PE13-018 FORD 8-23-2013 APPENDIX G **Engineering Review** 5 AND 6 PAGE 170

PE13-018 FORD 8-23-2013 APPENDIX G Engineering Review 5

From:	Dixon, Mark (M.R.)
Sent:	Tuesday, December 11, 2012 6:58 AM
To:	Whitehead, Joseph (J.P.); McDonagh, Scot (S.M.); Oyafuso, Kevin (K.G.); Caesar, Cynthia
Cc: Subject:	(C.L.) Devries, Jason (J.E.); Smith, Craig (C.A.) RE: Ecoboost F150 Fleets?

Joe, we have one '12 MY GTDI in our test fleet that can be used for this. Cynthia, are we getting our 2011 F150 GTDI's converted to 2013 MY with our fleet "refresh" plan?

Scot, let's discuss options we may have on working with a northern fleet to prove out this cal. FSCD team may be able to work with us on options for this.

From: Whitehead, Joseph (J.P.) Sent: Monday, December 10, 2012 3:49 PM To: McDonagh, Scot (S.M.); Oyafuso, Kevin (K.G.); Dixon, Mark (M.R.) Cc: Devries, Jason (J.E.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.) Subject: Ecoboost F150 Fleets?

Scot, Kevin and Mark,

Calibration is looking for EcoBoost F150's operating in cold climates. We'd like to put an experimental calibration which enables the misfire monitor immediately on cold starts & monitor with cellular VDR's the misfires on startup. Naturally exemption stickers, Control Tec support and other steps will be required.

Do you know of any commercial fleets which might be willing to work with Ford collect this data? The Bemidji DEMS fleet only has one truck currently running.

Thanks,

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

From:	Oyafuso, Kevin (K.G.)
Sent:	Wednesday, January 25, 2012 10:04 AM
То:	Stawiecki, Bob (R.); Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, Al (C.A.)
Cc:	Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.);
	McDonagh, Scot (S.M.); Atkinson, Bill (B.W.); Todisco, Ronald (R.J.)
Subject:	RE: Ecoboost Random Miss -
Attachments:	Report Summary for the CQIS Report#BF3GB001, 2011MY P415 GTDI , repeat mis, MA

Bob,

Is the following info correct for the vehicle in question?:

Report# :	BF3GB001 NHL			Received:	06/29/2011
CCRG/EPRC	•	Reviewed Status:		Date:	
Vehicle:	2011,F150 4X4 ,I ,1FTFX1ET5BF	F150 ,SUP CAB,STYSD		Build Date:	03/23/2011
Odometer :	8,998 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Dealer:	USA 09082 Place	e Motor, Inc.		Phone#:	(508) 943- 8011
City:	Webster	State:	Massachusett	Country :	USA
Originator:	PAUL SCHLESI	NGER			
Symptom:	5 50 3 39 DRV P	ERF,RUNS ROUGH,CRUISE/S	STEADY,INTE	RMITTENT	

I removed part of the subject text because this was referring to a vehicle that David Dripps was working on. Bob will confirm if above info applies to this repeat visit in his note on 1/25/2012 @ 9:24AM

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: Stawiecki, Bob (R.)
Sent: Wednesday, January 25, 2012 9:24 AM
To: Oyafuso, Kevin (K.G.); Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, AI (C.A.)
Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); McDonagh, Scot (S.M.);
Atkinson, Bill (B.W.); Todisco, Ronald (R.J.)
Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN :
1FTFW1ET3BF GCQIS : BLZDW003

Just a heads up . Our truck has returned to the dealer with same complaint. I will be inspecting it this AM. We had very humid and unseasonably warm weather this weekend.

From: Oyafuso, Kevin (K.G.)
Sent: Tuesday, January 17, 2012 4:35 PM
To: Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, AI (C.A.)
Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); Stawiecki, Bob (R.);
McDonagh, Scot (S.M.)
Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF
GCQIS : BLZDW003

You can send the new parts, but if there is water inside CAC there isn't a "permanent" corrective action at this time. We can try to do the same thing that Bob Stawiecki did on a truck he was looking into. If there is a combination of oil and water in the CAC then please call, we'll need to discuss if PCV needs a mod.

p.s. our FL buyback has the same oil and water mix in the CAC, inspected today after vehicle came in from it's drive route with drivability symptoms.

From: Nowaczyk, Rick (R.J.)
Sent: Friday, January 13, 2012 4:40 PM
To: Dripps, David (D.S.); Cockerill, Al (C.A.); Oyafuso, Kevin (K.G.)
Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.)
Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF
GCQIS : BLZDW003
Importance: High

Kevin,

Dave is going to check the CAC for water. However, this customer is very upset. Can we send this FSE the ground jumper for the G105 and New level spark plugs?

What are your thoughts?

From: Dripps, David (D.S.)
Sent: Friday, January 13, 2012 4:03 PM
To: Cockerill, Al (C.A.)
Cc: Dodds, Jordan (J.); Nowaczyk, Rick (R.J.)
Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF
GCQIS : BLZDW003

Jordan, I haven't heard anything back. I don't think there is an action available at this time.

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458

From: Dripps, David (D.S.)
Sent: Wednesday, January 11, 2012 9:38 PM
To: Cockerill, Al (C.A.)
Cc: Dodds, Jordan (J.); Nowaczyk, Rick (R.J.)
Subject: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF
GCQIS : BLZDW003

Greetings, Al.

I was wondering if you could offer any relief for the attached vehicle concern. This is a random Misfire on a 2011 ecoboost. We are told this is under investigation and current actions will not result in concern resolution.

The customer has given us a final repair attempt. I'm told he uses the truck to take his terminally ill Alzheimers wife to Atlanta for treatment and also complains that he only gets 17 mpg on the freeway. He has given us an opportunity to repair this vehicle but it must be done before he embarks on a lengthy cross country trip with his camper as he feels it will leave him stranded or cause other problems when it acts up while towing. He wants the truck fixed or bought back before he goes.

Is there anything I can do in the next two weeks to resolve this? The ground below checked out okay. Thanks,

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458

From: System on behalf of [mailto:CQIS@ford.com]
Sent: Wednesday, January 11, 2012 11:37 AM
To: Christoff, Donald (D.A.); Dripps, David (D.S.); Johnson, Jim (J.S.); McCall, Kris (K.J.); Wenzel, Derek (D.T.); Middleton, Greg (H.); Hammer, Richard (R.M.); Jackson, Robert (R.P.); Sonnen, Stuart (S.J.); Triplette, Wesley (.)
Cc: Dodds, Jordan (J.); Harmon, Derek (D.M.); Baker, Zachary (Z.)
Subject: TAR OPEN AT Duvall Ford Company, Inc. USA 00484 Phone : (706) 782-4231 FOR SMITH, KEVIN ON 2011 F150 4X4 VIN : 1FTFW1ET3BF

A request for technical assistance has been OPENED for :

SMITH, KEVIN SD USA 00484 Name : Duvall Ford Company, Inc.

By: US-TECHNICAL SERVICE HOTLINE

Unit Down :

With a concern on : 2011 F150 4X4 VIN :1FTFW1ET3BF

It is filed under GCQIS report number : BLZDW003

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.dealerconnection.com/gcqis/asp/WBRES RptSummaryUpdMain.asp?rptnbr BLZDW003

THANK YOU, FRO! ! M THE US-TECHNICAL SERVICE HOTLINE

Attachments :

Report# :		BLZDW003	NHL			Received:	12/26/2011
CCRG/EPRC:			Reviewed Status	5:		Date:	
Vehicle:		2011,F150 42	X4,1FTFW1ET3B	F		Build Date:	10/08/2011
Odometer :		1,577 M	Engine:	3.	.5L-GTDI	Calibration:	BF613C0A
Engine Serial N	lumber	•	11C116401096				
Transmission:		6R80E	Axle:	38	800F3.55L	A/C:	YES
Transmission S	erial N	umber:	101128219333				
Dealer:		USA 00484 I	Duvall Ford Comp	any, Inc.		Phone#:	(706) 782-4231
City:		Clayton	State:	G	leorgia	Country :	USA
Originator:		KENNETH I	BROKAW				
Symptom: 554239 DRV PERF,LACK/LOSS PV				SS PWR ,A	ACCEL,INT	TERMITTENT	
Status:							
VFG:		V52 DRIVE	ABILITY				
Additional Sym	nptom:	CEL FLASH	ES				
Fix:		Causal Com	ponent :				
Condition Code	e:						
!!							
Hotliner: SFI	ERRET		Phone: 313 317-9	9124	Reg	gn Cd: S1 Atl	lanta
Engineering:			Phone:		TAR:	OPEN	
Dlr Contact:	KENNI	ETH BROKA	W	Phone: 00	0000-000) T i	tle Cde: T
REPAIR	12/26/2	2011 05:17PN	1 SHA! ! WN FEI	RRET MSS	S - FCSD -	TECH SVC I	HOTLINE
			- CONCERN:CE				
	HARD				~		
	HIGHV CLYIN		ERATION INTER	RMITTENT	TLY. POWI	ER BALANCI	E SHOWS
	NUMB UP	BER 4 AND 5	MISFIRING WHI	EN IT HAP	PENS. CY	LINDER 6 DI	D NOT SHOW
	ON OL	JR TEST DRI	VE BUT WAS SE	ET IN MEM	IORY. DIA	GNOSTICS:	PULL CODES,
	MONI	TER POWER	BALANCE PAR	TS REPLA	CED:NONI	E TECH QUE	STION:HAVE
	THERI SEEN		OTHER SIMILA	R CONCE	RNS WITH	I ECOBOOST	F150? IVE
	TSB F BUT T		PORCELAIN ON	N SPARK P	LUGS FOF	R AN ECOBO	OST MOTOR
	-						
	WAS (ON OTHER V	EHICLE APPLIC	ATIONS. I	T SEEMS S	STRANGE TH	IAT ITS ONLY

APPRECIATED.

RECOMM 12/26/2011 05:17PM SHAWN FERRET MSS - FCSD - TECH SVC HOTLINE KENNETH, THIS CONCERN IS CURRENTLY UNDER INVESTIGATION AND WILL REQUIRE THE FOLLOWING QUESTIONS TO BE ANSWERED: 1) CAN G105 BE LOOSENED USING ONLY FINGER PRESSURE? 2) IF G105 CANNOT BE LOOSENED BY HAND, CAN IT BE TIGHTENED USING ONLY A SOCKET AND A 6-8 3/8 DRIVE EXTENSION (NO RATCHET)? G105 IS THE GROUND FOR THE BANK 2 IGNITION COILS LOCATED ON THE BACK OF THE LEFT SIDE CYLINDER HEAD. IT IS 13MM AND MOST EASILY ACCESSED FROM UNDER THE VEHICLE. AFTER CHECKING G105,

TORQUE IT TO 10NM PLUS AN ADDITIONAL 45 DEGREES AND UPDATE THIS FORM

WITH THE ANSWERS. IF G105 IS OK, TAKE A FUEL SAMPLE AND CHECK FOR CLOUDINESS, DEBRIS, AND ETHANOL CONTENT. CHECK FOR ETHANOL BY FILLING

A CONTAINER HALF WAY WITH WATER AND MARKING THE LEVEL. ADD A FUEL

SAMPLE TO THE REMAINING HALF AND MIX. AFTER ALLOWING THE MIXTURE TO

SETTLE IF THE WATER LINE RISES MORE THAN 10% THERE IS EXCESSIVE ETHANOL IN THE FUEL. CONTINUE WITH ATTEMPTS TO DUPLICATE THE CONCERN. MONITOR FRP AND FRP_DSD DURING THE CONCERN TO SEE IF A FUEL

SYSTEM CONCERN IS CAUSING THE MISFIRES.

REPAIR 12/27/2011 11:27AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE G105 WAS SECURE. I TOOK MULTIPLE FUEL SAMPLES, FUEL WAS NOT CLOUDY OR

DIRTY AND ETHANOL CONTENT WAS NOT EXCESSIVE. COULD NOT DUPLICATE

CONCERN ON SECOND TEST DRIVE. MONITORING FRP AND FRP_DSD SHOWED NO

CONCERNS OTHER THAN THE FRP SIGNAL SEEMED 'CHOPPY'. IT FOLLOWED FRP_DSD VERY CLOSELY BUT WHEN ACCELERATING SIGNAL WAS NOT AS SMOOTH AS

IT WAS WHEN YOU WERENT ON THE GAS.

RECOMM 12/27/2011 11:27AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE KENNETH, -SOME FLUCTUATION OF THE FRP READING IS A NORMAL CHARACTERISTIC OF A GTDI ENGINE DUE TO THE MECHANICAL ACTION OF THE HIGH PRESSURE PUMP. THIS ACTION CREATES NORMAL PULSATIONS IN THE FUEL

LINES AND WILL CAUSE THE READING TO FLUCTUATE SOME. IF FRP IS

FOLLOWING FRP_DSD CLOSELY, WOULD NOT SUSPECT A CONCERN WITH THE FUEL

SYSTEM AT THIS TIME. -AT THIS TIME, IT IS RECOMMENDED TO ENSURE G105 IS CLEAN & TIGHT, AND RELEASE THE VEHICLE TO THE CUSTOMER. PLEASE

CONTINUE TO MONITOR OASIS FOR UPDATES ON THIS ISSUE. WE APPRECIATE YOUR RESPONSES TO THE QUESTIONS, THIS INFORMATION IS IMPORTANT.

REPAIR01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINEDESCRIPTION OF VEHICLE CONCERN: VEHICLE HAS INTERMITTANT MISFIRE
ON

CYLINDERS 4 ,5 ,6 I HAVE ALREADY E MAILED YOU ABOUT THIS TRUCK AND SPOKE WITH MY FSE A COUPLE OF TIMES HE HAS EXPLAINED THAT FORD IS WORKING ON THIS ISSUE CUST BOUGHT THIS TRUCK WITH EXPECTATIONS OF PULLING HIS CAMPER ACROSS COUNTRY IN FEB CUST HAS STARTED LEMON LAW

AND HAS SENT ME A FINAL REPAIR OPPORTUNITY NOTICE DIAGNOSTICS ALREADY COMPLETED: WE HAVE CKED THE GROUND ,CKED THE FUEL AND FUEL

PRESSURE ANY UPDATES ON REPAIR PARTS REPLACED: NONE TECH'S QUESTION: ANY HELP ? DTC: P0306 MODULE: PCM DTC: P0304 MODULE: P0305

RECOMM 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE KEVIN, 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.

IN

ESCLHD 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE EH DUE TO CUSTOMER STATES LEMON LAW, HAS SENT FINAL REPAIR OPPORTUNITY NOTICE (ACCORDING TO SERVICE DIRECTOR, AS OF NOW THERE IS NOTHING

CUDL TO BACK THIS UP) // CONSULTED JDODDS6

- AUDIT 01/10/2012 10:55AM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE ODOMETER 1143 M CHANGED TO 1577 M BY DRIDOLF2
- REPAIR01/11/2012 11:36AM JORDAN DODDS MSS FCSD TECH SVC HOTLINETHE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEENPLACED TO THE DEALER TO DISCUSS THIS CONCERN IN GREATER DETAIL.
KEVINWAS ADVISED THAT FSE INVOLVEMENT HAS BEEN IMPLEMENTED AT THIS

TIME.

TAR

RECOMM 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE

KEVIN, 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.

01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE

A TAR HAS BEEN OPENED AT THE REQUEST OF THE HOTLINE DUE TO A POTENTIAL

BUY BACK CASE. THE VEHICLE OWNER HAS SUPPLIED THE DEALER WITH A "FINAL

REPAIR OPPORTUNITY NOTICE". THIS VEHICLE EXHIBITS A BANK TWO MISFIRE

CONDITION WHICH IS DIFFICULT TO DUPLICATE. THIS CONCERN IS CURRENTLY

UNDER ENGINEERING INVESTIGATION. GROUND G105 FOR THE BANK TWO IGNITION

COILS HAS BEEN INSPECTED AND TORQUED TO THE PROPER SPECIFICATION. NO

EVIDENCE OF WATER INTRUSION HAS BEEN UNIDENTIFIED. THE FUEL PRESSURE

IS WITHIN SPECIFICATIONS AND DOES NOT CONTAIN EXCESSIVE ETHANOL. IF FURTHER DIRECTION OR ASSISTANCE IS NEEDED, PLEASE CONTACT PCE RICK NOWACZYK. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 1 ESTIMATED DAYS OUT OF

SERVICE: 10

This email was generated by the server FCWS686

From:	Oyafuso, Kevin (K.G.)
Sent:	Wednesday, January 25, 2012 9:57 AM
To:	Oyafuso, Kevin (K.G.)
Subject:	Report Summary for the CQIS Report#BF3GB001, 2011MY P415 GTDI , repeat mis, MA

FSE, Bob Stawiecki, Place Motor, Webster, MA (09082)

Attachments : 5

Report# : CCRG/EPRC:	BF3GB001 NH	L Reviewed Status:		Received: Date:	06/29/2011
Vehicle:	2011,F150 4X4 ,1FTFX1ET5B	,F150 ,SUP CAB,STYSD		Build Date:	03/23/2011
Odometer :	8,998 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Dealer:	USA 09082 Pla	ce Motor, Inc.		Phone#:	(508) 943- 8011
City:	Webster	State:	Massachusett	Country :	USA
Originator:	PAUL SCHLES	SINGER			
Symptom:	5 50 3 39 DRV	PERF,RUNS ROUGH,CRU	ISE/STEADY,I	NTERMITTEN	Т
Status:					
VFG:	V52 DRIVEAE	BILITY			
Additional Symptom:	LACK OF POW	VER BLACK SMOKE			
Fix:	Causal Compo	ment :			
Condition Code:					
Hotliner: DBA	RRE63	Phone: 313 317-9373	Reg	n Cd: N2 Bos	ton
Engineering:		Phone:	TAR:	30-60	
Dlr Contact: PA	AUL SCHLESIN	GER Phone	: 413 786-0430	Titl	e Cde: T

DTCs: KOEO: KOEC:P0430 P0306 KOER:

Comments

:

REPAIR 06/29/2011 05:54PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: CUSTOMER STATES THAT WHEN HE MAKES A FULL THROTTTLE ACCELERATION THE TRUCK HESITATES AND WONT REV OVER 2000 RPMS AT TIMES. MOST OFTEN HE DRIVES ON THE HIGHWAY WITH THE CRUISE ON AND THEN SLOWS FOR A RAMP TO SWITCH HIGHWAYS. WHEN HE PUTS IT TO THE FLOOR TO BLEND IN WITH TRAFFIC IT HESITATES AND RUNS ROUGH. IF HE LETS OFF AND STEPS ON IT AGAIN IT WILL BE OK. I DO NOT HAVE THE TRUCK HERE NOW. I WENT FOR A ROAD TEST WITH HIM AND COULD NOT DUPLICATE SO HE TOOK THE TRUCK. I DROVE IT LAST NIGHT 60 MILES AND IT WAS FINE. DIAGNOSTICS: SCANNED FOR CODES PARTS REPLACED:: NONE TECH QUESTION: LOOKING FOR ANY INPUT OPN THIS CONCERN. WHAT IS BARO PID READING? NOT MEASURED WHAT IS THE MEASURED MECHANICAL FUEL PRESSURE? NOT MEASURED

RECOMM 06/29/2011 05:54PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE PAUL, VERIFY G105 GROUND IS PROPERLY ATTACHED AND CLEAN. VOLTAGE DROP

GROUND WITH THE VEHICLE RUNNING. INSPECT FOR POOR FUEL QUALITY. ESTABLISH BASELINE SENSOR VALUES. APP%, BARO, CAC_T, CHT, DTCNT, EQ_RAT11, EQ_RAT21, ETC_ACT, ETC_DSD, FRP, FRP_DSD, F_VCV#, GEAR, IAT, IAT2, KNOCK_1, KNOCK_2, LOAD, LONGFT1, LONGFT2, MAP (VOLTAGE AND PRESSURE), O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, SPARKADV, TCC, TFT, TIP_PRES_V, TIP_PRS_BOOST, TIP_PRS_DSD, TP1, TP2, TR, TURBO_UNDER, TURBO_WGATE, VCTADV, VCTADV2, VCTADVERR, VCTADVERR2

AND VSS KOEO, IDLE 2500 RPM AND DURING THE CONCERN. COMPARE SENSORS TO

REFERENCE VALUES IN SECTION 6 OF THE PC/ED.

- AUDIT 07/02/2011 11:08AM SYMPTOM 6 11 0 00 CHANGED TO 5 57 0 00 BY CS012093
- **REPAIR** 07/28/2011 01:27PM DALE BARRETT MSS FCSD TECH SVC HOTLINE CONTACTED PAUL SCHLESINGER TO DISCUSS THE VEHICLE CONCERN.

RECOMM 07/28/2011 01:27PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE MONITOR THE EXHAUST COLOR SMOKE ON HARD ACCELERATION, SLIGHT BLACK SMOKE IS NORMAL. IE SMOKE IS BLUE INSPECT THE TAIL PIPES FOR OU

SMOKE IS NORMAL. IF SMOKE IS BLUE INSPECT THE TAILPIPES FOR OIL DEPOSITS. IF OILY CHECK FOR FAILED TURBO SEALS. INSPECT ALL TURBO TUBES FOR LOOSE CLAMPS THAT MAY LIMIT BOOST. THIS VEHICLE IS EQUIPPED WITH BOA (BRAKE OVER ACCELERATOR) THAT WILL CUT ENGINE POWER IF VEHICLE IS 2 FOOTED.

REPAIR 12/05/2011 09:37AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE 07/27/2011 11:49AM XHUANG35 WEB FORM DATA - CONCERN: CUSTOMER STATES, MIL ON, BLOWING BLUE SMOKE. DIAGNOSTICS: REPEAT REPAIR, RETRIEVED CMDTCS AND KOEO, PASS. CHECKED MODE 6, PID MONITOR, AND FOUND VIRTUALLY NOTHING. CUSTOMER PREVIOUSLY STATED WHEN PROBLEM HAPPENS, HE IS ON A HIGHWAY INTERCHANGE AND AT WOT. PREVIOUS ATTEMPTS COULD NOT DUPLICATE. SENT IDS LOGGED DATA TO HOTLINE,

AGAIN. PARTS REPLACED:: PREVIOUSLY REPLACED COILS AND PLUGS. TECH QUESTION: ANY OTHER IDEAS?

- RECOMM 12/05/2011 09:37AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE 07/27/2011 11:49AM XHUANG35 JUSTIN, PLEASE VERIFY IF ANY DTC PRESENT. IT IS NECESSARY TO CONTACT HOTLINE BY PHONE IS USING THE CONTACT ID# IN RED ON TOP OF THE FORM TO DISCUSS THIS CONCERN. PLEASE HAVE ALL DIAGNOSTIC TEST RESULTS READY TO DISCUSS.
- AUDIT 12/05/2011 09:37AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE DEALER 09082, , , USA CHANGED TO 09137, , , USA BY CWAGONE1

REPAIR12/05/2011 09:38AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE
07/28/2011 10:44AM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
CUSTOMER STARTS VEHICLE BLOW BLUE SMOKE AND LACKS POWER AT TIMES.
CUSTOMER STATES THE CHECK ENGINE LIGHT WAS ON, NO STORED CODES IN
THE
PCM. DATA RECORDINGS WERE SENT TO THE HOTLINE. ON THE 1ST

DEALERSHIP VISIT TECH STATES A FORD ENGINEER CONTACTED HIM A DAY AFTER THE 1ST REPAIR.

- RECOMM 12/05/2011 09:38AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE 07/28/2011 10:44AM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE THE RECORDINGS WILL BE RETRIEVED AND REVIEWED. A HOTLINE REPRESENTATIVE WILL CONTACT YOU BY PHONE TO DISCUSS THE RECORDINGS
- REPAIR12/05/2011 09:40AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE
08/17/2011 05:21PM LAWRENCE STANLEY MSS FCSD TECH SVC HOTLINE
WEB FORM DATA CONCERN: CUSTOMER STATES LOOSES POWER AND FEELS
LIKE

IT IS RUNNING ON 3 CYLENDERS INTERMANTENT. WAS FINE UNTIL MONDAY WHEN WE HAD HEAVY RAIN DIAGNOSTICS: GOT TRUCK ON FIRST VISIT AND ROADTEST, NPF. LET MANAGER AND ADVISOR DRIVE WITH NPF. TESTED CODES NPF. HOOK UP VDR AND LET CUSTOMER DRIVR. CAME BACK WITH RECORDINGS. FOUND PO306 IN PENDING HISTORY. ALSO FOUND ABS AND EPAS CODES. NOT SURE IF I AM CHASING A INTERMANT PO306 MISFIRE OR ABS/EPAS CODES DERATING ENGINE. HAS BEEN AT ANOUTHER DEALER FOR CONCERN AND SPARKPLUGS AND COILS WERE REPLACED. SENT RECORDINGS TO YOU. PLEASE ADVIZE PARTS REPLACED:: NONE TECH QUESTION: PLEASE INSPECT DATA SENT AND LET US KNOW WHAT YOU THINK

RECOMM 12/05/2011 09:40AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE 08/17/2011 05:21PM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE SEAN, RECOMMEND TO INSPECT GROUND G105 WHICH IS ON THE REAR OF THE LH (DRIVERS SIDE) CYLINDER HEAD. A PREVIOUS REPORT HAS INDICATED THAT

IT WAS EASIER TO VIEW THE GROUND IF THE VEHICLE WAS RAISED ON A HOIST. PLEASE ENSURE THAT THIS GROUND IS CLEAN AND PROPERLY SECURED, AS WE HAVE SIMILAR REPORTS FOR THIS CONCERN BEING RESOLVED WITH CLEANING/SECURING THIS GROUND. ADDITIONALLY RECOMMEND REPLACING THE AFFECTED IGNITION COIL AND INSPECTING/REPLACING THE SPARK PLUG AS NECESSARY, CLEARING KAM AND RE-EVALUATING THIS CONCERN. AS FOR THESE RECORDINGS IT IS NOT GENERALLY OUR PRACTICE TO VIEW THESE RECORDINGS UNLESS ABSOLUTELY NECESSARY DUE TO TIME CONSTRAINTS. IF FURTHER DIAGNOSTIC DIRECTION IS REQUIRED IT WILL BE NECESSARY TO CONTACT THE TECHNICAL HOTLINE BY PHONE USING THE CONTACT ID NUMBER IN RED AT THE LEFT UPPER CORNER OF THIS FORM. PLEASE HAVE ALL OF YOUR FINDINGS AVAILABLE AND READY TO DISCUSS WITH THE SERVICE ENGINEER WHEN YOU CALL IN.

- AUDIT 12/05/2011 09:40AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE ODOMETER 4278 M CHANGED TO 8998 M BY CWAGONE1
- AUDIT 12/05/2011 09:40AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE DEALER 09137, , , USA CHANGED TO 09082, , , USA BY CWAGONE1
- REPAIR 12/05/2011 09:41AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE 10/12/2011 05:33PM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE SEAN STATED THAT THIS VEHICLE IS EXPERIENCING THE SAME CONCERN AS BEFORE, WITH DTC P0306 BEING IN MEMORY. THE TRUCK IS NOT AS OF YET AT THE DEALERSHIP, SO NO OTHER TESTS HAVE BEEN PERFORMED. G105 WAS TIGHTENED AT THE COIL AND PLUG WERE REPLACED ON NUMBER 6 CYLINDER OM

THE LAST VISIT.

RECOMM 12/05/2011 09:41AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE 10/12/2011 05:33PM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE SEAN, RECOMMEND RE-INSPECTING THE G105 TIGHTEN TO 16FT LBS PLUS AN ADDITIONAL 45 DEGREES. ALSO CHECK THE LOW SIDE FUEL PRESSURE WITH A MECHANICAL FUEL GAUGE 62-73 PSI. ADDITIONALLY PERFORM THE HIGH PRESSURE TEST USING THE IDS AS WELL AS AN INJECTOR FLOW TEST. IF NO CONCERNS WERE NOTED, RECOMMEND REPLACING NUMBER 6 FUEL INJECTOR AS

WE HAVE PAST REPORTS FOR THIS TYPE CONCERN BEING CAUSED BY A FAULTED

FUEL INJECTOR.

REPAIR 12/05/2011 09:49AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUST STATES TRUCK WILL BE CRUSING AT HIGHWAY SPEEDS THEN START TO SKIP, BLACK SMOKE,LACKS POWER. DIAGNOSTICS:

SPEEDS THEN START TO SKIP, BLACK SMOKE,LACKS POWER. DIAGNOSTICS: HAVE NEVER VERIFED CONCERN. SM, ADVISORS,AND I NEVER GOT IT TO DO IT. THIS VISIT PULLED CODE PO430. SENT DATA TO HOTLINE. ON OUTHER VISITS HAVE ALWAYS PULLED PO306. INSPECT AND TORQUE GROUND PER HOTLINE. HAS HAD SAME PROBLEM SINCE TRUCK WAS NEW PARTS REPLACED:ON PREVIOUS VISITS HAVE REPLACED #6 COIL,PLUG,INJECTOR AND OUTHER DEALER REPLACED

BANK 2 CAT. ON LAST VISIT HAVE REPLACED INJECTOR AND CUST SAID IT WAS OK UP UNTIL LAST WEEK. TECH QUESTION:CUSTOMER DOES NOT WANT TRUCK ANYMORE. REQUEST FSE TO INSPECT.

RECOMM 12/05/2011 09:49AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE SEAN, 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 12/05/2011 09:49AM CASEY WAGONER MSS - FCSD - TECH SVC HOTLINE NOTE TO ESCALATION TEAM, THIS REPORT IS BEING ESCALATED DUE TO THE LACK OF POWER AND BLACK SMOKE CONCERN REPEATING AFTER SEVERAL REPAIR

ATTEMPTS. A PREVIOUS CUDL CASE WAS OPENED AND CLOSED FOR THIS CONCERN.

THE TECH STATES THAT THE CUSTOMER NO LONGER WANTS THE VEHICLE. THE BANK 2 CATALYST, CYLINDER 6 PLUG, COIL, AND INJECTOR HAVE BEEN REPLACED. GROUND G105 HAS BEEN PROPERLY TORQUED. THE TECHNICIAN HAS NEVER BEEN ABLE TO DUPLICATE THE CUSTOMER'S CONCERN. THIS IS THE SECOND DEALER TO WORK ON THIS VEHICLE. PLEASE ASSIST THE TECHNICIAN IN DETERMINING THE ROOT CAUSE OF THIS CONCERN.

- AUDIT 12/05/2011 09:49AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE SYMPTOM 5, 57, 0, 00 CHANGED TO 5, 50, 3, 39 BY CWAGONE1
- ADD-ON 12/05/2011 09:50AM CASEY WAGONER MSS FCSD TECH SVC HOTLINE CONSULTED JORDAN DODDS.
- **REPAIR** 12/05/2011 10:40AM JORDAN DODDS MSS FCSD TECH SVC HOTLINE THE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEEN PLACED TO THE DEALER TO DISCUSS THIS MATTER IN GREATER DETAIL. SEAN STATES THAT THE CONCERN CANNOT BE DUPLICATED AT THIS TIME. THE COIL, PLUG AND INJECTOR WAS REPLACED DURING A PREVIOUS VISIT. ADDITIONALLY,

THE P0306 FAULT WAS NOT PRESENT DURING TESTING WHILE A P0430 WAS.

RECOMM 12/05/2011 10:40AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE SEAN, THIS CONCERN HAS BEEN FORWARDED FOR FURTHER REVIEW. YOU WILL BE CONTACTED WITHIN 1 BUSINESS DAY WITH FURTHER DIRECTION ON THIS

CONTACTED WITHIN 1 BUSINESS DAY WITH FURTHER DIRECTION ON THIS CONCERN

REPAIR12/06/2011 11:21AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINETHE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEEN

PLACED TO THE DEALER TO ADVISE FSE INVOLVEMENT HAS BEEN IMPLEMENTED.

RECOMM 12/06/2011 11:21AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE SEAN, 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.

12/06/2011 11:21AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE

A TAR HAS BEEN OPENED AT THE REQUEST OF THE HOTLINE DUE TO THE LACK OF

PROGRESS WITH THIS ON GOING CONCERN. THIS VEHICLE EXHIBITS A REPEAT P0430 WHICH WAS PREVIOUSLY ACCOMPANIED BY A P0306. THE CATALYST HAS BEEN REPLACED FOR THIS CONDITION BEFORE. THE CUSTOMER STATES THAT THE

VEHICLE WILL INTERMITTENTLY LACK POWER AND BLACK SMOKE WILL BLOW OUT

FROM THE EXHAUST. THE DEALERSHIP HAS NOT BEEN SUCCESSFUL IN DUPLICATING THIS CONDITION. GROUND G105 HAS BEEN TORQUED TO THE PROPER

SPECIFICATION PER HOTLINE REQUEST. ALL SENSOR VALUES WERE INCONCLUSIVE. THE TECHNICAL HOTLINE AND ENGINEER IS AWARE OF THIS CONCERN. HOWEVER, THERE IS CURRENTLY NO FIX INFORMATION IN REGARDS TO

THIS MATTER. PLEASE CONTACT RICK NOWACZYK FOR ADDITIONAL ASSISTANCE

WITH THIS MATTER.

TAR

ADD-ON 12/09/2011 09:57AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON ON SITE VISIT. P0430 IN MEMORY. NO DRIVEABILITY SYMPTOMS AT THIS TIME. POWER BALANCE IS GOOD. KOER IS A PASS. O2 SENSORS ARE NORMAL. CUSTOMER

STATES IT WILL BE OK FOR A MONTH AT A TIME BUT THEN SKIP AND LOOSE POWER. UNABLE TO DUPLICATE AT THIS TIME.ETC ACT VS DESIRED IS LESS THAN 3 DEGREES.APP READINGS ARE NORMAL.DEALER PERSONEL STATE THAT CUSTOMER IS THREATENING BUYBACK.

ADD-ON 12/09/2011 01:53PM KEVIN OYAFUSO PD - PRODUCT DEVELOPMENT SPOKE WITH SEAN MCGLONE, SERVICE TECHNICIAN AT PLACE MOTOR, RECOMMEND REMOVING EYELET FOR G105 GROUND AND INSPECT FOR ANY MATERIAL IN THAT

AREA. IF POSSIBLE, GET A PICTURE AND FORWARD TO ENGINEERING FOR

REVIEW BEFORE GROUND CONNECTON IS REMOVED.(WILL PROVIDE AN EMAIL ADDRESS FOR SEAN). RE-TORQUE CONNECTION TO 10 N-M PLUS AN ADDITIONAL 45 DEGREES (1/4 TURN). RETRIEVE MODE 6 AND 9 DATA AND LOG DATA TO SESSION, SEND SESSION TO HOTLINE SERVER. SERVICE ADVISOR MENTIONED THE VEHICLE IS NOT USED FOR TOWING, CUSTOMER USES REGULAR OCTANE FUEL. REQUESTED ETHANOL CONTENT TEST. ALSO RECOMMEND RUNNING RELATIVE COMPRESSION TEST WITH IDS. IF ANY OF THE CYLINDERS LOOKS OFF THEN RUN A MANUAL COMPRESSION TEST. REQUESTED TECH TO ORDER AND REPLACE BANK 2 CATALYST(DRIVERS SIDE), ALL 3 COILS ON BANK2 AND ALL 6 SPARK PLUGS. LABEL COMPONENTS TO IDENTIFY ORIGINAL CYLINDER LOCATIONS. RECOMMEND INSTALLING A FLIGHT RECORDER IF DRIVE SYMPTOMS

CAN NOT BE DUPLICATED AT THIS TIME. ENGINEERING WILL PROVIDE PID LIST VIA EMAIL TO SEAN AND FSE.

ADD-ON 12/19/2011 05:11PM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON DEALER CALLED STATING THEY HAVE RECHECKED G105 AND REPLACED PLUGS AND

INJECTORS. THEY HAVE BEEN DRIVING WITH FLIGHT RECORDER BUT UNABLE TO DUPLICATE. CUSTOMER IS DEMANDING TRUCK BACK. CUSTOMER WILL TAKE TRUCK

WITH RECORDER ON IT.I HAVE INSTRUCTED THEM TO REPLACE PCM AS WELL.

ADD-ON 01/04/2012 10:39AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON SERVICE ENGINEERING HAS SHIPPED REPLACEMENT SPARK PLUGS AND REDUNDANT

GROUND. WILL INSTALL UPON RECIEPT

ADD-ON 01/06/2012 02:32PM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON PLUGS AND GROUND STRAP INSTALLED. REMOVE CAC AND INSPECTED FOR WATER

IN SYSTEM . SEE ATTACHED PHOTOS. IMAGE 318 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.

IMAGE 313 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 ¹/₄ " 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. INSPECTED LH CAM COVER VENT FOR OIL RETENTION. DRILLED 1/8 " HOLE IN BASE OF BAFFLE. INSTALLED MATERIAL IN FENDER WELL AREA TO REDUCE SPLASH UP TO AIR INTAKE. CUSTOMER WILL EVALUATE.

ADD-ON 01/17/2012 11:09AM ROBERT STAWIECKI(FSE MSS - FCSD - REG - BOSTON CUSTOMER CALLED DEALER TO REPORT THAT THEY HAVE NO REPORTED CONCERNS AFTER TWO DAYS OF RAINY WEATHER.

Please click on the link below to view the attachments associated with this report https://www.gcqis.dealerconnection.com/gcqis/asp/DIViewAttachment Mainx.asp?ReportNumber BF3GB001

From: Sent:	Stawiecki, Bob (R.) Wednesday, January 25, 2012 6:18 PM
То:	Oyafuso, Kevin (K.G.); Osepchook, William (W.R.)
Cc:	Nowaczyk, Rick (R.J.); Atkinson, Bill (B.W.); Todisco, Ronald (R.J.); Reed, Dwight (H.)
Subject:	RE: Ecoboost Random Miss -

Gentlemen, the dealer received a call from the fleet owner stating he is going to pursue buyback due to the number of repairs etc. At this point it is my understanding that there are no further suggestions for repair and the matter is under investigation. I want to thank you all for your assistance and continued communication on this vehicle. We gave it our best shot but it appears we have run out of time (and customer patience)

From: Oyafuso, Kevin (K.G.)
Sent: Wednesday, January 25, 2012 10:04 AM
To: Stawiecki, Bob (R.); Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, AI (C.A.)
Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); McDonagh, Scot (S.M.);
Atkinson, Bill (B.W.); Todisco, Ronald (R.J.)
Subject: RE: Ecoboost Random Miss -

Bob,

Is the following info correct for the vehicle in question?:

Report# :	BF3GB001 NHL			Received:	06/29/2011
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2011,F150 4X4 , ,1FTFX1ET5BF	F150 ,SUP CAB,STYSD		Build Date:	03/23/2011
Odometer :	8,998 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Dealer:	USA 09082 Place	e Motor, Inc.		Phone#:	(508) 943- 8011
City:	Webster	State:	Massachusett	Country :	USA
Originator:	PAUL SCHLESI	NGER			
Symptom:	5 50 3 39 DRV P	ERF,RUNS ROUGH,CRUISE	/STEADY,INT	ERMITTENT	

I removed part of the subject text because this was referring to a vehicle that David Dripps was working on. Bob will confirm if above info applies to this repeat visit in his note on 1/25/2012 @ 9:24AM

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: Stawiecki, Bob (R.) Sent: Wednesday, January 25, 2012 9:24 AM To: Oyafuso, Kevin (K.G.); Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, Al (C.A.) Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); McDonagh, Scot (S.M.); Atkinson, Bill (B.W.); Todisco, Ronald (R.J.) Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF

Just a heads up . Our truck has returned to the dealer with same complaint. I will be inspecting it this AM. We had very humid and unseasonably warm weather this weekend.

From: Oyafuso, Kevin (K.G.)
Sent: Tuesday, January 17, 2012 4:35 PM
To: Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, AI (C.A.)
Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); Stawiecki, Bob (R.);
McDonagh, Scot (S.M.)
Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF

You can send the new parts, but if there is water inside CAC there isn't a "permanent" corrective action at this time. We can try to do the same thing that Bob Stawiecki did on a truck he was looking into. If there is a combination of oil and water in the CAC then please call, we'll need to discuss if PCV needs a mod.

p.s. our FL buyback has the same oil and water mix in the CAC, inspected today after vehicle came in from it's drive route with drivability symptoms.

From: Nowaczyk, Rick (R.J.) Sent: Friday, January 13, 2012 4:40 PM To: Dripps, David (D.S.); Cockerill, AI (C.A.); Oyafuso, Kevin (K.G.) Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.) Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF GCQIS : BLZDW003 Importance: High

Kevin,

Dave is going to check the CAC for water. However, this customer is very upset. Can we send this FSE the ground jumper for the G105 and New level spark plugs?

What are your thoughts?

From: Dripps, David (D.S.)
Sent: Friday, January 13, 2012 4:03 PM
To: Cockerill, AI (C.A.)
Cc: Dodds, Jordan (J.); Nowaczyk, Rick (R.J.)
Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN :
1FTFW1ET3BF
GCQIS : BLZDW003

Jordan, I haven't heard anything back. I don't think there is an action available at this time.

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458 From: Dripps, David (D.S.) Sent: Wednesday, January 11, 2012 9:38 PM To: Cockerill, AI (C.A.) Cc: Dodds, Jordan (J.); Nowaczyk, Rick (R.J.) Subject: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF

Greetings, Al.

I was wondering if you could offer any relief for the attached vehicle concern. This is a random Misfire on a 2011 ecoboost. We are told this is under investigation and current actions will not result in concern resolution.

The customer has given us a final repair attempt. I'm told he uses the truck to take his terminally ill Alzheimers wife to Atlanta for treatment and also complains that he only gets 17 mpg on the freeway. He has given us an opportunity to repair this vehicle but it must be done before he embarks on a lengthy cross country trip with his camper as he feels it will leave him stranded or cause other problems when it acts up while towing. He wants the truck fixed or bought back before he goes.

Is there anything I can do in the next two weeks to resolve this? The ground below checked out okay. Thanks,

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458

From: System on behalf of [mailto:CQIS@ford.com] Sent: Wednesday, January 11, 2012 11:37 AM To: Christoff, Donald (D.A.); Dripps, David (D.S.); Johnson, Jim (J.S.); McCall, Kris (K.J.); Wenzel, Derek (D.T.); Middleton, Greg (H.); Hammer, Richard (R.M.); Jackson, Robert (R.P.); Sonnen, Stuart (S.J.); Triplette, Wesley (.) Cc: Dodds, Jordan (J.); Harmon, Derek (D.M.); Baker, Zachary (Z.) Subject: TAR OPEN AT Duvall Ford Company, Inc. USA 00484 Phone : FOR FOR ON 2011 F150 4X4 VIN : 1FTFW1ET3BF GCQIS : BLZDW003

A request for technical assistance has been OPENED for :

SD USA 00484 Name : Duvall Ford Company, Inc.

By: US-TECHNICAL SERVICE HOTLINE

Unit Down :

With a concern on : 2011 F150 4X4 VIN :1FTFW1ET3BF

It is filed under GCQIS report number : BLZDW003

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.dealerconnection.com/gcqis/asp/WBRES_RptSummaryUpdMain.asp?rptnbr BLZDW003

THANK YOU , FRO! ! M THE US-TECHNICAL SERVICE HOTLINE

Attachments :

Report# :		BLZDW003	NHL			Received:	12/26/2011
CCRG/EPRC:			Reviewed Status	:		Date:	
Vehicle:		2011,F150 4X	K4,1FTFW1ET3B	F		Build Date:	10/08/2011
Odometer :		1,577 M	Engine:	3	3.5L-GTDI	Calibration:	BF613C0A
Engine Serial N	umber	:	11C116401096				
Transmission:		6R80E	Axle:	3	3800F3.55L	A/C:	YES
Transmission S	erial Nu	umber:	101128219333				
Dealer:		USA 00484 D	Duvall Ford Compa	any, Inc.		Phone#:	(706) 782-4231
City:		Clayton	State:	(Georgia	Country :	USA
Originator:		KENNETH B	ROKAW				
Symptom:		554239 DRV	PERF,LACK/LOS	SS PWR ,.	ACCEL,INT	ERMITTENT	
Status:							
VFG:		V52 DRIVEA	BILITY				
Additional Sym	ptom:	CEL FLASH	ES				
Fix:		Causal Comp	ponent :				
Condition Code	:						
!!							
Hotliner: SFI	ERRET]	Phone: 313 317-9	0124	Reg	gn Cd: S1 Atla	anta
Engineering:			Phone:		TAR:	OPEN	
Dlr Contact:	KENNI	ETH BROKAV	N	Phone: 0	000-000) Tii	tle Cde: T
REPAIR	12/26/2	2011 05:17PM	SHA! ! WN FEF	RET MS	S - FCSD -	TECH SVC F	IOTLINE
		FORM DATA	- CONCERN:CEI				
	HIGHV CLYIN		ERATION INTER	RMITTEN'	TLY. POWE	ER BALANCE	SHOWS
	NUMB UP	ER 4 AND 5	MISFIRING WHE	EN IT HAI	PPENS. CYI	LINDER 6 DII	O NOT SHOW
	ON OL	JR TEST DRI	VE BUT WAS SE	T IN MEN	MORY. DIA	GNOSTICS: F	PULL CODES,
	MONI	TER POWER	BALANCE PART	TS REPLA	CED:NONE	E TECH QUES	STION:HAVE

THERE BEEN ANY OTHER SIMILAR CONCERNS WITH ECOBOOST F150? IVE SEEN A

TSB FOR BROKEN PORCELAIN ON SPARK PLUGS FOR AN ECOBOOST MOTOR BUT THAT

WAS ON OTHER VEHICLE APPLICATIONS. IT SEEMS STRANGE THAT ITS ONLY MISFIRING ON ONE BANK AND VERY INTERMITTENTLY. ANY ASSISTANCE WILL BE

APPRECIATED.

RECOMM 12/26/2011 05:17PM SHAWN FERRET MSS - FCSD - TECH SVC HOTLINE KENNETH, THIS CONCERN IS CURRENTLY UNDER INVESTIGATION AND WILL REQUIRE THE FOLLOWING QUESTIONS TO BE ANSWERED: 1) CAN G105 BE LOOSENED USING ONLY FINGER PRESSURE? 2) IF G105 CANNOT BE LOOSENED BY HAND, CAN IT BE TIGHTENED USING ONLY A SOCKET AND A 6-8 3/8 DRIVE EXTENSION (NO RATCHET)? G105 IS THE GROUND FOR THE BANK 2 IGNITION COILS LOCATED ON THE BACK OF THE LEFT SIDE CYLINDER HEAD. IT IS 13MM AND MOST EASILY ACCESSED FROM UNDER THE VEHICLE. AFTER CHECKING G105,

TORQUE IT TO 10NM PLUS AN ADDITIONAL 45 DEGREES AND UPDATE THIS FORM

WITH THE ANSWERS. IF G105 IS OK, TAKE A FUEL SAMPLE AND CHECK FOR CLOUDINESS, DEBRIS, AND ETHANOL CONTENT. CHECK FOR ETHANOL BY FILLING

A CONTAINER HALF WAY WITH WATER AND MARKING THE LEVEL. ADD A FUEL

SAMPLE TO THE REMAINING HALF AND MIX. AFTER ALLOWING THE MIXTURE TO

SETTLE IF THE WATER LINE RISES MORE THAN 10% THERE IS EXCESSIVE ETHANOL IN THE FUEL. CONTINUE WITH ATTEMPTS TO DUPLICATE THE CONCERN. MONITOR FRP AND FRP_DSD DURING THE CONCERN TO SEE IF A FUEL

SYSTEM CONCERN IS CAUSING THE MISFIRES.

REPAIR12/27/2011 11:27AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINEG105 WAS SECURE. I TOOK MULTIPLE FUEL SAMPLES, FUEL WAS NOT CLOUDY
ORDIRTY AND ETHANOL CONTENT WAS NOT EXCESSIVE. COULD NOT
DUPLICATE

CONCERN ON SECOND TEST DRIVE. MONITORING FRP AND FRP_DSD SHOWED NO

CONCERNS OTHER THAN THE FRP SIGNAL SEEMED 'CHOPPY'. IT FOLLOWED FRP_DSD VERY CLOSELY BUT WHEN ACCELERATING SIGNAL WAS NOT AS SMOOTH AS

IT WAS WHEN YOU WERENT ON THE GAS.

RECOMM 12/27/2011 11:27AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

KENNETH, -SOME FLUCTUATION OF THE FRP READING IS A NORMAL CHARACTERISTIC OF A GTDI ENGINE DUE TO THE MECHANICAL ACTION OF

THE

HIGH PRESSURE PUMP. THIS ACTION CREATES NORMAL PULSATIONS IN THE FUEL

LINES AND WILL CAUSE THE READING TO FLUCTUATE SOME. IF FRP IS FOLLOWING FRP_DSD CLOSELY, WOULD NOT SUSPECT A CONCERN WITH THE FUEL

SYSTEM AT THIS TIME. -AT THIS TIME, IT IS RECOMMENDED TO ENSURE G105 IS CLEAN & TIGHT, AND RELEASE THE VEHICLE TO THE CUSTOMER. PLEASE

CONTINUE TO MONITOR OASIS FOR UPDATES ON THIS ISSUE. WE APPRECIATE YOUR RESPONSES TO THE QUESTIONS, THIS INFORMATION IS IMPORTANT.

REPAIR01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

DESCRIPTION OF VEHICLE CONCERN: VEHICLE HAS INTERMITTANT MISFIRE ON

CYLINDERS 4 ,5 ,6 I HAVE ALREADY E MAILED YOU ABOUT THIS TRUCK AND SPOKE WITH MY FSE A COUPLE OF TIMES HE HAS EXPLAINED THAT FORD IS WORKING ON THIS ISSUE CUST BOUGHT THIS TRUCK WITH EXPECTATIONS OF PULLING HIS CAMPER ACROSS COUNTRY IN FEB CUST HAS STARTED LEMON LAW

AND HAS SENT ME A FINAL REPAIR OPPORTUNITY NOTICE DIAGNOSTICS ALREADY COMPLETED: WE HAVE CKED THE GROUND ,CKED THE FUEL AND FUEL

PRESSURE ANY UPDATES ON REPAIR PARTS REPLACED: NONE TECH'S QUESTION: ANY HELP ? DTC: P0306 MODULE: PCM DTC: P0304 MODULE: P0305

RECOMM 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE KEVIN, 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 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE EH DUE TO CUSTOMER STATES LEMON LAW, HAS SENT FINAL REPAIR OPPORTUNITY NOTICE (ACCORDING TO SERVICE DIRECTOR, AS OF NOW THERE IS NOTHING IN CUDL TO BACK THIS UP) // CONSULTED IDODDS6

CUDL TO BACK THIS UP) // CONSULTED JDODDS6

AUDIT 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

ODOMETER 1143 M CHANGED TO 1577 M BY DRIDOLF2 REPAIR 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE THE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEEN PLACED TO THE DEALER TO DISCUSS THIS CONCERN IN GREATER DETAIL. **KEVIN** WAS ADVISED THAT FSE INVOLVEMENT HAS BEEN IMPLEMENTED AT THIS TIME. 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE RECOMM KEVIN, 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. TAR 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE A TAR HAS BEEN OPENED AT THE REOUEST OF THE HOTLINE DUE TO A POTENTIAL BUY BACK CASE. THE VEHICLE OWNER HAS SUPPLIED THE DEALER WITH A "FINAL REPAIR OPPORTUNITY NOTICE". THIS VEHICLE EXHIBITS A BANK TWO MISFIRE CONDITION WHICH IS DIFFICULT TO DUPLICATE. THIS CONCERN IS **CURRENTLY** UNDER ENGINEERING INVESTIGATION. GROUND G105 FOR THE BANK TWO **IGNITION** COILS HAS BEEN INSPECTED AND TORQUED TO THE PROPER SPECIFICATION. NO EVIDENCE OF WATER INTRUSION HAS BEEN UNIDENTIFIED. THE FUEL PRESSURE IS WITHIN SPECIFICATIONS AND DOES NOT CONTAIN EXCESSIVE ETHANOL. IF FURTHER DIRECTION OR ASSISTANCE IS NEEDED, PLEASE CONTACT PCE RICK NOWACZYK. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 1 ESTIMATED DAYS OUT OF **SERVICE: 10**

This email was generated by the server FCWS686

From:	Stawiecki, Bob (R.)
Sent:	Wednesday, January 25, 2012 10:11 AM
То:	Oyafuso, Kevin (K.G.); Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, Al (C.A.)
Cc:	Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); McDonagh, Scot (S.M.); Atkinson, Bill (B.W.); Todisco, Ronald (R.J.)
Subject:	Re: Ecoboost Random Miss -

Yes Bob Stawiecki

From: Oyafuso, Kevin (K.G.)
Sent: Wednesday, January 25, 2012 10:04 AM
To: Stawiecki, Bob (R.); Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, AI (C.A.)
Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); McDonagh, Scot (S.M.);
Atkinson, Bill (B.W.); Todisco, Ronald (R.J.)
Subject: RE: Ecoboost Random Miss -

Bob,

Is the following info correct for the vehicle in question?:

Report# :	BF3GB001 NHL			Received:	06/29/2011
CCRG/EPRC		Reviewed Status:		Date:	
Vehicle:	2011,F150 4X4 ,I ,1FTFX1ET5BF	F150 ,SUP CAB,STYSD		Build Date:	03/23/2011
Odometer :	8,998 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Dealer:	USA 09082 Place	e Motor, Inc.		Phone#:	(508) 943- 8011
City:	Webster	State:	Massachusett	Country :	USA
Originator:	PAUL SCHLESI	NGER			
Symptom:	5 50 3 39 DRV P	ERF,RUNS ROUGH,CRUISE/S	STEADY,INTE	RMITTENT	

I removed part of the subject text because this was referring to a vehicle that David Dripps was working on. Bob will confirm if above info applies to this repeat visit in his note on 1/25/2012 @ 9:24AM

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) Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); McDonagh, Scot (S.M.); Atkinson, Bill (B.W.); Todisco, Ronald (R.J.) Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF GCQIS : BLZDW003

Just a heads up . Our truck has returned to the dealer with same complaint. I will be inspecting it this AM. We had very humid and unseasonably warm weather this weekend.

From: Oyafuso, Kevin (K.G.) Sent: Tuesday, January 17, 2012 4:35 PM To: Nowaczyk, Rick (R.J.); Dripps, David (D.S.); Cockerill, AI (C.A.) Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.); Osepchook, William (W.R.); Sims, Ivan (I.D.); Stawiecki, Bob (R.); McDonagh, Scot (S.M.) Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF

You can send the new parts, but if there is water inside CAC there isn't a "permanent" corrective action at this time. We can try to do the same thing that Bob Stawiecki did on a truck he was looking into. If there is a combination of oil and water in the CAC then please call, we'll need to discuss if PCV needs a mod.

p.s. our FL buyback has the same oil and water mix in the CAC, inspected today after vehicle came in from it's drive route with drivability symptoms.

From: Nowaczyk, Rick (R.J.) Sent: Friday, January 13, 2012 4:40 PM To: Dripps, David (D.S.); Cockerill, AI (C.A.); Oyafuso, Kevin (K.G.) Cc: Dodds, Jordan (J.); Dixon, Mark (M.R.) Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF GCQIS : BLZDW003 Importance: High

Kevin,

Dave is going to check the CAC for water. However, this customer is very upset. Can we send this FSE the ground jumper for the G105 and New level spark plugs?

What are your thoughts?

From: Dripps, David (D.S.) Sent: Friday, January 13, 2012 4:03 PM To: Cockerill, AI (C.A.) Cc: Dodds, Jordan (J.); Nowaczyk, Rick (R.J.) Subject: RE: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF

Jordan, I haven't heard anything back. I don't think there is an action available at this time.

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458 From: Dripps, David (D.S.) Sent: Wednesday, January 11, 2012 9:38 PM To: Cockerill, AI (C.A.) Cc: Dodds, Jordan (J.); Nowaczyk, Rick (R.J.) Subject: Ecoboost Random Miss Final Repair Attempt/ Duvall Ford Company, Inc. USA 00484/ 2011 F150 4X4 VIN : 1FTFW1ET3BF

Greetings, Al.

I was wondering if you could offer any relief for the attached vehicle concern. This is a random Misfire on a 2011 ecoboost. We are told this is under investigation and current actions will not result in concern resolution.

The customer has given us a final repair attempt. I'm told he uses the truck to take his terminally ill Alzheimers wife to Atlanta for treatment and also complains that he only gets 17 mpg on the freeway. He has given us an opportunity to repair this vehicle but it must be done before he embarks on a lengthy cross country trip with his camper as he feels it will leave him stranded or cause other problems when it acts up while towing. He wants the truck fixed or bought back before he goes.

Is there anything I can do in the next two weeks to resolve this? The ground below checked out okay. Thanks,

David S. Dripps Field Service Engineer Atlanta, Georgia Southeast Region 678-358-8458

From: System on behalf of [mailto:CQIS@ford.com] Sent: Wednesday, January 11, 2012 11:37 AM To: Christoff, Donald (D.A.); Dripps, David (D.S.); Johnson, Jim (J.S.); McCall, Kris (K.J.); Wenzel, Derek (D.T.); Middleton, Greg (H.); Hammer, Richard (R.M.); Jackson, Robert (R.P.); Sonnen, Stuart (S.J.); Triplette, Wesley (.) Cc: Dodds, Jordan (J.); Harmon, Derek (D.M.); Baker, Zachary (Z.) Subject: TAR OPEN AT Duvall Ford Company, Inc. USA 00484 Phone : ON 2011 F150 4X4 VIN : 1FTFW1ET3BF

A request for technical assistance has been OPENED for :

USA 00484 Name : Duvall Ford Company, Inc.

By: US-TECHNICAL SERVICE HOTLINE

Unit Down :

With a concern on : 2011 F150 4X4 VIN :1FTFW1ET3BF

It is filed under GCQIS report number : BLZDW003

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.dealerconnection.com/gcqis/asp/WBRES_RptSummaryUpdMain.asp?rptnbr_BLZDW003

THANK YOU , FRO! ! M THE US-TECHNICAL SERVICE HOTLINE

Attachments :

Report# :	BLZDW003	NHL		Received:	12/26/2011
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2011,F150 4X	K4,1FTFW1ET3BF		Build Date:	10/08/2011
Odometer :	1,577 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Engine Serial Number		11C116401096			
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Transmission Serial N	umber:	101128219333			
Dealer:	USA 00484 E	Duvall Ford Company	, Inc.	Phone#:	(706) 782-4231
City:	Clayton	State:	Georgia	Country :	USA
Originator:	KENNETH E	BROKAW			
Symptom:	554239 DRV	PERF,LACK/LOSS	PWR ,ACCEL,INT	TERMITTENT	•
Status:					
VFG:	V52 DRIVEA	ABILITY			
Additional Symptom:	CEL FLASH	ES			
Fix:	Causal Com	ponent :			
Condition Code:					
11					
Hotliner: SFERRET]	Phone: 313 317-912	4 Reg	gn Cd: S1 Atl	anta
Engineering:		Phone:	TAR:	OPEN	
Dir Contact: KENN	TH BROKAN	W Ph	one: 000 000-000) Ti	tle Cde: T
DI Contact. REIGI					
			one. 000 000 000		
		SHA! ! WN FERR	ET MSS - FCSD -	TECH SVC H	IOTLINE
	FORM DATA	I SHA! ! WN FERR - CONCERN:CEL F	ET MSS - FCSD -	TECH SVC H	IOTLINE
WEB H HARD	FORM DATA WAY ACCELI		E T MSS - FCSD - LASHES AND VE	TECH SVC H HICLE MISFI	IOTLINE RES DURING
WEB H HARD HIGHV CLYIN	FORM DATA WAY ACCELI IDERS	- CONCERN:CEL F	ET MSS - FCSD - LASHES AND VE ITTENTLY. POWF	TECH SVC H HICLE MISFI ER BALANCE	HOTLINE RES DURING E SHOWS
WEB H HARD HIGHV CLYIN NUME UP	FORM DATA WAY ACCELI IDERS BER 4 AND 5 1	- CONCERN:CEL F	ET MSS - FCSD - LASHES AND VE ITTENTLY. POWF IT HAPPENS. CYI	TECH SVC H HICLE MISFI ER BALANCE LINDER 6 DII	HOTLINE RES DURING E SHOWS D NOT SHOW

THERE BEEN ANY OTHER SIMILAR CONCERNS WITH ECOBOOST F150? IVE

SEEN A

TSB FOR BROKEN PORCELAIN ON SPARK PLUGS FOR AN ECOBOOST MOTOR BUT THAT

WAS ON OTHER VEHICLE APPLICATIONS. IT SEEMS STRANGE THAT ITS ONLY MISFIRING ON ONE BANK AND VERY INTERMITTENTLY. ANY ASSISTANCE WILL BE

APPRECIATED.

RECOMM 12/26/2011 05:17PM SHAWN FERRET MSS - FCSD - TECH SVC HOTLINE KENNETH, THIS CONCERN IS CURRENTLY UNDER INVESTIGATION AND WILL REQUIRE THE FOLLOWING QUESTIONS TO BE ANSWERED: 1) CAN G105 BE LOOSENED USING ONLY FINGER PRESSURE? 2) IF G105 CANNOT BE LOOSENED BY HAND, CAN IT BE TIGHTENED USING ONLY A SOCKET AND A 6-8 3/8 DRIVE EXTENSION (NO RATCHET)? G105 IS THE GROUND FOR THE BANK 2 IGNITION COILS LOCATED ON THE BACK OF THE LEFT SIDE CYLINDER HEAD. IT IS 13MM AND MOST EASILY ACCESSED FROM UNDER THE VEHICLE. AFTER CHECKING G105,

TORQUE IT TO 10NM PLUS AN ADDITIONAL 45 DEGREES AND UPDATE THIS FORM

WITH THE ANSWERS. IF G105 IS OK, TAKE A FUEL SAMPLE AND CHECK FOR CLOUDINESS, DEBRIS, AND ETHANOL CONTENT. CHECK FOR ETHANOL BY FILLING

A CONTAINER HALF WAY WITH WATER AND MARKING THE LEVEL. ADD A FUEL

SAMPLE TO THE REMAINING HALF AND MIX. AFTER ALLOWING THE MIXTURE TO

SETTLE IF THE WATER LINE RISES MORE THAN 10% THERE IS EXCESSIVE ETHANOL IN THE FUEL. CONTINUE WITH ATTEMPTS TO DUPLICATE THE CONCERN. MONITOR FRP AND FRP_DSD DURING THE CONCERN TO SEE IF A FUEL

SYSTEM CONCERN IS CAUSING THE MISFIRES.

REPAIR 12/27/2011 11:27AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE G105 WAS SECURE. I TOOK MULTIPLE FUEL SAMPLES, FUEL WAS NOT CLOUDY OR

DIRTY AND ETHANOL CONTENT WAS NOT EXCESSIVE. COULD NOT DUPLICATE

CONCERN ON SECOND TEST DRIVE. MONITORING FRP AND FRP_DSD SHOWED NO

CONCERNS OTHER THAN THE FRP SIGNAL SEEMED 'CHOPPY'. IT FOLLOWED FRP_DSD VERY CLOSELY BUT WHEN ACCELERATING SIGNAL WAS NOT AS SMOOTH AS

IT WAS WHEN YOU WERENT ON THE GAS.

RECOMM 12/27/2011 11:27AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

KENNETH, -SOME FLUCTUATION OF THE FRP READING IS A NORMAL CHARACTERISTIC OF A GTDI ENGINE DUE TO THE MECHANICAL ACTION OF

THE

HIGH PRESSURE PUMP. THIS ACTION CREATES NORMAL PULSATIONS IN THE FUEL

LINES AND WILL CAUSE THE READING TO FLUCTUATE SOME. IF FRP IS FOLLOWING FRP_DSD CLOSELY, WOULD NOT SUSPECT A CONCERN WITH THE FUEL

SYSTEM AT THIS TIME. -AT THIS TIME, IT IS RECOMMENDED TO ENSURE G105 IS CLEAN & TIGHT, AND RELEASE THE VEHICLE TO THE CUSTOMER. PLEASE

CONTINUE TO MONITOR OASIS FOR UPDATES ON THIS ISSUE. WE APPRECIATE YOUR RESPONSES TO THE QUESTIONS, THIS INFORMATION IS IMPORTANT.

 REPAIR
 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

DESCRIPTION OF VEHICLE CONCERN: VEHICLE HAS INTERMITTANT MISFIRE ON

CYLINDERS 4 ,5 ,6 I HAVE ALREADY E MAILED YOU ABOUT THIS TRUCK AND SPOKE WITH MY FSE A COUPLE OF TIMES HE HAS EXPLAINED THAT FORD IS WORKING ON THIS ISSUE CUST BOUGHT THIS TRUCK WITH EXPECTATIONS OF PULLING HIS CAMPER ACROSS COUNTRY IN FEB CUST HAS STARTED LEMON LAW

AND HAS SENT ME A FINAL REPAIR OPPORTUNITY NOTICE DIAGNOSTICS ALREADY COMPLETED: WE HAVE CKED THE GROUND ,CKED THE FUEL AND FUEL

PRESSURE ANY UPDATES ON REPAIR PARTS REPLACED: NONE TECH'S QUESTION: ANY HELP ? DTC: P0306 MODULE: PCM DTC: P0304 MODULE: P0305

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

VEHICLE CONCERN.

ESCLHD 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE EH DUE TO CUSTOMER STATES LEMON LAW, HAS SENT FINAL REPAIR OPPORTUNITY NOTICE (ACCORDING TO SERVICE DIRECTOR, AS OF NOW THERE IS NOTHING IN CUDL TO BACK THIS UP) // CONSULTED IDODDS6

CUDL TO BACK THIS UP) // CONSULTED JDODDS6

AUDIT 01/10/2012 10:55AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE

ODOMETER 1143 M CHANGED TO 1577 M BY DRIDOLF2 REPAIR 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE THE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEEN PLACED TO THE DEALER TO DISCUSS THIS CONCERN IN GREATER DETAIL. **KEVIN** WAS ADVISED THAT FSE INVOLVEMENT HAS BEEN IMPLEMENTED AT THIS TIME. 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE RECOMM KEVIN, 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. TAR 01/11/2012 11:36AM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE A TAR HAS BEEN OPENED AT THE REOUEST OF THE HOTLINE DUE TO A POTENTIAL BUY BACK CASE. THE VEHICLE OWNER HAS SUPPLIED THE DEALER WITH A "FINAL REPAIR OPPORTUNITY NOTICE". THIS VEHICLE EXHIBITS A BANK TWO MISFIRE CONDITION WHICH IS DIFFICULT TO DUPLICATE. THIS CONCERN IS **CURRENTLY** UNDER ENGINEERING INVESTIGATION. GROUND G105 FOR THE BANK TWO **IGNITION** COILS HAS BEEN INSPECTED AND TORQUED TO THE PROPER SPECIFICATION. NO EVIDENCE OF WATER INTRUSION HAS BEEN UNIDENTIFIED. THE FUEL PRESSURE IS WITHIN SPECIFICATIONS AND DOES NOT CONTAIN EXCESSIVE ETHANOL. IF FURTHER DIRECTION OR ASSISTANCE IS NEEDED, PLEASE CONTACT PCE RICK NOWACZYK. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 1 ESTIMATED DAYS OUT OF **SERVICE: 10**

This email was generated by the server FCWS686

From:Karanth, Dinakara (.)Sent:Friday, May 18, 2012 11:40 AMTo:Liepa, Ilze (I.T.); Ladd, John (J.R.); Parrado, Manuel (M.E.)Cc:Kramer, Michael (M.T.); Rodgers, Thomas (T.A.); Le, Mimi (M.); Shaw, Nathanael (N.)Subject:RE: F.E benefit for P415

Even if we have AGS in the entire lower opening, it will be more open than closed due to higher MCT at moderate and high ambient with normal driving conditions.

I would imagine that AGS can be closed more often during cold ambient driving which could help cold ambient FE (TBD).

P.S. Many of the other OEM vehicles with AGS – generally avoid AGS coverage of CAC – as the CAC function is required more often than radiator/condenser/TOC. Also, CAC is significantly more restrictive for airflow to begin with and hence aero benefit CAC may be small. Regards,

Dinakara Karanth Technical Specialist TASE Cooling 313-805-4474

From: Liepa, Ilze (I.T.)
Sent: Friday, May 18, 2012 11:07 AM
To: Ladd, John (J.R.); Parrado, Manuel (M.E.)
Cc: Kramer, Michael (M.T.); Karanth, Dinakara (.); Rodgers, Thomas (T.A.); Le, Mimi (M.)
Subject: RE: F.E benefit for P415

AGS on the total lower opening is the easy one to quantify....5 cnts aero improvement.

Manuel, how much FE is this?

I will have to understand the execution of CAC mounted AGS a little more, I'll talk to Tom / Dinakara today...the way I picture it, it could be no aero benefit.

ITL

From:Ladd, John (J.R.)Sent:Friday, May 18, 2012 10:18 AMTo:Liepa, Ilze (I.T.)Cc:Kramer, Michael (M.T.); Karanth, Dinakara (.); Rodgers, Thomas (T.A.)Subject:RE: F.E benefit for P415

Ilze, I have been asked to follow-up with you with regard to potential fuel economy benefit that grill shutters in the lower bumper opening would offer. Grill shutters are being proposed to be added to the charge air cooler for the 3.5L GTDI powertrain to attempt to control condensate formation internal to the CAC.

There are two proposals which may have different fuel economy effects. One proposal is to mount the shutters to the CAC, while the second proposal would effectively close off the lower opening. Would either of these design proposals result in a change in CD for the vehicle? Dinakara or Tom may be able to provide a high level impact to CD.

Please give me a call if you have any questions. The need to control condensate has been weekly in front of the VP's and the fuel economy impact of this proposal needs to be understood. Thanks.

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Kramer, Michael (M.T.) Sent: Thursday, May 17, 2012 1:56 PM To: Madej, Jeanette (J.); Ladd, John (J.R.); Liepa, Ilze (I.T.); Lewis, Jeffrey (J.E.) Cc: Kramer, Michael (M.T.) Subject: RE: F.E benefit for P415

Quick summary of our testing as pertains to addressing CAC related misfire.

1) RFR

 CAC shutters. Similar to #1 above, however, mounted to the CAC (which is behind the lower bumper opening). Testing Monday 5/21/12. High confidence in successful misfire test based on #1 above. Aero driven FE benefit unknown.

Potential aero FE benefit #1 vs. #2?

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: Thursday, May 17, 2012 1:31 PM
To: Kramer, Michael (M.T.); Ladd, John (J.R.); Liepa, Ilze (I.T.)
Cc: Lewis, Jeffrey (J.E.)
Subject: F.E benefit for P415

John, can you please touch base with IIze. Jeff and I talked P415 needs some F/E benefit. We need to see what testing is required from IIze.

I want to look at the bumper shutters and the CAC shutters to see the difference. If we can we can combine with our testing.

Thanks

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

Nowaczyk, Rick (R.J.)
Wednesday, January 09, 2013 6:32 AM
Goodwin, William (W.R.); Wagers, Sue (S.K.); Kantrow, Mary Ann (M.A.); Whitehead, Joseph (J.P.); Oyafuso, Kevin (K.G.); Imarisio, Valerio (V.); Ozturk, Emin (E.)
Smith, Craig (C.A.); Hughes, Scott (S.R.); Devries, Jason (J.E.)
RE: F-150 GTDI Erratic TIP Voltage

Any update around this TIP sensor contamination concern?

From: Goodwin, William (W.R.)
Sent: Wednesday, November 28, 2012 4:58 PM
To: Wagers, Sue (S.K.); Kantrow, Mary Ann (M.A.); Whitehead, Joseph (J.P.); Oyafuso, Kevin (K.G.); Imarisio, Valerio (V.); Ozturk, Emin (E.)
Cc: Smith, Craig (C.A.); Hughes, Scott (S.R.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.)
Subject: RE: F-150 GTDI Erratic TIP Voltage

Can we get the engine and associated TIP part number and can we determine if this is one of the programs that received the 8917 grease in the mating connection. I believe the oil contamination is an unlikely cause of any failure and the repeat repair an indication that the part was not bad.

Regards, **Bill Goodwin** Powertrain Sensors Technical Specialist Global Powertrain Control Systems Engineering Ford Motor Company / Building #2 / 22B19 E-mail: wgoodwin@ford.com Tel: (313) 805-9111 ONE FORD: ONE Plan - ONE Team - ONE Goal

From: Wagers, Sue (S.K.)
Sent: Wednesday, November 28, 2012 4:33 PM
To: Kantrow, Mary Ann (M.A.); Whitehead, Joseph (J.P.); Oyafuso, Kevin (K.G.); Imarisio, Valerio (V.); Ozturk, Emin (E.); Goodwin, William (W.R.)
Cc: Smith, Craig (C.A.); Hughes, Scott (S.R.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.)
Subject: RE: F-150 GTDI Erratic TIP Voltage

We release the sensor so I think we should at least be involved, but reading through the chain it sounds like the issue is not with the sensor itself.

Emin or Bill, and comments on sensor behavior if sensor gets filmed up?

Sue Wagers Supervisor - gPCSE Quality Global Powertrain Controls Systems Engineering Dearborn - Building 2 Room 22G20 E-mail <u>swagers@ford.com</u> Tel: (313) 805 7177 ONE FORD: ONE Plan - ONE Team - ONE Goal

From: Kantrow, Mary Ann (M.A.)
Sent: Wednesday, November 28, 2012 3:40 PM
To: Whitehead, Joseph (J.P.); Oyafuso, Kevin (K.G.); Imarisio, Valerio (V.); Wagers, Sue (S.K.)
Cc: Smith, Craig (C.A.); Hughes, Scott (S.R.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.)
Subject: RE: F-150 GTDI Erratic TIP Voltage

Sue,

Are you keeping take of this or should this go to Engine Systems. I can forward the attachments if you wish. Thanks.

Mary Ann Kantrow

GPCSE Module and Sensor Application Engineering CD3/U377, EUCD, CD4.x, D3, S197 & S550 Platforms Building 2 - 22P36 313-805-7092

From: Whitehead, Joseph (J.P.)
Sent: Wednesday, November 28, 2012 10:15 AM
To: Oyafuso, Kevin (K.G.); Kantrow, Mary Ann (M.A.); Imarisio, Valerio (V.)
Cc: Smith, Craig (C.A.); Hughes, Scott (S.R.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Whitehead, Joseph (J.P.)
Subject: FW: F-150 GTDI Erratic TIP Voltage
Importance: High

Kevin,

This is the first I've heard about TIP sensor contamination and possible link to driveability problems.

Mary Ann and Valerio,

Do you have any additional information on possible TIP sensor problems in the field on 3.5L GTDI P415? The oil and water contamination on this application is expected.

Thanks,

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

From: Oyafuso, Kevin (K.G.) Sent: Wednesday, November 28, 2012 8:17 AM To: Whitehead, Joseph (J.P.); Smith, Craig (C.A.); Hughes, Scott (S.R.) Subject: FW: F-150 GTDI Erratic TIP Voltage Importance: High

All, Have you guys tried looking at TIP sensors and seeing if contamination will cause driveability symptoms?
 From:
 Nowaczyk, Rick (R.J.)

 Sent:
 Thursday, November 15, 2012 12:50 PM

 To:
 Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Osepchook, William (W.R.)

 Cc:
 Dobbs, Dan (K.D.); McDonagh, Scot (S.M.); Ridolfi, Dominic (D.R.)

 Subject:
 FW: F-150 GTDI Erratic TIP Voltage

 Importance:
 High

Powertrain Engineering Team,

Please review the note below.

Is it possible that this issue could be creating some of the complaints we are seeing with the surge and/or misfire issues?

From: Ridolfi, Dominic (D.R.)
Sent: Thursday, November 15, 2012 12:32 PM
To: Nowaczyk, Rick (R.J.)
Cc: Abercrombie, Robert (R.); Osepchook, William (W.R.); Johnson, Seth (S.)
Subject: F-150 GTDI Erratic TIP Voltage

Rick,

We are seeing instances of drivability concerns being caused by erratic TIP sensor voltages. In some of these cases the technicians are reporting contamination being found on the sensor. Often, replacement of the sensor will fix erratic TIP voltage, and the vehicle will be released to the customer with the concern resolved – however in some cases, the vehicle eventually returns with the same issue, and once again erratic TIP voltage is found.

Some comments call out oil film contamination found on the sensor. In dealing with CAC condensation, we would occasionally get a report of a foamy oil-water mix being found in the CAC.

First of all, what are the thoughts on oil film, oil/water mixture, or condensation droplets alone, contaminating the TIP sensor to the point of the erratic voltages shown in the recordings on the attached reports?

Is there a relation to the erratic TIP sensor readings, and the moisture created in the CAC?

When oil contamination is found on the sensor, what is the correct repair direction? Our understanding is that some level of oil (a light coating) can be normal in the CAC tubes. However, when this normal level of oil mixes with condensation, can this produce a substance that is leading to the oil filming the technicians are finding on the sensors? If so, replacement of the TIP sensor will not resolve this concern long term, even if the WSM CAC cleaning procedure is followed.

Here are some reports to reference:

This report shows TIP sensor replacement resolving intermittent voltage spikes, only with the vehicle to return around two weeks later with the same issue. TAR currently open, and a recording is attached. << Message: F150 GTDI TIP - CQIS Report#CJDGV001 >>

This report shows the tech finding TIP contamination. Replacement of sensor resolves concern for a brief period of time. << Message: F150 Repeat TIP CQIS Report#CITF1024 >>

This report has attached recordings of erratic TIP voltage. Sensor replacement resolved the concern briefly however the vehicle has since come back to the dealer. << Message: Tip CQIS Report#CH3EH021 >>

This report shows possible, but not confirmed, sensor contamination causing voltage spikes. << Message: Tip CQIS Report#CKGA6019 >>

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:	Smith, Craig (C.A.)
Sent:	Monday, August 20, 2012 8:20 AM
То:	Dixon, Mark (M.R.); Whitehead, Joseph (J.P.); Hocking, Chris (C.); Kramer, Michael (M.T.); Wagers, Sue (S.K.)
Cc:	Dobson, Kevin (K.E.); Krygowski, Richard (R.J.); Pierce, Michael (M.A.); Ducklow, Corey (C.S.); Whitehead, Joseph (J.P.); Carroll, Lori (L.J.)
Subject:	RE: F150 Pareto VFM F15 - NA F-SERIES u 8500 TOTAL 15Aug2012.xlsx

Mark, Kevin,

The majority of our V52 drivability (and other) items are CAC condensate related for which calibration has no control over.

We've released changes for the CBV cycling (surge) and long crank fix so those items should be resolved.

Calibration is still looking into the following projects. You can bin the following to me but here are the specifics:

- 1) CSW hesitation likely VCT scheduling related due to emissions requirements : Ducklow/Krygowski
- 2) CSW idle quality combustion stability portion due to CSSRE spark retard: Pierce
- 3) CSW surge/brakes won't hold investigating opportunity to reduce time in drive hicam: Pierce/Carroll

Opportunities to improve #1 & #2 may be limited (low confidence) while we have medium confidence that some improvement is possible for item #3. Mazen reviewed this status with Mr. Bajak last week so there should be no surprises. If there is a need for additional projects for which my team will be assigned then please bring them to Mazen's quality review.

Thanks,

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

From: Dixon, Mark (M.R.) Sent: Monday, August 20, 2012 7:18 AM To: Smith, Craig (C.A.); Whitehead, Joseph (J.P.); Hocking, Chris (C.); Kramer, Michael (M.T.); Wagers, Sue (S.K.) Cc: Dobson, Kevin (K.E.) Subject: RE: F150 Pareto VFM F15 - NA F-SERIES u 8500 TOTAL 15Aug2012.xlsx

Per below, we've been asked to show the names of the specific people working on the top F150 concerns in the attached "customer paredo". This is simply a document that ranks a composite number representing all the F150 quality metrics (high and low TIS warranty and TGW) from top to bottom. Bennie Fowler has asked that the names in the boxes reflect the people actually working on the concerns.

Since GTDI dominates these metrics, the names on the V52/V40/V23/V29 sections on attached are tied to this PT. I've highlighted these names.

Craig/Joe, I have you shown for most of the driveability items and the "does not maintain consistent speed" CCC under the speed control VFG. Mike, since the CAC misfire claims are all getting binned to D42 (lacks power), I have your name for this CCC.

Chris, I have your name down for the V40 CCCs.

Sue, I have your name on the "engine stalls" CCC since I believe most of the stall complains are related to the "loss of power to PEM" concern that the Controls team led the investigation on.

To my knowledge, there are no assignments that will get generated for the people added to the list. It's an "awareness" document.

Get back to me with any name assignments you disagree with. Thanks.

<< File: F150 Pareto _VFM_F15 - NA F-SERIES u 8500 TOTAL__15Aug2012 MD.xlsx >>

From:	Sparks, Douglas (D.S.)
Sent:	Friday, August 17, 2012 4:46 PM
To:	Galas, Dean (C.K.); Miller, Brian (B.J.); Ronzi, Bill (W.C.); Dixon, Mark (M.R.); Tyahla, Mark (M.A.); Crudo, Frank (F.J.)
Subject:	F150 Pareto VFM F15 - NA F-SERIES u 8500 TOTAL 15Aug2012.xlsx

Dean/Brian,

Please find latest pareto with update PD ccc leads

Bill, Mark, Mark, Frank,

Please make sure the names within your VFG's are aware there name in on the pareto and why. Please call them and discuss on Monday.

Thank you,

Doug

<< File: F150 Pareto _VFM_F15 - NA F-SERIES u 8500 TOTAL__15Aug2012.xlsx >>

From: Sent:	Smith, Craig (C.A.) Wednesday, September 12, 2012 9:22 AM
То:	Kromberg, Arnold (A.W.)
Cc:	Dobson, Kevin (K.E.); Hammoud, Mazen (M.); Smith, Craig (C.A.)
Subject:	RE: F150 Q3 march-april verbatim

I went through the file. Here's my quick assessment:

30 check boxes

- 6 CAC misfire (CAC PCA in mid-September)
- 8 Long Crank (fix released)
- 1 Cold Idle Roughness (revised CSER calibration)
- 2 Turbo Lag
- 1 CBC cycling (fix released)
- 4 duplicate (D41/D42)
- 3 no verbatim (D36/D21- prior D21 'stalls' were actually CAC misfire)
- 5 TBD

Thanks,

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

From: Kromberg, Arnold (A.W.) Sent: Wednesday, September 12, 2012 12:41 AM To: Smith, Craig (C.A.); Hughes, Scott (S.R.) Cc: Dobson, Kevin (K.E.) Subject: RE: F150 Q3 march-april verbatim

Attached is an update. Binning the higher confidence verbatim that appear to be CAC carryover it seems that 25% impact on V52 is a fair estimate.

<< File: Copy of F150 Q3 march-april checkbox.xlsx >>

Kind Regards,

Arnold Kromberg

Calibration Quality Supervisor Gas and Diesel Powertrain Phone: 313-805-0156 E-mail: <u>akromber@ford.com</u>

From: Kromberg, Arnold (A.W.)

Sent: Tuesday, September 11, 2012 5:11 PM To: Smith, Craig (C.A.); Hughes, Scott (S.R.) Cc: Dobson, Kevin (K.E.) Subject: F150 Q3 march-april verbatim

Craig/Scott,

In a review of the Q3 quality data this afternoon there appeared to be a fair spike in March and April. Attached is a file that has F150 sorted for the months in question. Phil/Joe have requested a review of the verbatim to determine:

- Potential impact from CAC carryover
- New issues driving the up tick or current increased contribution of currently known issues

Now the best part of all, we need to have the analysis by 7:00 AM tomorrow.

On the plus side for 3.5L there are only 20 verbatim out of 31 check boxes. I'll give you a call. << File: F150 Q3 march-april checkbox.xlsx >>

Kind Regards,

Arnold Kromberg

Calibration Quality Supervisor Gas and Diesel Powertrain Phone: 313-805-0156 E-mail: <u>akromber@ford.com</u> From: Sent: To: Cc: Subject: Dumler, Jeff (J.D.) Friday, January 13, 2012 4:48 PM Ronzi, Bill (W.C.) Stanley, Daniel (D.J.); Allan, Valerie (V.J.); Kramer, Michael (M.T.) RE: File: CAS/Misfire Updates

Yep, another good idea Bill. Thanks and keep'em coming. Unfortunately we don't need a puddle at the bottom of the CAC to cause misfire. During one of WT tests yesterday they ran an F150 3.5L GTDI for 1.5 hours at a steady 70 mph in a low ambient temp with high humidity, stopped the engine and drained about 2.5 ounces out of the bottom of the CAC, restarted the vehicle and slowly brought it up to 45 mph (about 60 seconds) and then when to WOT. The engine misfired apparently just on the residual condensate left in the CAC tubes. So although puddling at the bottom of the CAC is a concern, eliminating it will not eliminate misfire.

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

From: Ronzi, Bill (W.C.) Sent: Friday, January 13, 2012 1:08 PM To: Stanley, Daniel (D.J.); Allan, Valerie (V.J.); Kramer, Michael (M.T.); Dumler, Jeff (J.D.) Subject: RE: File: CAS/Misfire Updates

Good stuff. Thanks Dan.

Val / Jeff, I'm sure you have lots of good ideas on this. One more idea from the peanut gallery... a "waffle" type pattern at the bottom of the cac would allow the water to collect but would make it very difficult for those puddles to become entrained in the airflow during wot events.

From: Stanley, Daniel (D.J.) Sent: Friday, January 13, 2012 11:23 AM To: Ronzi, Bill (W.C.) Subject: File: CAS/Misfire Updates

Bill, I WebEx'ed the meeting and extracted the following. My added info is in Blue. <<...>>

Daniel J. Stanley

Ford Motor Company Powertrain Engineering (PTIM) Exhaust Systems VFG Team Leader Bldg 2; 24P12 313.805.9717 From:Kramer, Michael (M.T.)Sent:Wednesday, March 20, 2013 8:42 AMTo:Andersen, Erik (E.)Cc:Ladd, John (J.R.); Russo, Scott (S.)Subject:RE: Follow-up to P415 CAC testing history

I anticipate was something like a piece of cardboard. Should keep Friday test plan as-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

From: Andersen, Erik (E.) Sent: Tuesday, March 19, 2013 5:31 PM To: Kramer, Michael (M.T.); Russo, Scott (S.) Cc: Ladd, John (J.R.) Subject: RE: Follow-up to P415 CAC testing history

I see. Do you remember what kind of a blocker it was?

Our pass is 33% external blocker with internal blocker. We are planning to test Friday without the internal blocker.

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

From: Kramer, Michael (M.T.) Sent: Tuesday, March 19, 2013 5:30 PM To: Andersen, Erik (E.); Russo, Scott (S.) Cc: Ladd, John (J.R.) Subject: RE: Follow-up to P415 CAC testing history

Lower 45% blocked failed.

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, March 19, 2013 5:29 PM To: Kramer, Michael (M.T.); Russo, Scott (S.) Cc: Ladd, John (J.R.) Subject: RE: Follow-up to P415 CAC testing history

Do I interpret that test as a pass? At 70% covered, I'd be surprised if it didn't.

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

From: Kramer, Michael (M.T.) Sent: Tuesday, March 19, 2013 5:17 PM To: Russo, Scott (S.); Andersen, Erik (E.) Cc: Ladd, John (J.R.); Kramer, Michael (M.T.) Subject: Follow-up to P415 CAC testing history

Regarding your question on whether or not tested lower external blocker. Yes, on J1 level CAC. See hi-lighted item on first tab.

<< File: DTF_Summary_120427.xls >>

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: Tyler, Jim (J.S.) Sunday, June 03, 2012 6:28 PM 'Joseph LUMETTA'; Hayes, Kenneth (K.J.) Kramer, Michael (M.T.) RE: Ford F150 CAC pending changes update

Joe please come in to Ford on Monday morning to pickup the 2 CACs at bld 2 needed to make the CACs. I will be on vacation you will need to contact Ken Hayes at 3138052319 for help with the parts. Ken the 2 no louver uncrimped CACs are in unopened boxes at the back of the storage room, on the floor, the boxes have writing on them with this description.

5 CAC tube covers 27mm opening (SLS white material) are on my desk for Joe to pickup also.

To summarize, Joe plan to pickup 2 CACs and 5 27mm tube covers on Monday with help from Ken Hayes. Please try to also Ship out to SLP on Monday.

Thank you,

Sent with Good (<u>www.good.com</u>) Jim Tyler T1/P552 Cooling 313-805-2565

----Original Message----From: Kramer, Michael (M.T.)
Sent: Friday, June 01, 2012 05:37 PM Eastern Standard Time
To: Kronig, Donald (D.M.); Larry ENGEL (larry.engel@valeo.com); Peter GAUDINO (peter.gaudino@valeo.com); David CASTILLO (david.castillo@valeo.com); Joseph LUMETTA
Cc: Tyler, Jim (J.S.); Madej, Jeanette (J.); Kramer, Michael (M.T.); Ladd, John (J.R.)
Subject: Ford F150 CAC pending changes update

We have had favorable results in minimizing condensation accumulated within the CAC using the 11 cell louverless turbulator, 27 mm tube end plates (TMD), and 6 tube blocker (not a Valeo part). Next step is to confirm adequate charge air cooling performance.

Please expedite the two related CACs ordered by Jim today.

Further updates regarding timing and direction for CAC hardware changes will be provided week of 6/4/12.

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: Randal B White [Randal.B.White@usa.dupont.com] Tuesday, March 27, 2012 8:45 AM Tyler, Jim (J.S.) Khami, Roger (R.); Kramer, Michael (M.T.) Re: FW: DuPont Zytel Plus. Zytel® PLSFR95G15DH2 BK269.

Now that I see the part, my only concern is keeping the part from warping. My experience with parts with the geometry all on one side is they tend to bow in that direction. This part should be flexible enough to be flattened, but it will be bowed in the free state. I would also not use a single edge gate but look at two fan gates on the end so that the material flow down each side.

One last option would be to place a thin rib along the parameter between each raised section. This would make the part stiff to resist warpage.

I am stuck leading several meetings this morning, but I am available after 1PM to discuss this further. If we have the tool cut for 0.009"/" we should be able to use either Zytel HTN FE8200 or Zytel Plus.

I also wanted to let you know we sell this product commercially today and have several more applications that will use Zytel PLSFR95G15DH2 in the future. We will have no problem supplying product going forward. I just need to make sure we have your forecast in so we can plan to increase our production. I will at least warn the production scheduler.

Randal B White Business Development DuPont Performance Polymers Cell (585)704-5993

 From:
 "Tyler, Jim (J.S.)" < ityler1@ford.com

 To:
 "Kowalski, George (G.S.)" <gkowalsk@ford.com</td>

 Cc:
 "Kramer, Michael (M.T.)" <mkramer1@ford.com</td>

 Date:
 03/26/2012 05:33 PM

 Subject:
 FW: Dupont Zytel Plus. Zytel@ PLSFR95G15DH2 BK269.

George/Alan, please prepare a Ford spec number for this Zytel Plus material. Cooling intends to use it within approx 6 weeks on P415 as an internal CAC core tube cover (15.5in x 2.25in).

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

[attachment "ZYTEL_PLSFR95G15DH2_BK269[1].pdf" deleted by Randal B White/AE/DuPont]

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From: Sent: To: Cc: Subject: David CASTILLO [david.castillo@valeo.com] Monday, June 11, 2012 1:48 PM Kramer, Michael (M.T.) Joseph LUMETTA; Tyler, Jim (J.S.) Re: FW: P415 CAC performance testing

Hi Mike,

-Parts are at workshoop righ now. -Parts will be at Ford on Wednesday morning base on UPS leadtime -Tests will be complete tomorrow for the pars we will keep

One of the 5 cover sent was broken during assembly, material looks brittle, Material did not resist the stress when flaring was done on the tube. We are trying to stress as lowest we can to make the flaring process on it.

DC

On Mon, Jun 11, 2012 at 3:19 PM, Kramer, Michael (M.T.) <<u>mkramer1@ford.com</u>> wrote: Please confirm test completion date and status of part being shipped to Dearborn.

Need the data for an internal Ford meeting on Thursday.

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, June 05, 2012 1:01 PM To: Joseph LUMETTA; Larry ENGEL (<u>larry.engel@valeo.com</u>); David CASTILLO (<u>david.castillo@valeo.com</u>); 'Satish NADELLA' (<u>satish.nadella@valeo.com</u>) Cc: Tyler, Jim (J.S.); Kramer, Michael (M.T.); Huang, Larry (L,.); Allan, Valerie (V.J.)

Subject: P415 CAC performance testing

Follow-up to our conference call this morning.

Please see attached test matrix. Let me know if questions.

There are two external air blocker shields and push pins at Jim's desk. Please come by and have ship to SLP ASAP. I will put them on Jim's chair with your name on them.

Need for this testing is urgent. Also, how is Ying coming on the analytical projections?

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

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Phone:(52) 444 826 6687 Mobile:(52) 1 444 829 1895 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: Sent: To: Cc: Subject: Blas-Fernando GUTIERREZ [blas-fernando.gutierrez@valeo.com] Wednesday, June 26, 2013 5:07 AM Kramer, Michael (M.T.); Eduardo BARRIOS Tyler, Jim (J.S.); Reaume, Alan (A.C.); Alcaraz andrade, Alejandro (M.) Re: FW: Surface prep question

Good morning Mike,

The paint we are using is a water base, but, we will get more details o share...

Eduardo,

Please support us on this request for information ...

Thank you BG

On Wed, Jun 26, 2013 at 6:57 AM, Kramer, Michael (M.T.) <<u>mkramer1@ford.com</u>> wrote: 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

Blas Gutierrez **Project Manager** blas-fernando.gutierrez@valeo.com Tel. +52 444 8 26 66 12

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:Laleman, Mark (M.R.)Sent:Friday, February 22, 2013 7:50 AMTo:Oyafuso, Kevin (K.G.); Ronzi, Bill (W.C.); Dixon, Mark (M.R.)Cc:Baskins, Robert (R.S.); Smith, Craig (C.A.)Subject:RE: GTDI CAC - Agree Verbiage for TSB UpdateSigned By:mlaleman@ford.com

Looks good to me

-----Original Message-----From: Oyafuso, Kevin (K.G.) Sent: Thursday, February 21, 2013 2:34 PM To: Ronzi, Bill (W.C.); Dixon, Mark (M.R.) Cc: Baskins, Robert (R.S.); Smith, Craig (C.A.); Laleman, Mark (M.R.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update

I left it at a high level, If I add too much explanation of the FF and Mode 6, it will get too complicated to follow, let me know what you guys think.

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Thursday, February 21, 2013 1:57 PM To: Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update

Kevin, Getting close? Would like to send out ahead of 3:30 meeting so that folks can review in advance.

Bill

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Thursday, February 21, 2013 1:09 PM To: Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update

Excellent. Thanks...

-----Original Message-----From: Dixon, Mark (M.R.) Sent: Thursday, February 21, 2013 1:08 PM To: Ronzi, Bill (W.C.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update

No, Kevin has added to your draft and will send to you. He has actual metric for the load value.

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Thursday, February 21, 2013 12:51 PM To: Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update

Mark/Kevin, Should I use this for updating the draft or are you working on

other verbiage? ----Original Message-----From: Dixon, Mark (M.R.) Sent: Thursday, February 21, 2013 11:22 AM To: Ronzi, Bill (W.C.); Sparks, Douglas (D.S.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update Steps would be: Check for misfire FF. If values are all zero, there was not a misfire event. If values are not zero: - Confirm load value is above what we believe is the load conditions that typically precede a misfire event - Check Mode 6 data for counts on bank 2. Must be confirmed high load with counts on bank 2 to establish high likelihood of CAC misfire event. ----Original Message-----From: Ronzi, Bill (W.C.) Sent: Thursday, February 21, 2013 8:22 AM To: Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update Doug, The P0300 is general misfire where an individual cylinder could not be identified. We may be able to remove P0300 from criteria and rely on mode 6 data instead but I'm not sure though whether mode 6 would be any more cylinder specific so that could still leave us open to other causes. Need input from Mark and Kevin here. Bi11 ----Original Message-----From: Sparks, Douglas (D.S.) Sent: Thursday, February 21, 2013 8:15 AM To: Ronzi, Bill (W.C.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update Bill, Not sure of all the codes. Does a coil misfire give the same code as a CAC misfire ? If so step 2 will need to be strengthened. 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

2

ttessadr

313 594-1115

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Wednesday, February 20, 2013 3:57 PM To: Wagner, Glen (G.C.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Sparks, Douglas (D.S.); Nowaczyk, Rick (R.J.); Dixon, Mark (M.R.); McDonagh, Scot (S.M.); Oyafuso, Kevin (K.G.) Subject: RE: GTDI CAC - Agree Verbiage for TSB Update Importance: High Attached is my first pass at the proposed TSB revisions, per yesterday's discussion, requiring the presence of DTC's or misfire mode 6 data. This will help make CAC's available to those customers that need them most. Please review the draft and provide your feedback. I'll schedule a follow-up for Thursday. Thanks, Bill -----Original Appointment-----From: Ronzi, Bill (W.C.) Sent: Wednesday, February 20, 2013 1:29 PM To: Ronzi, Bill (W.C.); Wagner, Glen (G.C.) (gwagner1@ford.com); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Sparks, Douglas (D.S.); Nowaczyk, Rick (R.J.); Dixon, Mark (M.R.); McDonagh, Scot (S.M.) (smcdonag@ford.com); Oyafuso, Kevin (K.G.) (koyafuso@ford.com) Cc: Smith, Craig (C.A.); Whitehead, Joseph (J.P.) Subject: GTDI CAC - Agree Verbiage for TSB Update When: Wednesday, February 20, 2013 3:30 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada). Where: Audio/Webex Importance: High Purpose: Agree on verbiage to include requirement for DTC, Mode 6, or freeze frame evidence of misfire. [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: 712 050 079 Meeting Password: This meeting does not require a password. Meeting Link: https://ford.webex.com/ford/j.php?J=712050079 Audio conference information 3

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: https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=194424297&tol IFree=1 Toll-free dialing restrictions: http://www.webex.com/pdf/tollfree_restrictions.pdf

Access code:712 050 079

MC12

http://www.webex.com

From: Sent: To: Cc: Subject: Shovlin, Jean (J.E.) Wednesday, June 26, 2013 11:56 AM Kramer, Michael (M.T.) Alcaraz andrade, Allejandro (M.) RE: HOT. RPS 1330314

Importance:

High

Michael,

PO issued today for DL34 3G4610 AA Service CAC Blocker

Best Regards,

Jean Shoolin

Interior Prototype Buyer Ford Motor Company 20300 Rotunda Drive, Bldg #5 - 3D101 Dearborn, MI 48124 (313) 390-6049 jshovlin@ford.com ONE FORD • ONE TEAM • ONE PLAN • ONE GOAL

and a street day

From: Granett, Karol (K.A.) Sent: Sunday, June 23, 2013 11:06 PM To: Kramer, Michael (M.T.); Shovlin, Jean (J.E.) Cc: Alcaraz andrade, Alejandro (M.) Subject: RE: HOT. RPS 1330314

This is not a PTI part...it is currently sitting in Jean's work queue.

As always...thanks!

Karol A. Granett

Prototype Buyer PTI Purchasing Phone: 313-594-1643

Laugh...you'll feel better!

From: Kramer, Michael (M.T.) Sent: Sunday, June 23, 2013 8:16 AM To: Shovlin, Jean (J.E.); Granett, Karol (K.A.) Cc: Kramer, Michael (M.T.); Alcaraz andrade, Alejandro (M.) Subject: HOT. RPS 1330314

1

Part number is DL34-3G4610-AA. Which one of you is the correct buyer for this part. We need to get this prototype order out quickly.

Jean, presently in your proto que.

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:Smith, Craig (C.A.)Sent:Monday, July 30, 2012 5:02 PMTo:Dobson, Kevin (K.E.)Cc:Ducklow, Corey (C.S.); Pierce, Michael (M.A.); Hammoud, Mazen (M.)Subject:RE: Input to annotate Top 25 slides

P415 GTDI V52 Annotations:

Condensate-Induced Misfire:

- 1) Implemented improved misfire detect/react algorithms, eliminated flashing MIL
- 2) Implemented 6 tube blocker plate on CAC
- 3) Implementing revised CAC in mid-September

Note that several cac-condensate misfire-related items are being misbinned into other CCCs, including 3 D21 verbatims

Tip-In/SS Surge:

1) Implemented CBV cycling fix

Long Crank Start:

1) Implementing Long Crank strategy fixes (mid-September plant incorporation).

P415 GTDI V40 Annotations

1) Emissions compliance drives significant spark retard that degrades combustion stability during CSSRE. Investigating potential CSW changes to improve combustion stability.

Thanks,

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

From: Dobson, Kevin (K.E.)
Sent: Monday, July 30, 2012 1:54 PM
To: Dame, Andrew (A.C.); Smith, Craig (C.A.); Zimlich, Glenn (G.A.); Nault, Ben (B.D.); Barwick, Matt (M.E.)
Subject: Input to annotate Top 25 slides

All

Last Friday, I posted your department GQRS Wave 2 file to the sharepoint site (Not sent Friday). We are scheduled to review the top 25 issues with Joe tomorrow, so please forward any actions to annotate the Top 25 Chart (CCC level preferably) by COB today.

Kevin E. Dobson P/T CALIBRATION QUALITY CO-LOCATED: APTL 3AM25 – M/W/TH BLDG 2 22J02 – TU/F CELL PHONE: (313) 805-7052 CDS ID: KDOBSON From: Sent: To: Cc: Subject: Zhang, Yi (Y.) Thursday, October 25, 2012 2:03 PM Huang, Larry (L,.); Myers, Eric (E.) Andersen, Erik (E.); Allan, Valerie (V.J.) RE: intake turbolator

The idea is to use the device to swirl the air flow, that may disperse the water in air and flow into every combustion chamber more uniformly.

From: Huang, Larry (L,.) Sent: Thursday, October 25, 2012 12:36 PM To: Zhang, Yi (Y.); Myers, Eric (E.) Cc: Andersen, Erik (E.); Allan, Valerie (V.J.) Subject: RE: intake turbolator

Thanks for the input on the resolutions.

We need to separate and tentatively collect water from the air/water mix flow. This device looks like to go to the opposite direction. We did try "centrifugal device" in P415. It did not work well. Thanks

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Zhang, Yi (Y.) Sent: Thursday, October 25, 2012 12:30 PM To: Huang, Larry (L,.) Cc: Andersen, Erik (E.); Allan, Valerie (V.J.); Myers, Eric (E.) Subject: FW: intake turbolator

Larry,

I know that you guys have tried many different ways to deal with the CAC condensation issue... but Eric Myers, one of our CAE engineers, suggests this aftermarket product. It may help dispersing the water out of CAC. Let me know if you have not tried it and see any merits.

From: Myers, Eric (E.) Sent: Thursday, October 25, 2012 10:38 AM To: Zhang, Yi (Y.) Subject: intake turbolator Yi,

Below is the link to a web page for the intake turbolator manufacturer.

http://tornadoair.com/tornadoair.php

thanks, Eric Myers

Ford Motor Company Powertrain Installations CAE Bldg #2, Cube 24E18 Phone: 313-805-9822 Email: <u>emyers3@ford.com</u>

Share the Ford story at www.TheFordStory.com

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R.)
2012 12:47 PM
); Graham, David (D.L.)
sfire

First meeting internal. I discussed with FCSD this morning.....and my plan is the correct direction.

From:	Mazuchowski, James (J.A.)
Sent:	Wednesday, January 11, 2012 12:42 PM
To:	Graham, David (D.L.); Osepchook, William (W.R.)
Subject:	RE: ISM/SSM re: GTDI Misfire

I'll leave it to you guys to forward & include any other FCSD folks at this point. Or 1st mtg more internal ??

Jim Mazuchowski Manager, New V6 Engine Programs V-Engine Eng'r; 33-79935

From:Mazuchowski, James (J.A.)Sent:Wednesday, January 11, 2012 12:25 PMTo:Mazuchowski, James (J.A.); Sims, Ivan (I.D.); Cockerill, AI (C.A.); Osepchook, William (W.R.); Graham, David (D.L.); Morrow, Bill
(N.W.); McCoy, Jim (D.); Fabien, Phil (P.A.); Donahue, Francis (Fran.); Langley, Scott (C.S.)Cc:Oyafuso, Kevin (K.G.)Subject:ISM/SSM re: GTDI MisfireWhen:Wednesday, January 11, 2012 3:00 PM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).Where:Bld-1 13C037 (12)

Purpose: discuss immediate service field communication in lieu of recent findings on GTDI Root Cause.

Agenda:

1) should we publish ISM/SSM to minimize part changes (i.e coils, plugs, etc) and redirect to CAC R&R and cleaning ?

- 2) any other ideas or action req'd ??
- 3) walk-ins

From: Sent: To: Subject: Andersen, Erik (E.) Friday, February 17, 2012 11:10 AM Ladd, John (J.R.) RE: Kick off tooling for P415 misfire fixes

Is our PCA solution still the perforated baffle / chamber solution?

Erik Andersen eanderse@ford.com 313-805-2966

From: Ladd, John (J.R.) Sent: Friday, February 17, 2012 11:04 AM To: Andersen, Erik (E.) Subject: FW: Kick off tooling for P415 misfire fixes

FYI.

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Madej, Jeanette (J.) Sent: Friday, February 17, 2012 11:02 AM To: Kramer, Michael (M.T.); Ladd, John (J.R.) Subject: 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
 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:Andersen, Erik (E.)Sent:Monday, May 13, 2013 2:08 PMTo:Alcaraz andrade, Alejandro (M.); Hayes, Kenneth (K.J.)Cc:Kramer, Michael (M.T.); Huang, Larry (L.)Subject:RE: lower blocker on 11 / 12 P415

Craig is looking for 6 now, probably should get a bunch more.

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

From: Alcaraz andrade, Alejandro (M.) Sent: Monday, May 13, 2013 2:07 PM To: Andersen, Erik (E.); Hayes, Kenneth (K.J.) Cc: Kramer, Michael (M.T.); Huang, Larry (L,.) Subject: RE: lower blocker on 11 / 12 P415

I think we have 5 blockers available right now, how many do we need?

Ken, Did you received the blockers from Creative Foam?

Regards,

From: Andersen, Erik (E.) Sent: lunes, 13 de mayo de 2013 01:02 p.m. To: Alcaraz andrade, Alejandro (M.) Cc: Kramer, Michael (M.T.); Huang, Larry (L,.) Subject: FW: lower blocker on 11 / 12 P415

Alejandro,

Can you get a bunch of blockers for both calibration / engine to run any testing they need on P415?

Thanks,

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966 From: Smith, Craig (C.A.)
Sent: Monday, May 13, 2013 1:55 PM
To: Andersen, Erik (E.); Norman, Kristofor (K.R.)
Cc: Whitehead, Joseph (J.P.); Horng, Margaret (M.); Syrylo, Tom (T.M.); Peterson, Timothy (T.A.); Devries, Jason (J.E.);
VanHouten, Andrew (A.S.)
Subject: RE: lower blocker on 11 / 12 P415

Yes, we'll take 6 of the new blockers for 11/12 (and 13MY R/C)? We'll want to review TASE's test data with the revised blocker. We may also need to rerun P4-7 pending Chris's feedback, particularly if it's a production R/C.

Thanks,

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

From: Andersen, Erik (E.) Sent: Monday, May 13, 2013 12:23 PM To: Smith, Craig (C.A.); Norman, Kristofor (K.R.) Subject: lower blocker on 11 / 12 P415

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Let me know. If you need blockers, we can get them.

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

From:	Hayes, Kenneth (K.J.)
Sent:	Monday, May 13, 2013 3:06 PM
To:	corey.small@valeo.com; Stein, James (J.R.)
Cc:	Kramer, Michael (M.T.); Huang, Larry (L,.); Alcaraz andrade, Alejandro (M.); Andersen,
	Erik (E.); Mendez, Mario (M.M.)
Subject:	RE: lower blocker on 11 / 12 P415
Importance:	High

1

Corey/Jim, Reminder that we require the CAC blockers as soon as possible.

Call me when you get to Bld #2 I will run down to the lobby. Thanks!



Ken Hayes P/T Cooling 313-805-2319

From: Alcaraz andrade, Alejandro (M.) Sent: Monday, May 13, 2013 2:07 PM To: Andersen, Erik (E.); Hayes, Kenneth (K.J.) Cc: Kramer, Michael (M.T.); Huang, Larry (L,.) Subject: RE: lower blocker on 11 / 12 P415

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From: Andersen, Erik (E.) Sent: Monday, May 13, 2013 12:23 PM To: Smith, Craig (C.A.); Norman, Kristofor (K.R.) Subject: lower blocker on 11 / 12 P415

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

From:	Hayes, Kenneth (K.J.)
Sent:	Friday, May 10, 2013 1:43 PM
To:	Alcaraz andrade, Alejandro (M.); corey.small@valeo.com; Mendez, Mario (M.M.); Stein,
	James (J.R.)
Subject:	RE: CAC Corrosion test plan review

No problem Alejandro...

Jim my desk here at Bldg #2 is: 23Q25

Thanks!

Ken Hayes P/T Cooling 313-805-2319

From: Alcaraz andrade, Alejandro (M.) Sent: Friday, May 10, 2013 12:20 PM To: <u>corey.small@valeo.com</u>; Hayes, Kenneth (K.J.); Mendez, Mario (M.M.); Stein, James (J.R.) Subject: FW: CAC Corrosion test plan review

Hi,

Ken/Mario,

James is going to send on Monday more blockers(10) for a corrosion testing that is planned for the P415, RFR CAC. Can you please give Corey the blockers?

Corey,

Please pick the blockers on Building 2 with Mario or Ken on Monday. How many extra do you need? We would like to keep some here at Ford.

Thanks

From: Alcaraz andrade, Alejandro (M.) Sent: jueves, 09 de mayo de 2013 03:30 p.m. To: Kramer, Michael (M.T.); Allan, Valerie (V.J.); Andersen, Erik (E.); Huang, Larry (L,.); <u>corey.small@valeo.com</u>; <u>guillermo.guadarrama@valeo.com</u> Subject: RE: CAC Corrosion test plan review

Hi,

I am attaching the test plan agreed on the meeting. I'll provide Valeo the correct angle of the CAC.

Thanks

<< File: CAC corrosion testing timing estimation.xlsx >>

-----Original Appointment-----From: Alcaraz andrade, Alejandro (M.) Sent: miércoles, 08 de mayo de 2013 07:43 a.m. To: Alcaraz andrade, Alejandro (M.); Kramer, Michael (M.T.); Allan, Valerie (V.J.); Andersen, Erik (E.); Huang, Larry (L,.); <u>corey.small@valeo.com</u>; <u>guillermo.guadarrama@valeo.com</u> Subject: CAC Corrosion test plan review When: jueves, 09 de mayo de 2013 03:00 p.m.-03:30 p.m. (GMT-06:00) Guadalajara, Mexico City, Monterrey. Where: WEBEX

Moved to THURSDAY 9 AT 4:00PM (DEARBORN TIME) VALEO CONFIRM YOU ATTENDANCE

Webex info added

VALEO team your attendance is required	the second s
In this meeting we are going to review the RFR	P415 CAC(DL34 9L440 AC) corrosion test plan and timing.

[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.]

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Access code:716 971 770

MC12

http://www.webex.com

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Sent: Monday, May 13, 2013 1:55 PM
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Let me know. If you need blockers, we can get them.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966
 From:
 Andersen, Erik (E.)

 Sent:
 Thursday, May 16, 2013 9:03 AM

 To:
 Weber, Erik (E.M.)

 Subject:
 RE: lower blocker on 11 / 12 P415

Importance:

High

Erik,

Do you have the data the engine team is looking for? This blocker is progressing quickly and the quality team is looking for us to release in June. We need to make sure there are no issues anywhere else.

Also, we have data sheets for these CAC's. Are you the right person in TSE to provide them too? Carl indicated he wanted to check the other test points analytically.

Please let me know.

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

From: Andersen, Erik (E.) Sent: Tuesday, May 14, 2013 11:53 AM To: Weber, Erik (E.M.) Subject: FW: lower blocker on 11 / 12 P415

Erik,

Did you collect any of the parameters below from the wind tunnel testing you did a few weeks back on the P415?

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

From: Fabien, Phil (P.A.) Sent: Tuesday, May 14, 2013 11:51 AM To: Andersen, Erik (E.); Norman, Kristofor (K.R.); Mancini, Michael (M.A.) Subject: RE: lower blocker on 11 / 12 P415

Forgot tqe_brk_req, tqe_brk_led. The calibration team would have a full list of parameters that they captured last time.

Phil Fabien

Supervisor 2.0/2.3 GTDI / 3.5 GTDI Engine Development Engine Performance Development Global Engine Engineering 313-805-8973 pfabien1@ford.com

From: Fabien, Phil (P.A.) Sent: Tuesday, May 14, 2013 11:49 AM To: Andersen, Erik (E.); Norman, Kristofor (K.R.); Mancini, Michael (M.A.) Subject: RE: lower blocker on 11 / 12 P415

MCT, MAP, TIP, SAFTOT, A/F ratio. Who reviewed the data?

Phil Fabien

Supervisor 2.0/2.3 GTDI / 3.5 GTDI Engine Development Engine Performance Development Global Engine Engineering 313-805-8973 pfabien1@ford.com

From: Andersen, Erik (E.) Sent: Tuesday, May 14, 2013 8:19 AM To: Fabien, Phil (P.A.); Norman, Kristofor (K.R.); Mancini, Michael (M.A.) Subject: RE: lower blocker on 11 / 12 P415

What vehicle data do you need?

We have confirmation from TSE on its transparency to the PCA, do you need something beyond that?

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

From: Fabien, Phil (P.A.) Sent: Monday, May 13, 2013 5:04 PM To: Norman, Kristofor (K.R.); Mancini, Michael (M.A.) Cc: Andersen, Erik (E.) Subject: RE: lower blocker on 11 / 12 P415

I think at minimum the vehicle level data needs to be collected and then based on the results we can determine if additional work needs to be completed.

Phil Fabien

Supervisor 2.0/2.3 GTDI / 3.5 GTDI Engine Development Engine Performance Development Global Engine Engineering 313-805-8973 pfabien1@ford.com

From: Norman, Kristofor (K.R.) Sent: Monday, May 13, 2013 3:55 PM To: Fabien, Phil (P.A.); Mancini, Michael (M.A.) Cc: Andersen, Erik (E.) Subject: RE: lower blocker on 11 / 12 P415

Phil, Mike, They're looking at another configuration for the CAC PCA. Should we recheck fuel and performance as last year for transparency?

Regards,

Kristofor Norman Manager Engine Performance Development Global Engine Engineering P: 313-390-7855 C: 313-805-8967 knorman1@ford.com

From: Andersen, Erik (E.) Sent: Monday, May 13, 2013 12:23 PM To: Smith, Craig (C.A.); Norman, Kristofor (K.R.) Subject: lower blocker on 11 / 12 P415

Do you guys need to do any special testing with the lower blocker on the P415? This opportunity is quickly gaining momentum and the quality team is looking to implement quickly. I want to ensure we have checked all areas before this gets too far.

Let me know. If you need blockers, we can get them.

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

From:	Osepchook, William (W.R.)	
Sent:	Monday, April 09, 2012 10:31 AM	
То:	Dobbs, Dan (K.D.)	
Subject:	RE: Misfire Tech Posting	
Attachments:	http www.db.fmcdealer.dealerconnection.pdf	

Sorry sent the wrong one.....

-----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 www.db.fmcdealer.dealerconnection.pdf >>

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

Mb_Postings

Discussion Boards Parts & Service Discussion Board

Page 1 of 3

Tech-to-Tech 2012 Ecoboost F-150 intermittent miss

<u>View Most Recent Message</u> <u>R</u> Window	efresh Open Discussion Boards in a New	ch Discussion Board:	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 ONCE (for about 10 seconds) after a long highway cruise. Had p0306 in CM but hadn't done it since. I inspected the basics and swapped the plug to #5 incase it did it again. It did it again 6K miles later. No DTC's and no misfires in Mode 6. I thought I saw a few other people posting about this and that engineering was "investigating" Anyone else seen this or heard anything else about it??		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 the CAC. I would do. Our FSE was here and we were discussing it the CAC was too efficent causing condensation inside ma noticeable on highway cruise decel.	and he said something to	the effect
		March 26, 2012 (03:51:25 PM
 Mike Schindler Dempewolf Ford Henderson, KY (270) 827-3566 	In a few days a p0430 will rear its ugly head Ive put a fe high speed miss and kills the cat,I think its the water in	ew cats in left bank. Start	
(270) 827-3300		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 engine from the turbos along with all plugs and left hand had the reprogram issues that ford didnot have out at the back. at that time also there was no moisture in the cac also we replaced all the side 2 ign. coils. hope this helps	cat. the miss went away the time so they bought the like there has been repor	v but still e vehicle
		March 27, 2012 (08:23:24 AM
 Mike Schindler Dempewolf Ford Henderson, KY 	Ihave replaced the cat on one 2 times in 12k miles and i		
(270) 827-3566		March 27, 2012 1	L0:15:39 AM
 DEKE HOFFMAN Tri Motor Sales, Inc. Oak Harbor, OH (419) 898-2931 	This one has 11K and I personally know the customer. If will ask more questions knowing what I know from you g if this is whats happening. The first time he did say it wa cruise. That I do know. I'll post back if I find out anythin replies	gus now and see it I can o as on a decel after a long	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. Have put or different trucks) The first one sound exactly like yours D and I can give you the fix that we came up with. Havent maint. so far.	n 2 drivers side cats so fa eke. Shoot me an email a	r (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 during h 11 f150 Ecoboost w/ similar problem. Problem occured w raining. We had the truck for a few days. Couldn't duplic raining heavy on one of the road tests. Drove again next outside w/ no problem. Started to rain later in the day, t Had some engineers involved with the cat converter and decided to take the truck back to selling dealer in FL to o heard anything since.	with customer on interstate tate on road tests until it s t day same route, speed, cook truck out and duplicate coil replacements but cu	te while started etc but dry ated again. stomer
		March 28, 2012 1	10:07:58 PM
 Gary Gearner Crossroads Ford Lincoln of Sa Sanford, NC (919) 775-2221 	Have had a couple here with that issue. Last one we four Found PCV valve stuck open allowing oil to get to the tur and also found water in the CAC with oil from the PCV va and the CAC tubes as well. Water in the CAC is definitely Vehicle still had issues after the repair and reprogram. E	nd that there was oil in the rbo and CAC. Had to clear alve stuck open. Cleaned of from the condensation is	ne turbo. n the CAC the turbo

PE13-018 000832

http://www.db.fmcdealer.dealerconnection.com/messageboardsWeb/mbdisplaypostings.do?boardId=7&for... 4/9/2012

			March 29, 2012 12:19:31 PM
۶	DEKE HOFFMAN Tri Motor Sales, Inc.	Partick, I'd appreciate any info horspla65@hotmail.com	
	Oak Harbor, OH (419) 898-2931		March 29, 2012 04:31:18 PM
Þ	JAMIE HACK Don Franklin Ford, Inc. Columbia, KY	patrick me to ive got 2 of them here my email is jhack71@googler	mail.com
	(270) 384-3016		March 29, 2012 04:58:10 PM
•	STEVEN CLINE Ford Country of Lewisville Lewisville, TX (972) 221-2900	Patrick, isnt this the discussion board for things like you have four to know what you guys come up with down there. just my 0.02 thx	
			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 suspectin 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
			March 30, 2012 08:33:40 AM
Þ	kyle rosen Cox Motor Sales, Inc.	Patrick send it my way please!! hoheisel1@yahoo.com	
	New Richmond, WI (715) 246-2561		March 30, 2012 03:29:51 PM
Þ	Rick Barlau North Star Ford	Patrick send to smtech46@yahoo.com	
	Duluth, MN (218) 727-3673		April 2, 2012 04:31:38 PM
۲	James Strothers New Holland Ford	patrick send to jstrothers@newhollandauto.com	
	New Holland, PA (717) 354-4901		April 4, 2012 09:39:37 AM
Þ	Joshua Loney Kayser Ford Stoughton	patrick can i get an email to thanks loneyj2@gmail.com	
	Stoughton, WI (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
Þ	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
Þ	DONALD REIK JR Mullinax Ford East	djreik@yahoo.com	
	Wickliffe, OH (440) 585-8000		April 4, 2012 12:22:00 PM
•	Daniel Toronski	please send me one? thanks for your time and input. dtoronski@n	c.rr.com
	Leith Lincoln Raleigh, NC (919) 872-9500		April 4, 2012 02:29:21 PM
•	Vernie Newton	Me too please. carslayer11@yahoo.com Thanks.	
	Olathe Ford Lincoln Olathe, KS (913) 782-0881		April 4, 2012 03:25:28 PM
۲	John Lewis Classic Ford Lincoln of Columb	one more please streetglider79@gmail.com	
	Columbia, SC (803) 779-5977		April 4, 2012 04:13:15 PM
Þ	Eric Wiedeman	send one my way if u get a chance. thanks. fritow1234@yahoo.co	m
	Courtesy Ford Lincoln Sales, I Norfolk, NE (402) 371-9350		April 4, 2012 05:33:44 PM
►	JEFFREY NEUHAUS		

PE13-018 000833 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:Allan, Valerie (V.J.)Sent:Tuesday, May 21, 2013 8:46 AMTo:Alcaraz andrade, Allejandro (M.); Huang, Larry (L,.)Cc:Russo, Scott (S.); Andersen, Erik (E.)Subject:RE: More fittings required for testing the P415 CAC

Yes - it's okay to start without the pressure fittings.

Valerie J. Allan Ford Motor Company Powertrain Cooling Heat Exchangers 313-805-4421 vallan@ford.com

From: Alcaraz andrade, Alejandro (M.) Sent: Tuesday, May 21, 2013 10:50 AM To: Allan, Valerie (V.J.); Huang, Larry (L,.) Subject: FW: More fittings required for testing the P415 CAC Importance: High

Val/Larry,

Valeo says they can start the test without pressurizing the CAC and then when they get the fittings they can pressurize. See note below. Is this something that can be done? Thanks

From: Carl HILDINGER [mailto:carl.hildinger@valeo.com]
Sent: martes, 21 de mayo de 2013 10:46 a.m.
To: Russo, Scott (S.)
Cc: Corey SMALL; Alcaraz andrade, Alejandro (M.); Joe LUMETTA; Les TICKNOR; Wayne LIU; Satish NADELLA; Norbert BIKOS; Larry ENGEL; Andersen, Erik (E.)
Subject: Re: More fittings required for testing the P415 CAC

To All:

What I would recommend with Ford's approval. Allow the lab to put the parts on test TODAY unpressurized, and as soon as the proper fitting arrive, we will put the proper fittings on, pressurize the parts, and get them back on test. I think this is the best solution. The pressure early on in the test will not impact the test. If approved, we can have the parts on test by 4PM this afternoon.

Carl

Carl Hildinger

MAKE a GREAT Day!

R&D Laboratory Manager Phone: 812-527-3089 Cell: 812-614-4861 On Tue, May 21, 2013 at 10:20 AM, Russo, Scott (S.) < srusso2@ford.com> wrote:

SO when will test start?

Scott Russo

Ford Motor Company PT Cooling Applications Manager srusso2@ford.com Phone: 313-805-3059 Page: <u>3138053059@vtext.com</u>

From: Corey SMALL [mailto:corey.small@valeo.com]
Sent: Tuesday, May 21, 2013 9:53 AM
To: Alcaraz andrade, Alejandro (M.)
Cc: Joe LUMETTA; Russo, Scott (S.); Les TICKNOR; Wayne LIU; Carl HILDINGER; Satish NADELLA; Norbert BIKOS; Larry ENGEL; Andersen, Erik (E.)

Subject: Re: More fittings required for testing the P415 CAC

Alejandro,

Yes, I will drop by today around 2pm at Bldg 2 to pick up the parts. Thank you!

Best Regards/Sincerement,

Corey Small Customer Technical Leader (P) 1-248-209-8677 (C) 1-248-310-2334 Email: corey.small@valeo.com

On Tue, May 21, 2013 at 9:48 AM, Alcaraz andrade, Alejandro (M.) < malcara2@ford.com > wrote:

Corey I am going to pick up the parts you need today around 1pm. Can you come to Building 2 to pick them up around 2pm?

Thanks

From: Corey SMALL [mailto:corey.small@valeo.com]
Sent: lunes, 20 de mayo de 2013 12:15 p.m.
To: Andersen, Erik (E.)
Cc: Joe LUMETTA; Russo, Scott (S.); Alcaraz andrade, Alejandro (M.); Les TICKNOR; Wayne LIU; Carl HILDINGER; Satish NADELLA; Norbert BIKOS; Larry ENGEL

Subject: Re: More fittings required for testing the P415 CAC

Eric,

As we discussed, the additional parts (see attached pictures) we need for the CAC SWAAT and Cyclic corrosion tests are:

- 7 quick connect fittings with plugs
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- 10 hoses and plugs with hose clamps

Valeo is working towards pulling together parts that have been scrounged from other areas, and cobbling (making plugs, pressure fitting connections, etc..) in the prototype shop to get tests started asap. If all goes according to plan; 2 CAC's in AH (Cyclic corrosion) will start today, and 2 CAC's in Greensburg (SWAAT) will start Wednesday at the latest with parts cobbled in AH and shipped to Greensburg.

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3

These parts were requested for all fittings before I left to China. Thank you for your support.

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On Mon, May 20, 2013 at 7:51 AM, Andersen, Erik (E.) < eanderse@ford.com > wrote:

All,

This testing needs to start today. Please advise if there are any issues getting this moving.

Erik Andersen

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

From: Corey SMALL [mailto:<u>corey.small@valeo.com]</u> Sent: Friday, May 17, 2013 10:15 PM To: Joe LUMETTA; Russo, Scott (S.); Andersen, Erik (E.); Alcaraz andrade, Alejandro (M.)

Subject: Re: More fittings required for testing the P415 CAC

Scott, Joe has been assisting pulling together the new requirement of parts while I was in China. We need ideally 8 inlet and outlet fittings for the SWAAT and cyclic corrosion testing. I will follow up with Joe for the final fitting requirements.

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_	
From:	Corey SMALL <corey.small@valeo.com></corey.small@valeo.com>
Sent:	Monday, May 20, 2013 12:15 PM
То:	Andersen, Erik (E.)
Cc:	Joe LUMETTA; Russo, Scott (S.); Alcaraz andrade, Alejandro (M.); Les TICKNOR; Wayne
	LIU; Carl HILDINGER; Satish NADELLA; Norbert BIKOS; Larry ENGEL
Subject:	Re: More fittings required for testing the P415 CAC
Attachments:	CAC SWAAT testing TLR0209 photos parts needed.docx; P415 CAC corrosion test
	fittings.docx

Eric,

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Best Regards/Sincèrement, Corey Small Customer Technical Leader (P) 1-248-209-8677 (C) 1-248-310-2334 Email: corey.small@valeo.com

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All,

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

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Subject: Re: More fittings required for testing the P415 CAC

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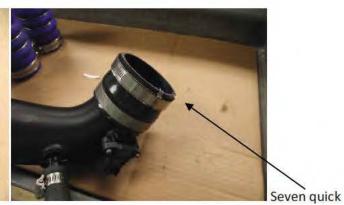
Need 2 screws/muffler for the muffler fitting, 10 screws total

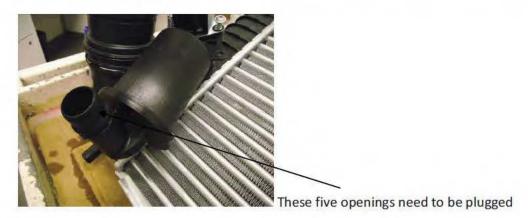


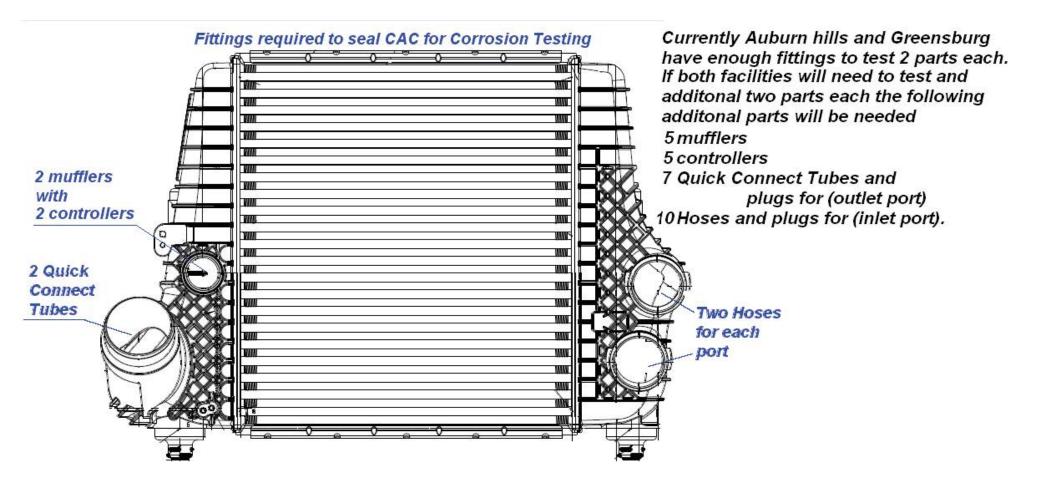
Need 10 hoses and 10 plugs for these hoses



connects need to be plugged







From:	Corey SMALL <corey.small@valeo.com></corey.small@valeo.com>
Sent:	Tuesday, May 21, 2013 1:01 PM
То:	Russo, Scott (S.); Alcaraz andrade, Alejandro (M.); Andersen, Erik (E.)
Cc:	Carl HILDINGER; Les TICKNOR; Wayne LIU; Satish NADELLA
Subject:	Re: More fittings required for testing the P415 CAC

Scott/Eric,

Is this acceptable for SWAAT to start the test capped off and unpressurized, and when the materials arrive to recobble and make additional fittings to pressurize this week? The goal is to get 2 parts started for SWAAT and Cyclic corrosion today.

Thanks.

Best Regards/Sincèrement, Corey Small Customer Technical Leader (P) 1-248-209-8677 (C) 1-248-310-2334 Email: corey.small@valeo.com

On Tue, May 21, 2013 at 10:46 AM, Carl HILDINGER <<u>carl.hildinger@valeo.com</u>> wrote: To All:

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From: Sent:	Andersen, Erik (E.) Monday, June 17, 2013 9:55 AM
То:	Smith, Craig (C.A.)
Cc:	Norman, Kristofor (K.R.); Leisenring, Kenneth (K.C.); Syrylo, Tom (T.M.); Ducklow, Corey
	(C.S.); Fabien, Phil (P.A.); Mancini, Michael (M.A.)
Subject:	RE: MY2012 P415 P4-7 For CAC Blocker

We can coordinate usage of the WT 7 slot on the 28th. I don't see it being an issue at this point.

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

From: Smith, Craig (C.A.)
Sent: Thursday, June 13, 2013 4:32 PM
To: Andersen, Erik (E.)
Cc: Norman, Kristofor (K.R.); Leisenring, Kenneth (K.C.); Syrylo, Tom (T.M.); Ducklow, Corey (C.S.); Fabien, Phil (P.A.);
Mancini, Michael (M.A.)
Subject: FW: MY2012 P415 P4-7 For CAC Blocker

Erik,

I know that we are be challenged to get the new 11-12MY P415 GTDI CAC blocker out ASAP. We're working to get the additional vehicle performance data that Kris's team needs to assess transparency.

Unfortunately, we no longer have any instrumented, 12MY vehicles in our inventory so we are in the process of instrumenting a clean unit.

We may need to utilize one of your Friday timeslots at DTF to run the testing once vehicle instrumentation is complete.

We'll keep you posted regarding status. Corey Ducklow will be the point of contact from my team relative to this work stream.

Thanks,

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

From: Ducklow, Corey (C.S.) Sent: Thursday, June 13, 2013 12:40 PM To: Danger, Gerald (G.); Yamada, Shuya Shark (S.Y.); Mandjack, Michael (M.P.) Cc: Syrylo, Tom (T.M.); Smith, Craig (C.A.); Devries, Jason (J.E.) Subject: MY2012 P415 P4-7 For CAC Blocker

1

I got the assignment today to run a MY2012 P415 P4-7 with a new mastic style external CAC blocker. I will be putting in a DTF test request and want to make sure we are all on the same page for Hardware, Procedure and Instrumentation requirements.

Hardware:

294W942 MY 2012 P415 TT (4x2 Crew cab, 4x2 3.15 FDR, 157", 275-55R20) w/ Latest production intent CAC blocker installed

Procedure:

Standard P4-7 with the following notes

- Indolence Clear fuel (Howell EEE)
- 10min cruze between each pull
- 0 sec soak between cruze and launch
- 2nd gear locked

Instrumentation requirements:

- PCM parameters (RPM, MAP, TIP, TCIP, MCT, ACT, SAFTOT, VCT, LAMB30MS) +more
- Thermocouples required (Ambient, cat midbeds, turbo out, CAC in/out)
- Lambda meter (is left and right required??)
- Pressures (Turbo out Kiel Probe, CAC in Kiel Probe, CAC out Kiel Probe)

Per my discussions with Tom, it appears the instrumentation list is getting long enough that we may wish to just have a standard VP level instrumentation done on the vehicle.

Regards,

Corey Ducklow

3.5L GTDI Calibration Development Engineering 2000 Enterprise Dr, TEE Building (313) 461 0481 From: Sent: To: Subject: Tyler, Jim (J.S.) Friday, June 15, 2012 3:32 PM Kramer, Michael (M.T.) RE: Need CAD Picture P415 CAC Outlet port package

I am continuing to investigate with Luyan the package of potentially having the AIS tube route under the body 2x4 in a U shape and route up to the top of the tank to a downward oriented QC port. These pics show the current package.

P415_CAC_Front_ P415_CAC_Side_vi view.JPG ew.JPG

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

From:Wang, Luyan (L.)Sent:Thursday, June 14, 2012 3:04 PMTo:Tyler, Jim (J.S.)Subject:RE: Need CAD Picture

See if these work for you. << OLE Object: Picture (Device Independent Bitmap) >> << OLE Object: Picture (Device Independent Bitmap) >>

Luyan Wang 313-248-1629

 From:
 Tyler, Jim (J.S.)

 Sent:
 Thursday, June 14, 2012 1:44 PM

 To:
 Wang, Luyan (L.)

 Subject:
 FW: Need CAD Picture

Luyan, please bring in the CAC and Cooling package and also the body 2x4 structure to show that the package does not have space to move the CAC outlet port to the top of the outlet tank and route to the engine throttle body. I will need side and isometric views to help illustrate the package difficulty to move the port up.

Thank you,

<< File: P415_CAC_Side_View_Port_Angles.JPG >>

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

 From:
 Kramer, Michael (M.T.)

 Sent:
 Thursday, June 14, 2012 11:57 AM

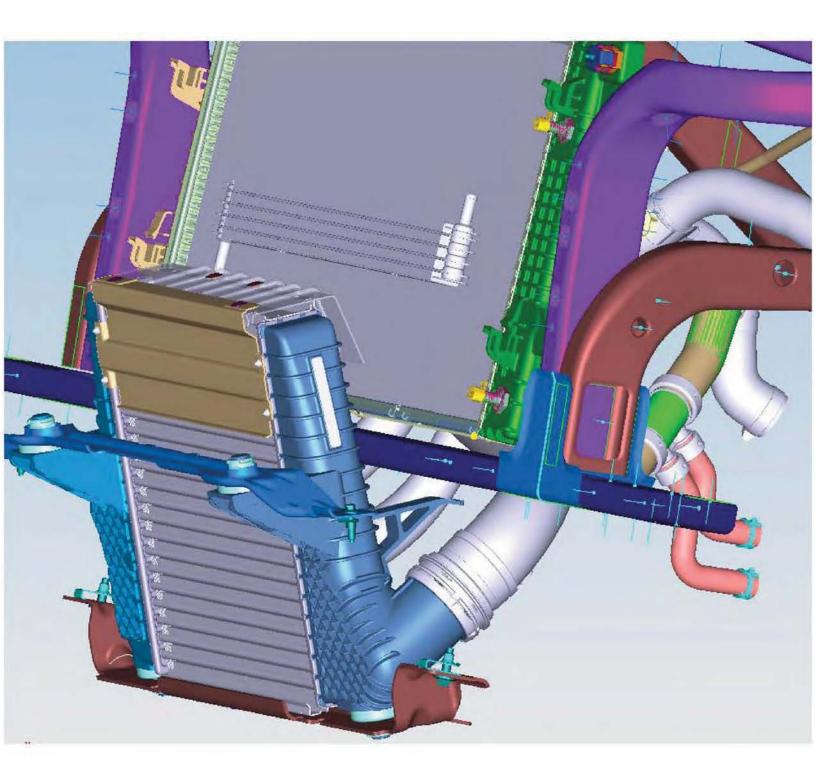
 To:
 Tyler, Jim (J.S.)

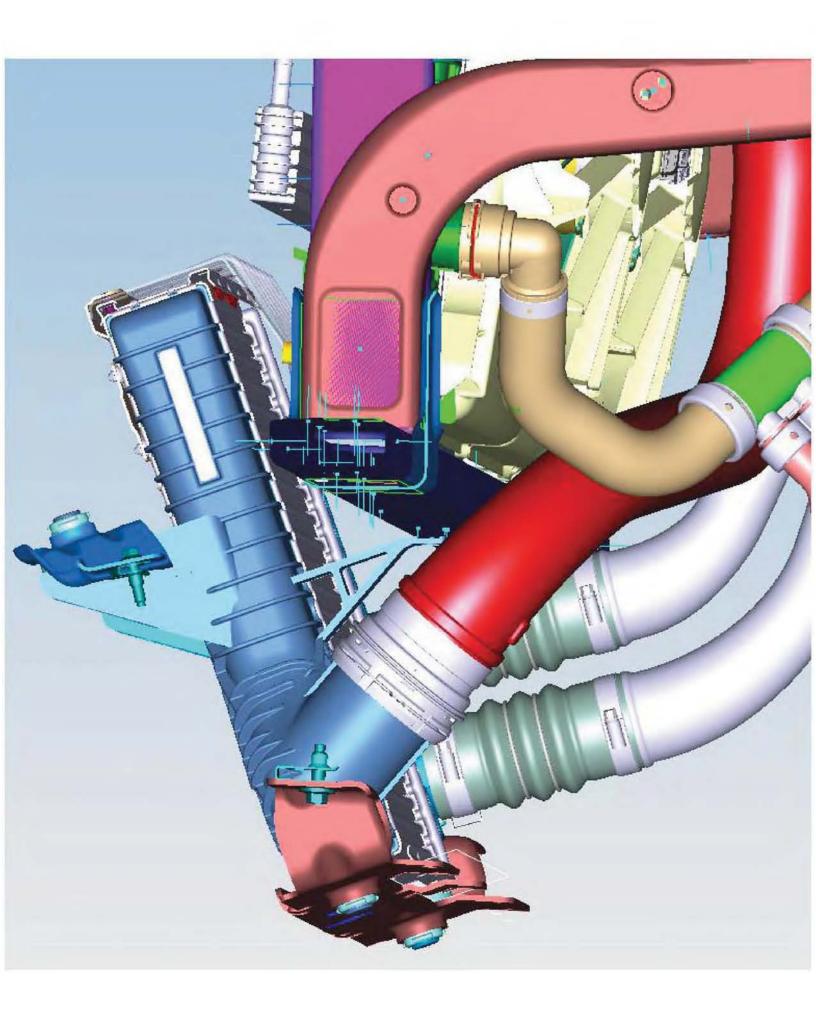
 Subject:
 Need CAD Picture

1

Questions continue to surface around trying to move the P415 CAC outlet to the top of the tank. Please forward a CAD picture showing the package limitations.

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:	Corey SMALL <corey.small@valeo.com> Wednesday, March 20, 2013 3:26 PM Andersen, Erik (E.) Kramer, Michael (M.T.); Satish NADELLA; Alcaraz andrade, Alejandro (M.); ying.tang@valeo.com; Huang, Larry (L,.); David CASTILLO (david.castillo@valeo.com); Blas.Formanda CUTTERET (blas.formanda gutiorraz@valeo.com)</corey.small@valeo.com>
Subject:	Blas-Fernando GUTIERREZ (blas-fernando.gutierrez@valeo.com) Re: Need P415 CAC Data Sheet ASAP

Hello Eric,

We are resending the pictures to Mike K. for confirmation that we will provide data that meets Ford's intent. Thanks.

Best Regards/Sincèrement, Corey Small Customer Technical Leader (P) 1-248-209-8677 (C) 1-248-310-2334 Email: corey.small@valeo.com

On Wed, Mar 20, 2013 at 7:44 AM, Andersen, Erik (E.) <<u>eanderse@ford.com</u>> wrote: Valeo team,

Please confirm there won't be any issues meeting this timing. We need these data sheets quickly so that we can progress some immediate testing.

Thanks all for the help,

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

From: Kramer, Michael (M.T.) Sent: Tuesday, March 19, 2013 8:31 AM To: Satish NADELLA; Alcaraz andrade, Alejandro (M.) Cc: Corey SMALL <<u>corey.small@valeo.com</u>> (<u>corey.small@valeo.com</u>); <u>ying.tang@valeo.com</u>; Huang, Larry (L,.); Andersen, Erik (E.); David CASTILLO (<u>david.castillo@valeo.com</u>); Blas-Fernando GUTIERREZ (<u>blas-fernando.gutierrez@valeo.com</u>); Kramer, Michael (M.T.) Subject: Need P415 CAC Data Sheet ASAP

We need the following data sheets:

1) Otherwise same as DL34-9L440-AD except replace present external 6 top tube blocker with external stick on blocker (ie. zero clearance) covering bottom 7 tubes and row of fins above 7th tube.

2) Same as #1 above except remove internal plastic tube end covers from both the inlet and outlet side.

Looking for data by Thursday this week. Please send pictures of stick on blocker so we can confirm meets our intent.

Alejandro, please follow-up with Valeo.

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 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: Sent:	Whitehead, Joseph (J.P.) Wednesday, February 15, 2012 1:10 PM
То:	Smith, Craig (C.A.)
Cc:	Pawlak, Greg (G.J.); Devries, Jason (J.E.); Martin, Thomas (T.C.); Gernant, Tim (T.R.)
Subject:	RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Craig,

You're right about the load limiting feature reducing P0299 codes. The current round of DTF testing has had lots of runs with misfires. Only set P0299 codes on one set of runs which had a restricted CAC outlet tube (with exp water trap).

Thanks,

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

From:Smith, Craig (C.A.)Sent:Wednesday, February 15, 2012 12:36 PMTo:Whitehead, Joseph (J.P.); Martin, Thomas (T.C.); Gernant, Tim (T.R.)Cc:Pawlak, Greg (G.J.); Devries, Jason (J.E.)Subject:RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Joe, I agree with your proposal. I also believe that we'll see less of these now that we limit load to 1.0 during FMEM.

Tom, Please submit an etracker/URD to disable P0299 test during misfire FMEM.

Thanks,

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

From:Whitehead, Joseph (J.P.)Sent:Wednesday, February 15, 2012 8:51 AMTo:Martin, Thomas (T.C.); Gernant, Tim (T.R.)Cc:Smith, Craig (C.A.); Pawlak, Greg (G.J.); Devries, Jason (J.E.); Whitehead, Joseph (J.P.)Subject:RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Tom,

The verbatim exactly fits the condensate induced misfire. Georgia in May. Pulling a trailer. Passing another vehicle. Loss of power. Restarted & everything is OK.

Tim,

Should we add logic to disable the underboost code when misfire FMEM is active or other misfire codes are pending? Such a change would save on diagnostics which will be unsuccessful in finding a cause for the underboost.

Thanks,

Joe Whitehead 3.5L GTDI P415 Calibration jwhiteh4@ford.com From:Martin, Thomas (T.C.)Sent:Tuesday, February 14, 2012 3:10 PMTo:Devries, Jason (J.E.)Cc:Pawlak, Greg (G.J.); Whitehead, Joseph (J.P.)Subject:FW: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDIImportance:High

Jason - can you give me your opinion on these underboost codes? During TT and uphill, flashing MIL? Sounds like misfire FMEM tied into underboost code maybe?

 From:
 Nowaczyk, Rick (R.J.)

 Sent:
 Tuesday, February 14, 2012 11:05 AM

 To:
 Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Selthofer, Adam (A.); Cockerill, AI (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.

<< File: 2011 F-150 MIL P0299 DTC GCQIS Folder.pdf >>

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: Sent:	Devries, Jason (J.E.) Wednesday, February 22, 2012 2:48 PM
То:	Miller, Chuck (C.A.); Smith, Craig (C.A.)
Cc:	Galas, Dean (C.K.); Lehmkuhl, David (D.B.); Miller, Brian (B.J.)
Subject:	RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

No, only the P0299 can happen with this failure mode.

Jason DeVries

Calibration Commodity Technical Specialist GTDI, I4, and V6 Powertrains Phone: 313-805-1035 e-mail: jdevrie4@ford.com

From:Miller, Chuck (C.A.)Sent:Wednesday, February 22, 2012 1:25 PMTo:Smith, Craig (C.A.); Devries, Jason (J.E.)Cc:Galas, Dean (C.K.); Lehmkuhl, David (D.B.); Miller, Brian (B.J.)Subject:RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Can we assume the P0234 overboost code also apply to this failure mode? Rich doesn't mention it below, but there are an equal number of the P0299 and P0234 codes.

From: Miller, Brian (B.J.)
Sent: Wednesday, February 15, 2012 7:43 AM
To: Miller, Chuck (C.A.)
Cc: Galas, Dean (C.K.); Lehmkuhl, David (D.B.)
Subject: FW: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Chuck

This is more info on the Wastegate Failure Modes we talked about yesterday. The additional Mode is related to the same condensation issues presented to Misfire. So, the Critical X would be "Condensation in the Charge Air Cooler Induction System" and the PCA is the same as 3.5L R10 implementation:

KCAP 2/8/12 DTP 2/6/12

Brian Miller

KCAP F150 PVT Powertrain Resident Engineer Cell (816)200-3868 Desk (816)459-1987

From: Dixon, Mark (M.R.) Sent: Wednesday, February 15, 2012 6:13 AM To: Galas, Dean (C.K.); Cervenan, Neil (N.J.); McDonagh, Scot (S.M.); Miller, Brian (B.J.) Cc: Wagers, Sue (S.K.) Subject: FW: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Dean/Brian, another critical X for the underboost DTCs on GTDI. Looks like we can no longer blame the plant for all of these.

Neil, add this as 2nd critical X on your F-Series MIL summary. Don't do this until I send you the updates I made a for the MIL Affinity Team meeting.

Scot, need to discuss what service direction may be appropriate for this.

 From:
 Smith, Craig (C.A.)

 Sent:
 Tuesday, February 14, 2012 4:00 PM

 To:
 Martin, Thomas (T.C.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Selthofer, Adam (A.); Cockerill, AI (C.A.); Martin, Thomas (T.C.);
Osepchook, William (W.R.); McDonagh, Scot (S.M.); Dobbs, Dan (K.D.)

 Cc:
 Devries, Jason (J.E.); Whitehead, Joseph (J.P.)

 Subject:
 RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

With exception to cases where special cause is known (e.g. hose off), we believe that the P0299 issue is tied to misfires, particularly with 2 or more cylinders out as is the case with condensate ingestion. We have replicated this condition on engineering vehicles. With the introduction of the load limiting during misfire FMEM, we should start seeing a reduction in P0299 under these circumstances.

Thanks,

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

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.

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: Importance:	New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI High

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<< File: 2011 F-150 MIL P0299 DTC GCQIS Folder.pdf >>

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:	Nowaczyk, Rick (R.J.)
Sent:	Thursday, February 16, 2012 10:05 AM
To:	McDonagh, Scot (S.M.); Dixon, Mark (M.R.); Smith, Craig (C.A.); Martin, Thomas (T.C.)
Cc:	Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Subject:	RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI
Importance:	High

Team,

Shouldn't we attempt to look at freeze frame data, before we assume the MIL and DTC is a result two cylinders misfiring? I found one report the dealer tech claims he found ice inside the CAC. I also found two other reports of the nut for the turbo coming off? Did we have an issue last year with this concern?



From: McDonagh, Scot (S.M.)
Sent: Thursday, February 16, 2012 8:52 AM
To: Dixon, Mark (M.R.); Smith, Craig (C.A.); Martin, Thomas (T.C.)
Cc: Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.)
Subject: RE: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

Should we update R10-R12 TSB to include DTC P0299 ?

<< File: tsb12-02-10.pdf >> Scot G. McDonagh PT Quality Engineering Phone: (313)337-8091 smcdonag@ford.com

From: Dixon, Mark (M.R.)
Sent: Wednesday, February 15, 2012 7:13 AM
To: Galas, Dean (C.K.); Cervenan, Neil (N.J.); McDonagh, Scot (S.M.); Miller, Brian (B.J.)
Cc: Wagers, Sue (S.K.)
Subject: FW: New Emerging Concern - 2011 F-150 MIL DTC P0299 3.5L GTDI

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Osepchook, William (W.R.); McDonagh, Scot (S.M.); Dobbs, Dan (K.D.)

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<< File: 2011 F-150 MIL P0299 DTC GCQIS Folder.pdf >>

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:	Nowaczyk, Rick (R.J.)
Sent:	Thursday, February 16, 2012 9:56 AM
То:	Nowaczyk, Rick (R.J.)
Subject:	Report Summary for the CQIS Report#BCNEC002

Attachments : 0

Report# :	BCNEC002 FCSDFS			Received:	03/14/2011
CCRG/EPRC:	Reviewed Status:			Date:	
Vehicle:	2011,F150 ,1FTFW1E	4X4 ,F150 ,SUP CRW,S Г9BF	TYSD	Build Date:	02/01/2011
Odometer :	125 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Dealer:	USA 04361	Barreth Ford Center		Phone#:	(636) 583- 8655
City:	Union	State:	Missouri	Country :	USA
Originator:					
Symptom:	2 27 Q 00 A	AID/INFO,WNG IND/M	ESS/C,ENGINE IMAGE	E,UNKNOWN	
Status:					
VFG:	V29 CHEC	K ENGINE LIGHT			
Additional Symptom:	CODE P0299				
Fix:Y	Causal Component : TURBOCH			ARGER ADJ	I
Condition Code:					
Region Code: C	24	Region Na	ame: Kansas City		
DTCs: KOEO: KOEC:					
KOEC. KOER:					
Comments					
• OWNER 03/14	4/2011 05.291	PM ION NEIL (ESE) MS	S - FCSD - REG - KAN	SAS CTY	
	03/14/2011 05:29PM JON NEIL(FSE) MSS - FCSD - REG - KANSAS CTY MIL LIGHT CAQME ON				
	03/14/2011 05:29PM JON NEIL(FSE) MSS - FCSD - REG - KANSAS CTY				
		9, TURBO HAD LOOS			
		PM JON NEIL(FSE) M		NSAS CTY	
		PCE CONTACTED FS			O CHANGED.
		STMENT WOULD BE			7

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- AUDIT 03/14/2011 05:31PM JON NEIL(FSE) MSS FCSD REG KANSAS CTY TECH ASSIST REFERRAL HAS BEEN OPENED
- ADD-ON 03/15/2011 06:35AM KEVIN GORGOL(FSE) MSS FCSD REG PHILADELPH ENGINEERING ADVISED TO REPLACE TURBOCHARGER DUE TO NO WASTEGATE ADJUSTMENT PROCEDURE AVAILABLE FOR SERVICE.

ADD-ON 03/21/2011 10:02AM JON NEIL(FSE) MSS - FCSD - REG - KANSAS CTY 3/18 SHAWN HINDS OF BORG WARNER WAS AT THE DEALER, WE WORKED TO RECALIBRATE THE WASTEGATE ON THE RIGHT TURBO. HE RAN THE PRESSURE UP AND DOWN WITH VERY ACCURATE REGULATORS, AND MEASURED THE TRAVEL

ON THE WASTEGATE WITH A DIAL INDICATOR. THE LINKAGE LOCK NUTS WERE

TORQUED

AND THE CLIP WAS ADDED TO SECURE THE NUTS, THE TORQUE WAS CHECKED ON

THE LEFT TURBU AND THE CLIP INSTALLED. THE TRUCK IS NOW REPAIRED.

AUDIT 03/21/2011 10:02AM JON NEIL(FSE) MSS - FCSD - REG - KANSAS CTY TECH ASSIST REFERRAL HAS BEEN CLOSED

AUDIT 07/02/2011 11:04AM

SYMPTOM 6 98 2 98 CHANGED TO 2 27 Q 00 BY CS012093

From:	Nowaczyk, Rick (R.J.)
Sent:	Thursday, February 16, 2012 9:52 AM
То:	Nowaczyk, Rick (R.J.)
Subject:	Report Summary for the CQIS Report#CA4CR002

Attachments : 0

Report# :	CA4CR002 NHL	_		Received:	01/30/2012
CCRG/EPRC:		Reviewed Statu	18:	Date:	
Vehicle:	2011,F150 4X4 ,F ,1FTFW1ET5BF	150 ,SUP CRW,S'	ГYSD	Build Date:	08/25/2011
Odometer :	6,408 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3800F3.31C	A/C:	YES
Dealer:	CAN B4614 Thon	npson Ford Sales		Phone#:	(800) 665- 6386
City:	Thompson	Province	Manitoba	Country :	CAN
Originator:	DURANT SENKO	OWSKI			
Symptom:	2 27 Q 68 AID/IN	FO,WNG IND/MI	ESS/C,ENGINE IMAGI	E,STAYS ON	
Status:					
VFG:	V29 CHECK ENC	GINE LIGHT			
Additional Symptom:	P0299 ICE IN CAC				
Fix:	Causal Component :				
Condition Code:					
Hotliner: DRID	OLF2 Phone:	000 248-8241	Regn Cd: 06 06 FCS	D REGION-CA	ANADA
Engineering:		Pho	hone: TAR:		
Dlr Contact: DURANT SENKOWSKI		SKI	Phone: 000 000-000	D Tit	le Cde: T
DTCs:					
KOEO:					
KOEC:P0299					

KOER:

Comments

:

REPAIR 01/30/2012 10:48AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUSTOMER CONCERNED WITH ENGINE LIGHT ON DIAGNOSTICS: PULLED DTC P0299(LOW BOOST). INSPECT CAC PIPES AND TURBOS, NOTHING FOUND. SMOKE TESTED, NO LEAKS, REMOVED INTERCOOLER AND FOUND THE BOTTOM FULL OF ICE. PARTS REPLACED:NONE TECH QUESTION:WHAT SERVICE ACTION DO I TAKE? I SUSPECT THE ICE IS COMING FROM WATER IN THE EXHAUST VAPOR. INTERCOOLER IS THE LOWEST PART ON THE

CAC SYSTEM SO IM ASSUMING THE WATER IS COLLECTING THERE AND FREEZING... NOT SURE WHAT I SHOULD DO NEXT?

- **RECOMM 01/30/2012 10:48AM DOMINIC RIDOLFI MSS FCSD TECH SVC HOTLINE** DURANT, -AT THIS TIME IT IS RECOMMENDED TO THAW OUT THE ICE IN THE CAC, ONCE THE IT TURNS INTO WATER, CLEAN OUT THE WATER FROM THE CAC, CLEAR THE DTC, AND RE-EVALUATE. IF THE DTC IS NO LONGER PRESENT RELEASE THE VEHICLE. CHECK ALL TUBING, CLAMPS, ETC FOR ANY ISSUES.
- **REPAIR** 02/06/2012 06:04PM MICHAEL SCHOBER MSS FCSD TECH SVC HOTLINE SO THE VEHICLE IS BACK SETTING P0299 AGAIN. WHEN IT WAS FIRST IN, I THAWED OUT THE INTERCOOLER, AND CLEANED IT OUT. WAS DRY WHEN IT WAS RE-INSTALLED, ALL THE CAC TUBING IS OK, PULLED THE INTERCOOLER IN AGAIN AND FOUND MORE ICE... ALSO FOUND OUT THE CUSTOEMR PARKS THE TRUCK IN A HEATED GARAGE. I DONT KNOW WHAT TO TELL THE CUSTOMER WITH

THIS ONE. ANY HELP WOULD BE APPRIECIATED.

RECOMM 02/06/2012 06:04PM MICHAEL SCHOBER MSS - FCSD - TECH SVC HOTLINE DURANT, THIS CONCERN IS CURRENTLY UNDER INVESTIGATION PER SSM 22192 (DESPITE NO CATALYST CODES BEING PRESENT). WITH THE CHARGE AIR COOLER TUBING BEING TIGHT/SECURE AND ROUTED PROPERLY, RECOMMEND TO CLEAN THE

WATER OUT OF THE CHARGE AIR COOLER ASSEMBLY AGAIN AND TO MONITOR OASIS

FOR UPDATES ON THIS CONCERN.

From:	Nowaczyk, Rick (R.J.)
Sent:	Thursday, February 16, 2012 10:04 AM
To:	Nowaczyk, Rick (R.J.)
Subject:	Report Summary for the CQIS Report#BEYBZ004

Attachments : 0

Report# :	BEYBZ004 NHL			Received:	05/25/2011
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2011,F150 4X4 ,F150 ,1FTFW1ET7BF	,SUP CRW,STYSD		Build Date:	03/18/2011
Odometer :	3,651 M	Engine:	3.5L-GTDI	Calibration:	BF613C0N
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES
Dealer:	USA 02710 Huntingto	on Ford, Inc.		Phone#:	(248) 852- 0400
City:	Rochester Hills	State:	Michigan	Country :	USA
Originator:	TOM SILVA				
Symptom:	2 27 Q 00 AID/INFO,	,WNG IND/MESS/C,EN	GINE IMAGI	E,UNKNOWN	
Status:					
VFG:	V29 CHECK ENGIN	E LIGHT			
Additional Symptom:	NUT FELL OFF TURBO IMPELLER				
Fix:Y	Causal Component : TURBO CH			IG-EXH DRIV	E RPL
Condition Code:					
Hotliner: JMOR	RFITT Ph	one: 313 317-7039	Reg	n Cd: G2 Detr	oit
Engineering:		Phone:		TAR:	
Dlr Contact: TOM SILVA		Phone: 000 000-0	0000	Title Cde	e: OT
DTCat					

DTCs:

KOEO: KOEC:P0299 KOER:

Comments

:

REPAIR 05/25/2011 10:43AM JACOB MORFITT MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: NO POWER/ MIL ON DIAGNOSTICS: DIAG TURBO LOW PERFORMANCE, HEAR A BEARING NOISE LT TURBO/ REVED A FEW TIMES AND OIL STARTED BELLOWING OUT OF EXHAUST/ REMOVED LT TURBO FOUND

1

EXCESSIVE

SHAFT ENDPLAY, NUT ON END OF EMPELLER MISSING PARTS REPLACED:: NONE, ORDERED A LT TURBO TECH QUESTION: WITH THE NUT MISSING ON THE END OF SHAFT HOW FAR DO GO LOOKING FOR THE MISSING PART, ALLREADY LOOKED IN THE INTERCOOLER? PLEASE LIST ANY PERTINENT FREEZE FRAME DATA NONE PLEASE LIST ANY VEHICLE MODIFICATIONS, OR TYPE NONE. NONE

RECOMM 05/25/2011 10:43AM JACOB MORFITT MSS - FCSD - TECH SVC HOTLINE TOMAS, IT IS UNCLEAR AS TO WHICH NUT FELL OFF, IF THE NUT FELL OFF THE TURBINE (EXHAUST) SIDE OF THE TURBO THE NUT MOST LIKELY HAS PASSED

THROUGH THE EXHAUST SYSTEM. IF THE NUT FELL OFF THE COMPRESSOR SIDE THE NUT IS MOST LIKELY CAUGHT IN THE INTAKE SYSTEM. IT IS CRITICAL TO VERIFY THE LOCATION OF THIS NUT. IF THE NUT WAS TO BE INGESTED INTO THE ENGINE, ENGINE DAMAGE COULD OCCUR. PLEASE REMOVE THE INTAKE COMPONENTS ONE AT A TIME PAYING CLOSE ATTENTION TO THE CHARGE AIR COOLER (CAC) TO VERIFY THE NUT IS NOT PRESENT IN THE INTAKE SYSTEM TO PREVENT THE POSSIBILITY OF ENGINE DAMAGE.

- **REPAIR** 05/25/2011 11:02AM ALEC MCENTEE MSS FCSD TECH SVC HOTLINE TECHNICIAN REPLY: NUT FELL OFF COMPRESSOR SIDE. I WILL CONTINUE TO SEARCH FOR MISSING PART
- **RECOMM 05/25/2011 11:02AM ALEC MCENTEE MSS FCSD TECH SVC HOTLINE** TOMAS, THANK YOU FOR THE UPDATED VEHICLE INFORMATION. PLEASE CONTINUE WITH AN INSPECTION OF THE INTAKE SYSTEM FOR THE MISSING PART.

ALSO INSPECT THE WASTE GATE CLIP, CHECKING IF LOOSE AND/OR MISSING. IF YOU REQUIRE FURTHER ASSISTANCE AFTER PERFORMING THE POSTED RECOMMENDATIONS, PLEASE UPDATE YOUR FORM WITH ANY ADDITIONAL INFORMATION. IF YOU RESOLVE THE CONCERN, PLEASE LET US KNOW WHAT REPAIRED THE VEHICLE USING THE SURVEY. THANK YOU."

- REPAIR 05/27/2011 10:24AM ALEX BOUGHAN MSS FCSD TECH SVC HOTLINE TECHNICIAN REPLY: UPDATE: I HAVE DISASSEMBLED INTAKE SYSTEM INCLUDING THE INTAKE MANIFOLD WITH NO TRACES OF MISSING NUT. WITH BOREASCOPE LOOKED AT THE BACKSIDE OF THE VALVES, NO TELLTAIL SIGNS OF NUT BOUNCING AROUND IN THERE. SHOULD I REASSEMBLE?
- **RECOMM 05/27/2011 10:24AM ALEX BOUGHAN MSS FCSD TECH SVC HOTLINE** TOMAS, AT THIS TIME IT IS RECOMMENDED TO RE-ASSEMBLE THE ENGINE, REPLACE THE TURBOCHARGER AND RE-TEST FOR PROPER OPERATION.

ADD-ON 06/07/2011 02:36PM AMEINKEN TECH COMMENTS: NEVER DID FIND MISSING NUT/ COMPLETELY DISASSEMBLE INTA KE SYS/ REASSEMBLED. ROAD TEST WITH NO FURTHER PROBLEMS FOUND/ SUSPECT

NUT WAS NEVER THERE IN THE FIRST PLACE

AUDIT 07/02/2011 11:07AM SYMPTOM 6 98 2 98 CHANGED TO 2 27 Q 00 BY CS012093

From: Sent: To: Subject: Attachments: Britton, Eric (E.J.) Tuesday, May 28, 2013 9:30 AM Andersen, Erik (E.); Smith, Craig (C.A.) RE: Opening Resume Attached PE13-018 Opening Resume.pdf

Thanks Erik.

Craig, I am going to need your help also.

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

From: Andersen, Erik (E.) Sent: Tuesday, May 28, 2013 9:26 AM To: Britton, Eric (E.J.) Subject: RE: Opening Resume Attached

Okay, but we will need calibration to address the misfire strategy. They are the most knowledgeable on it and should probably address that piece of it.

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

From: Britton, Eric (E.J.) Sent: Tuesday, May 28, 2013 9:18 AM To: Andersen, Erik (E.) Subject: FW: Opening Resume Attached

Erik, looks like we will be working together on this. I will let you know as soon as I have the list of questions from NHTSA.

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

From: McCoy, Julie (.) Sent: Tuesday, May 28, 2013 8:45 AM To: Fronckowiak, Todd (T.M.) Subject: RE: Opening Resume Attached

Sure Erik Andersen.

Julie McCoy

Chief Engineer, Powertrain Installations (PTI) jmccoy, 313-805-6374 Administrative assistant: Angie Perkins x47391

From: Fronckowiak, Todd (T.M.) Sent: Thursday, May 23, 2013 6:23 PM To: McCoy, Julie (.) Subject: FW: Opening Resume Attached

Julie,

NHTSA has opened a safety investigation into reports of loss of performance in 2011-13 MY F-150s with the 3.5 L GTDI. They have requested that we set up a WebEx with them to discuss the technical aspects of this alleged concern in the next week or so, including how our misfire strategy works (and recovers), and our TSBs and related calibration and hardware changes. Please let me know who in your group should be our single point of contact? If possible, I would also like to include them in our discussions with the agency. Thanks.

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

From: <u>Valencia.Johnson@dot.gov</u> [<u>mailto:Valencia.Johnson@dot.gov</u>] Sent: Thursday, May 23, 2013 8:08 AM To: Fronckowiak, Todd (T.M.) Cc: <u>Jeff.Quandt@dot.gov</u>; <u>Derek.Rinehardt@dot.gov</u> Subject: Opening Resume Attached

Good Morning Mr. Fronckowiak, for your information, please see the attached opening resume.

Thank you



ODI RESUME

U.S. Department of Transportation	Investigation:	PE 13-018			
	Date Opened:	05/22/2013			
	Investigator:	Derek Rinehardt	Reviewer:	Jeff Quandt	
National Highway	Approver:	Frank Borris			
Traffic Safety	Subject:	Reduced power during hard acceleration			
Administration					

MANUFACTURER & PRODUCT INFORMATION

Manufacturer:	Ford Motor Company	
Products:	2011 - 2013 Ford F150 with 3.5L GTDI engine	
Population:	400,000 (Estimated)	
Problem Description: Complainants allege unexpected sharp reductions in engine power during hard accelerations at highway speeds, such as attempted merging or passing maneuv		

FAILURE REPORT SUMMARY					
	ODI	Manufacturer	Total		
Complaints:	95	TBD	TBD		
Crashes/Fires:	0	TBD	TBD		
Injury Incidents:	0	TBD	TBD		
Number of Injuries:	0	TBD	TBD		
Fatality Incidents:	0	TBD	TBD		
Number of Fatalities:	0	TBD	TBD		

ACTION / SUMMARY INFORMATION

Action: A Preliminary Evaluation has been opened.

Summary:

The Office of Defects Investigation (ODI) has received 95 reports alleging incidents of reduced engine power during hard accelerations in model year (MY) 2011 through 2013 Ford F150 trucks equipped with 3.5L gasoline turbocharged direct injection (GTDI) engines. Ford has issued three technical service bulletins related to intermittent stumble/misfire on acceleration from highway cruise in humid or damp conditions in some MY 2011 and 2012 F150 vehicles equipped with 3.5L GTDI engines. The most recent bulletin, TSB 13-3-3, includes procedures for (1) diagnosing a condition related to moisture accumulation in the Charge Air Cooler (CAC) during extended highway cruising at constant throttle in humid or damp conditions; and (2) repairing the condition by reprogramming the powertrain control module with the latest calibration and installing a new CAC and air deflector plate. Approximately one-third of the reports received by ODI indicate that the incidents occurred while driving in humid or rainy conditions. Many complaints allege safety concerns associated with overtaking vehicles. No related crashes have been reported to ODI to date.

A Preliminary Evaluation has been opened to gather information to assess whether the subject vehicles contain a safety related defect.

2011 – 2013 Ford F150 Unexpected Reduction in Motive Power

The ODI complaints cited above can be viewed at www-odi.nhtsa.dot.gov/complaints under the following identification numbers:

10512361, 10512473, 10512204, 10512225, 10509838, 10509625, 10508479, 10505159, 10504895, 10504415, 10503441, 10503179, 10502362, 10502249, 10502074, 10501953, 10499948, 10499740, 10499669, 10499386, 10499487, 10499488, 10499380, 10499261, 10498369, 10496917, 10496460, 10495297, 10494890, 10492897, 10492208, 10492094, 10486724, 10486683, 10486138, 10485979, 10483294, 10482987, 10482665, 10482566, 10482565, 10481252, 10480796, 10480175, 10480044, 10479552, 10478858, 10478730, 10476830, 10475971, 10475444, 10474297, 10473719, 10470822, 10470344, 10470330, 10470129, 10469115, 10468842, 10465748, 10465631, 10464804, 10460736, 10460698, 10459365, 10459405, 10459488, 10459477, 10459379, 10454934, 10453990, 10452914, 10452909, 10452231, 10452116, 10450638, 10445175, 10444860, 10441950, 10512010, 10512028, 10512048, 10511144, 10512082, 10512098, 10512178, 10512180, 10512205, 10512221, 10512247, 10512252, 10512261, 10512445, 10509838, and 10512181.

From:Kramer, Michael (M.T.)Sent:Wednesday, August 29, 2012 12:01 PMTo:Parsons, Howard (H.S.)Cc:Gourneau, Frank (F.B.); Kramer, Michael (M.T.); Madej, Jeanette (J.)Subject:RE: P415 3.5 GTDI CAC Implementation Timing

PV testing is complete and passed. Production start at the supplier (Valeo, San Luis Potosi – Mexico) is Thursday 8/30/12 with shipments to DTP and KCAP beginning 9/5/12.

Per DDL, transit time to DTP is 9.5 days and 7.4 days to KCAP.

Implementation week of 9/10 may be possible if can shorten up the transit times.

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: Parsons, Howard (H.S.) Sent: Wednesday, August 29, 2012 2:23 PM To: Kramer, Michael (M.T.); Madej, Jeanette (J.) Cc: Gourneau, Frank (F.B.) Subject: FW: P415 3.5 GTDI CAC Implementation Timing

Any updates of firmed up P415 CAC Timing?

Howard Parsons

Chief Engineer New Model Programs - NA Phone: 313-805-2611 EMAIL: hparsons@ford.com

From: Gourneau, Frank (F.B.) Sent: Wednesday, August 29, 2012 2:14 PM To: Parsons, Howard (H.S.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

Any updates.....?

Frank Gourneau

Director, New Models FNA Office: 313-323-1213 Cell: 313-805-6065

From: Parsons, Howard (H.S.) Sent: Tuesday, August 28, 2012 2:40 PM To: Gourneau, Frank (F.B.) Subject: Fw: P415 3.5 GTDI CAC Implementation Timing FYI. Should have firm P415 CAC timing tomorrow.

Howard Parsons Chief Engineer New Model Programs

From: Kramer, Michael (M.T.)
Sent: Tuesday, August 28, 2012 01:48 PM
To: Parsons, Howard (H.S.)
Cc: Madej, Jeanette (J.); Kramer, Michael (M.T.)
Subject: RE: P415 3.5 GTDI CAC Implementation Timing

We reviewed 90% of the PV test results yesterday afternoon. There was one test to finish last night and teardown results from another that we are reviewing this afternoon at 4:00 pm.

If all ok then Valeo will begin production of the revised CACs. Will confirm timing for first shipments from Valeo by tomorrow. I owe you the follow-up this time.

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: Parsons, Howard (H.S.) Sent: Tuesday, August 28, 2012 9:25 AM To: Kramer, Michael (M.T.); Madej, Jeanette (J.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

Do we have an updated status and assessment on opportunity to pull ahead?

Howard Parsons

Chief Engineer

New Model Programs - NA

Phone: 313-805-2611

EMAIL: hparsons@ford.com

From: Kramer, Michael (M.T.)

Sent: Friday, August 24, 2012 8:17 AM To: Madej, Jeanette (J.); Parsons, Howard (H.S.) Cc: Kramer, Michael (M.T.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

The 9/17 implementation date is supported with approved alert A12602983 as the CAC's are not fully PSW'd until 9/27/12 (multiple tools / production streams phased in sequentially to optimize timing).

We will have a better read on pull-ahead opportunity following PV test completion over this weekend with subsequent results review on Monday (8/27). I will follow-up with a further update by COB Monday.

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: Thursday, August 23, 2012 4:45 PM To: Parsons, Howard (H.S.) Cc: Kramer, Michael (M.T.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

I will check

Jeanette Madej

Global Cooling Systems Manager

Phone: 313-805-0189

From: Parsons, Howard (H.S.) Sent: Thursday, August 23, 2012 4:45 PM To: Madej, Jeanette (J.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

With Valeo starting production on 8/31, is there any opportunity to pull "Production Start up" from 9/17, by building with parts less PSW (also 9/17)?

Howard Parsons

Chief Engineer

New Model Programs - NA

Phone: 313-805-2611

EMAIL: hparsons@ford.com

From: Kramer, Michael (M.T.) Sent: Tuesday, August 21, 2012 6:33 PM To: Parsons, Howard (H.S.) Cc: Madej, Jeanette (J.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

<< File: 2013 P415 D35 CAC Misfire Actions_WPTS-E-12559964-001.pptx >>

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: Tuesday, August 21, 2012 5:28 PM To: Parsons, Howard (H.S.) Cc: Kramer, Michael (M.T.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

Mike will send the slide we reviewed at the PDQR. Not a 5D. Who is this for?

Jeanette Madej

Global Cooling Systems Manager

Phone: 313-805-0189

From: Parsons, Howard (H.S.) Sent: Tuesday, August 21, 2012 3:59 PM To: Madej, Jeanette (J.); Mazuchowski, James (J.A.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

Can you send me the current plan or 5/8D that team is working to?

4

Howard Parsons

Chief Engineer

New Model Programs - NA

Phone: 313-805-2611

EMAIL: hparsons@ford.com

From: Madej, Jeanette (J.) Sent: Tuesday, August 21, 2012 3:58 PM To: Parsons, Howard (H.S.); Mazuchowski, James (J.A.) Subject: RE: P415 3.5 GTDI CAC Implementation Timing

No, right now, we are doing everything we can to still meet the 9/17 date.

Jeanette Madej

Global Cooling Systems Manager

Phone: 313-805-0189

From: Parsons, Howard (H.S.) Sent: Tuesday, August 21, 2012 3:53 PM To: Madej, Jeanette (J.); Mazuchowski, James (J.A.) Subject: P415 3.5 GTDI CAC Implementation Timing

Not sure which of you is the lead for the P415 GTDI CAC Implementation Timing for Misfire. We have been asked if there is any opportunity to pull this ahead of the current Sept-14 implementation plan. Can you provide summary of current status/timing, and if there are any opportunities to pull ahead. Need by 8:00am tomorrow (Wednesday).

Thanks.

Howard Parsons

Chief Engineer

New Model Programs - NA

Phone: 313-805-2611

EMAIL: hparsons@ford.com

From:Tyler, Jim (J.S.)Sent:Thursday, April 25, 2013 11:41 AMTo:Huang, Larry (L,.)Cc:Andersen, Erik (E.); Weber, Erik (E.M.); Sowards, John (J.)Subject:RE: P415 Blocker Configurations for MCT Evaluation.pptx

Correct, Erik Weber's current vehicle test is using an early 2013 MY CAC which has the eCBV port and original 2011.5/2012 CAC internals (14 cell INT with louvers).

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

From: Huang, Larry (L,.)
Sent: Thursday, April 25, 2013 10:35 AM
To: Tyler, Jim (J.S.)
Cc: Andersen, Erik (E.); Weber, Erik (E.M.); Sowards, John (J.)
Subject: FW: P415 Blocker Configurations for MCT Evaluation.pptx

Jim,

Talked to Erik Weber, this CAC actually is "Original J1 CAC with adding ECBV port on the tank" (internal louvered fins, 14 cells). Would you please confirm? Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 9:53 AM To: Andersen, Erik (E.); Weber, Erik (E.M.); Sowards, John (J.) Subject: RE: P415 Blocker Configurations for MCT Evaluation.pptx

Updated with the base-line CAC info: "P415 PCA Minus (Int. Cover and ICA Blocker)"

<< File: P415 Blocker Configurations for MCT Evaluation.pptx >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215 From: Andersen, Erik (E.) Sent: Wednesday, April 24, 2013 4:22 PM To: Weber, Erik (E.M.); Huang, Larry (L,.); Sowards, John (J.) Subject: P415 Blocker Configurations for MCT Evaluation.pptx

<< File: P415 Blocker Configurations for MCT Evaluation.pptx >>

From: Sent: To:

Subject:

Huang, Larry (L,.) Tuesday, January 10, 2012 11:51 AM Kramer, Michael (M.T.); Palm, Jim (J.R.); Ladd, John (J.R.); Hayes, Kenneth (K.J.); Tyler, Jim (J.S.); Andersen, Erik (E.); Allan, Valerie (V.J.) RE: P415 CAC

Attached is the benchmark info on the condensation collector, on Chevey Cobalt 2L GTDI CAC, see the bottom of the first slide. It was compared to our EuCD, which has been runing on the road many years and never heard of white smoke/engine stumbling issue. It's hard to belive that the collector "really" was the solutions to the engine misfire issue, especially water accumulation after a half hour cruising. Thanks.



Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

 From:
 Kramer, Michael (M.T.)

 Sent:
 Thursday, January 05, 2012 2:55 PM

 To:
 Kramer, Michael (M.T.); Palm, Jim (J.R.); Ladd, John (J.R.); Hayes, Kenneth (K.J.); Tyler, Jim (J.S.); Huang, Larry (L,.); Andersen, Erik (E.)

 Subject:
 Updated: P415 CAC

 When:
 Monday, January 09, 2012 2:00 PM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).

 Where:
 My Office

When: Monday, January 09, 2012 2:00 PM-3:00 PM (GMT-05:00) Eastern Time (US & Canada). Where: My Office

Note: The GMT offset above does not reflect daylight saving time adjustments.

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

Moving in attempt to better accommodate schedules. Larry, can we review the CAD pictures for item #1 at this meeting (now on Monday).

Circling the wagons. The Indians are on the horizon

1) Heat exchanger layout pics for RFR P415 RFR

2) Brainstorm potential cooling hardware ICAs.

GM Chevy Cobalt SS 2.0L GTDI I4, , 2009







arc tank-to-port transition



Core 74X705x160 mm 10 tubes, Int/Ext Fin, 62 FPD in/out ports: ID/OD=54/60mm Core=6.64lb, total =9.1lb CBE = \$28.62 water collector on bottom



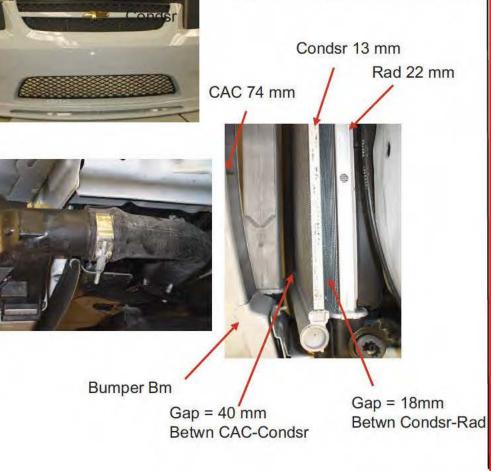




Chevorlet, Cobalt, 2009 74x680x160 mm

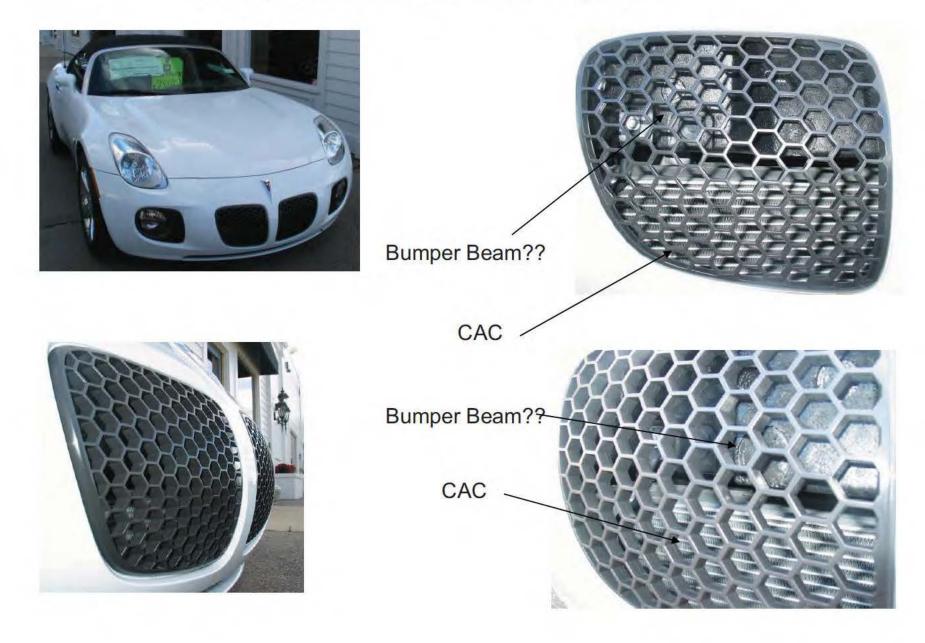


PE13-018 000884



Redacted for Relevance

Pontiac Solstice GXP 2L GTDI, 260 hp, 2007



From:Andersen, Erik (E.)Sent:Wednesday, May 01, 2013 3:25 PMTo:Madej, Jeanette (J.); Ronzi, Bill (W.C.); Kramer, Michael (M.T.)Cc:Sparks, Douglas (D.S.); Russo, Scott (S.)Subject:RE: P415 CAC Blocker Results

We also need to have some critical DV completed before these go anywhere. The team is working the DV plan now and hopefully will get some robust timing around it shortly.

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

From: Madej, Jeanette (J.) Sent: Wednesday, May 01, 2013 2:48 PM To: Ronzi, Bill (W.C.); Andersen, Erik (E.); Kramer, Michael (M.T.) Cc: Sparks, Douglas (D.S.); Russo, Scott (S.) Subject: RE: P415 CAC Blocker Results

We need to slow down. I need a supplier and confirmation on a couple of items. Mike Kramer, please find a supplier and start moving the process

Jeanette Madej

Global Cooling Manager

313-805-0189

From: Ronzi, Bill (W.C.) Sent: Wednesday, May 01, 2013 2:46 PM To: Andersen, Erik (E.) Cc: Russo, Scott (S.); Sparks, Douglas (D.S.); Madej, Jeanette (J.) Subject: RE: P415 CAC Blocker Results

Erik, Can you provide about a dozen sample parts as soon as possible? We'd like to use them for a few critical southern region customers (repeat repairs/buy-back risks. Would also like to install a few on local Dearborn area trucks.

Thanks, Bill

From: Ronzi, Bill (W.C.) Sent: Wednesday, May 01, 2013 10:56 AM To: Sparks, Douglas (D.S.); Andersen, Erik (E.); Madej, Jeanette (J.) Cc: Russo, Scott (S.) Subject: RE: P415 CAC Blocker Results

I believe OGC has someone review all TSB's before they are published but I'll make sure that they look at this one specifically for potential interaction with pending litigation.

From: Sparks, Douglas (D.S.) Sent: Wednesday, May 01, 2013 10:53 AM To: Andersen, Erik (E.); Ronzi, Bill (W.C.); Madej, Jeanette (J.) Cc: Russo, Scott (S.) Subject: RE: P415 CAC Blocker Results

Ok, but as long as it is equal to or better it should not be a problem.

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: Andersen, Erik (E.) Sent: Wednesday, May 01, 2013 8:21 AM To: Ronzi, Bill (W.C.); Sparks, Douglas (D.S.); Madej, Jeanette (J.) Cc: Russo, Scott (S.) Subject: RE: P415 CAC Blocker Results

One more tick item, we probably need to discuss with OGC as well before we go out with anything.

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

From: Ronzi, Bill (W.C.) Sent: Tuesday, April 30, 2013 3:01 PM To: Sparks, Douglas (D.S.) Cc: Andersen, Erik (E.); Russo, Scott (S.) Subject: P415 CAC Blocker Results

Doug, Confirmation from Erik's meeting today...

- 11MY/12MY CAC with bottom 7 tube blocker passed Davis Dam TASE test and is equivalent, or directionally better, versus the 13MY CAC for misfire.
- TASE has a few more confirmation tests to run this week but team feels that those should pass easily based on Davis Dam results (Erik will discuss with Carl W).
- Erik and Scott agree that we can kick off Creative Foam on service blockers in parallel with additional TASE work (RPS for 4000 parts perhaps).
 - Need some extra care to establish low service price from Creative since take rate will be huge.
- Bill to work with FCSD to create draft of revised TSB specifying blocker in lieu of new CAC.
- One last concern: Angle of P415 CAC makes it directionally worse for adhesion versus current production Fusion.
 - Need quick judgment as to whether Fusion DV/PV is adequate surrogate data for P415 or whether we need specific P415 testing.
- Re: 13MY/14MY direction, need more testing to determine whether current production CAC with bottom blocker is improvement vs current state.

Bill

William C. Ronzi PTI Quality Supervisor (313) 805-6140 cell & pgr From: Sent: To: Cc: Subject: Rodgers, Thomas (T.A.) Thursday, January 26, 2012 12:48 PM Kramer, Michael (M.T.) Weber, Erik (E.M.); Dumler, Jeff (J.D.); Tyler, Jim (J.S.); Palm, Jim (J.R.); Ladd, John (J.R.) RE: P415 CAC Effectiveness/Misfire

Top water and Vmax did not change with ~5C MCT change The turbos work harder and lambse adjustments are the change metrics

There would be a greater consequence with >5% degradation and we have CAC studies on more restrictive grilles (Harley bumper grilles @ \sim -30% CAC effectiveness change)

From: Kramer, Michael (M.T.)
Sent: Thursday, January 26, 2012 12:22 PM
To: Rodgers, Thomas (T.A.)
Cc: Weber, Erik (E.M.); Dumler, Jeff (J.D.); Tyler, Jim (J.S.); Palm, Jim (J.R.); Ladd, John (J.R.)
Subject: RE: P415 CAC Effectiveness/Misfire

Yes, we too are concerned about potential consequences of reducing the CAC effectiveness. Reduced effectiveness CAC designs are on the test matrix to evaluate the impact on generation of water condensation. Help from your team will be needed with validation should one of these design proposals start gaining momentum toward implementation.

If get less heat out of the charge air do you also see an associated top water risk?

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: Rodgers, Thomas (T.A.) Sent: Thursday, January 26, 2012 11:52 AM To: Dumler, Jeff (J.D.) Cc: Kramer, Michael (M.T.); Weber, Erik (E.M.) Subject: P415 CAC Effectiveness/Misfire

Regarding your misfire root cause due to CAC water vapor.... Currently right at the limit for 75% CAC effectiveness at Davis Dam There has been a Body TGW/marketing want to add a grille to the lower opening. TSE Study attached wrt consequences <u>http://www.apdm.ford.com/apdm/v4.0/by-</u> id/item/228694741/Effect%20of%20Modified%20eBay%20Grill%20for%20P415%20CAC%2020111012.ppt

We would advise not making the CAC less effective as MCT rises and has a consequence to trailering fuel economy. Slides 5,8,9

The Body group has been instructed to investigate a less restrictive grille vs. what is shown on pg2 - to minimize the consequence.

From: Sent: To: Subject: Andersen, Erik (E.) Monday, May 06, 2013 11:50 AM Huang, Larry (L,.); Kramer, Michael (M.T.); Tyler, Jim (J.S.) RE: P415 CAC last week test results-Updated

No, Carl needs the data sheet to assess his other tests.

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

From: Huang, Larry (L,.) Sent: Monday, May 06, 2013 2:41 PM To: Kramer, Michael (M.T.); Tyler, Jim (J.S.) Cc: Andersen, Erik (E.) Subject: RE: P415 CAC last week test results-Updated

Just got a call beck form Valeo (Corey Small). They couldn't located any J1 CAC jest. They are continuing looking for it, and provide us the feedback by first thing tomorrow morning.

I don't bet too much for them to get J1 CAC for us by tomorrow morning. We may need to find one by ourselves and ship to them. It would take long time.

We have both CAC and vehicle available. Shouldn't we just put them in wind tunnel to test it. It would be quicker and more accurate.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Monday, May 06, 2013 10:10 AM To: Huang, Larry (L..); Kramer, Michael (M.T.) Subject: FW: P415 CAC last week test results-Updated

Larry,

Can you please review for accuracy? Once complete, please let Mike know for routing to TSE to complete their analysis.

Please prioritize this morning.

Thanks,

Erik Andersen

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

From: Satish NADELLA [mailto:satish.nadella@valeo.com]
Sent: Monday, May 06, 2013 10:06 AM
To: Andersen, Erik (E.)
Cc: Kramer, Michael (M.T.); Corey SMALL <<u>corey.small@valeo.com</u>> (<u>corey.small@valeo.com</u>); <u>ying.tang@valeo.com</u>;
Tyler, Jim (J.S.); Widmann, Carl (C.A.); Weber, Erik (E.M.); Rodgers, Thomas (T.A.); Huang, Larry (L,.)
Subject: Fwd: P415 CAC last week test results-Updated

Erik,

Please find enclosed the data from testing for the P415 CAC for the 3 options.

Regards, Satish Nadella

----- Forwarded message -----From: Ying TANG <<u>ying.tang@valeo.com</u>> Date: Mon, May 6, 2013 at 9:49 AM Subject: RE: P415 CAC last week test results-Updated To: Satish NADELLA <<u>satish.nadella@valeo.com</u>>

FYI

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.

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: Sent: To: Cc: Subject: Huang, Larry (L,.) Wednesday, January 11, 2012 9:13 AM Tyler, Jim (J.S.) Allan, Valerie (V.J.); Andersen, Erik (E.); Kramer, Michael (M.T.) RE: P415 CAC Outlet made of transparent material

What about bending outlet duct upward, and move the port level to be the same as the upper inlet port, as well as moving eCBV below the outlet port?

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: <u>Ihuang3@ford.com</u> Building #2-3M29. Mail Drop: 1215

From:	Tyler, Jim (J.S.)	
Sent:	Wednesday, January 11, 2012 12:02 PM	
To:	Huang, Larry (L,.); Kramer, Michael (M.T.)	
Cc:	Allan, Valerie (V.J.); Andersen, Erik (E.)	
Subject:	RE: P415 CAC Outlet made of transparent materia	

The 2013 CAC eCBV is mounted above the outlet port, and the front structure above limits upward movement of the outlet port.

<< File: P415_front_structure.JPG >>

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

 From:
 Huang, Larry (L,.)

 Sent:
 Wednesday, January 11, 2012 11:02 AM

 To:
 Tyler, Jim (J.S.); Kramer, Michael (M.T.)

 Cc:
 Allan, Valerie (V.J.); Andersen, Erik (E.)

 Subject:
 RE: P415 CAC Outlet made of transparent material

Is the packaging allow to move the outlet port up, see attached?

<< File: P415 CAC Port.ppt >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: <u>Ihuang3@ifod.com</u> Building #2-3M29. Mail Drop: 1215

From: Sent: To: Kramer, Michael (M.T.) Wednesday, January 11, 2012 10:34 AM 'Satish NADELLA'

1

Follow-up to my voice mail yesterday.

We have received some reports on the F150 of what appears to be condensation formed in the CAC resulting in driveability concerns. The investigation is moving very fast. What options can Valeo offer to either reduce the amount of condensate generated in the CAC and/or store in a self draining reservoir that do not violate any existing patents?

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:
 Tyler, Jim (J.S.)

 Sent:
 Wednesday, January 11, 2012 10:24 AM

 To:
 Guillermo GUADARRAMA; Blas-Fernando GUTIERREZ; Eduardo BARRIOS

 Cc:
 Joseph LUMETTA; Kramer, Michael (M.T.)

 Subject:
 P415 CAC Outlet made of transparent material

Checking if Valeo has feasibility to injection mold the CAC outlet tank with a transparent plastic and then crimp to the core. The prototype outlet tank tool for eCBV system could be used to make the tanks with the alternate material if this is feasible. We are studying accumulation of condensation water in the CAC outlet tank in a test cell. 4 parts will be ordered if this is feasible.

Please advise.

Jim Tyler T1/P552 Cooling 313-805-2565 Bld-2 23P25 From: Sent: To: Cc: Subject: Tyler, Jim (J.S.) Wednesday, January 11, 2012 12:02 PM Huang, Larry (L,.); Kramer, Michael (M.T.) Allan, Valerie (V.J.); Andersen, Erik (E.) RE: P415 CAC Outlet made of transparent material

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

From:Huang, Larry (L,.)Sent:Wednesday, January 11, 2012 11:02 AMTo:Tyler, Jim (J.S.); Kramer, Michael (M.T.)Cc:Allan, Valerie (V.J.); Andersen, Erik (E.)Subject:RE: P415 CAC Outlet made of transparent material

Is the packaging allow to move the outlet port up, see attached?

<< File: P415 CAC Port.ppt >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

Kramer, Michael (M.T.)
Wednesday, January 11, 2012 10:34 AM
'Satish NADELLA'
Allan, Valerie (V.J.); Andersen, Erik (E.); Huang, Larry (L,.); Kramer, Michael (M.T.)
FW: P415 CAC Outlet made of transparent material

Follow-up to my voice mail yesterday.

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Mike Kramer RWD PT Cooling Supv. Six Sigma Black Belt Cell Phone: (313) 805 0190 Text Page: mkramer1 From:Tyler, Jim (J.S.)Sent:Wednesday, January 11, 2012 10:24 AMTo:Guillermo GUADARRAMA; Blas-Fernando GUTIERREZ; Eduardo BARRIOSCc:Joseph LUMETTA; Kramer, Michael (M.T.)Subject:P415 CAC Outlet made of transparent material

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Please advise.

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

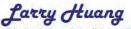
Mackup 8.3 - [PDV.jt]	
Actions Tools Web Concept Window Help	
: 1 최	
Item Name	
05-110013.5L_CAC_TUBES_AND_DUCTS	
00-11004AIS_&_HOSES_3.5L_GTDI	
01-9L34B01FRONT_STRUCTURE 01-9L34B02MAGBOLSTER_ISOLATORS 01-G1P415-MAG-BOLSTER	
01-AL34B01FRONT_STRUCTURE 060-AREINF_ASY-FRT_FNDR_INR_BDY_RH	
061-AREINF_ASY-FRT_FNDR_INR_BDY_LH	- IV View
06-AREINF_ASY-RAD_SUPT_LWR	
BB224-ABRKT-RAD_SUPT_LWR_RH	
C38-C_PLT_ASY-RR_CHAS_FR_RR	
BB225-ABRKT-RAD_SUPT_LWR_LH	
IC38-C_PLT_ASY-RR_CHAS_FR_RR	
8B222-AREINF-RAD_SUPT_LWR	
NUT_M06x1.00_RIV_TYP	
NUT_M06x1.00_RIV_TYP	
01-BL34B01FRONT_STRUCTURE 00-11501_2011.5_FRAME_SYS_4X2_3198RC	
05-110013.5L_CAC_TUBES_AND_DUCTS	
00-11004AIS_&_HOSES_3.5L_GTDI	
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3	2
018	
PE13-018 Groups PMI & Paths	

From: Sent: To: Cc: Subject: Huang, Larry (L,.) Wednesday, January 11, 2012 11:02 AM Tyler, Jim (J.S.); Kramer, Michael (M.T.) Allan, Valerie (V.J.); Andersen, Erik (E.) RE: P415 CAC Outlet made of transparent material

Is the packaging allow to move the outlet port up, see attached?



Regards,



Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

 From:
 Kramer, Michael (M.T.)

 Sent:
 Wednesday, January 11, 2012 10:34 AM

 To:
 'Satish NADELLA'

 Cc:
 Allan, Valerie (V.J.); Andersen, Erik (E.); Huang, Larry (L,.); Kramer, Michael (M.T.)

 Subject:
 FW: P415 CAC Outlet made of transparent material

Follow-up to my voice mail yesterday.

We have received some reports on the F150 of what appears to be condensation formed in the CAC resulting in driveability concerns. The investigation is moving very fast. What options can Valeo offer to either reduce the amount of condensate generated in the CAC and/or store in a self draining reservoir that do not violate any existing patents?

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:
 Tyler, Jim (J.S.)

 Sent:
 Wednesday, January 11, 2012 10:24 AM

 To:
 Guillermo GUADARRAMA; Blas-Fernando GUTIERREZ; Eduardo BARRIOS

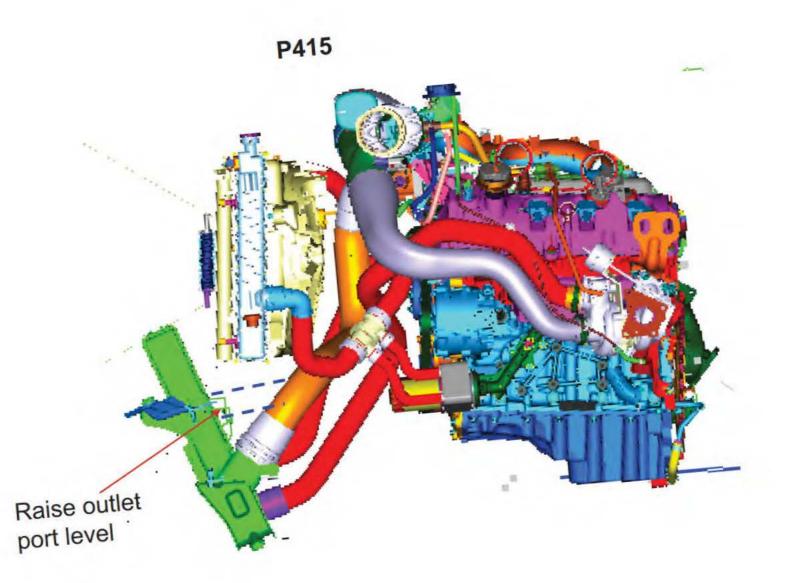
 Cc:
 Joseph LUMETTA; Kramer, Michael (M.T.)

 Subject:
 P415 CAC Outlet made of transparent material

Checking if Valeo has feasibility to injection mold the CAC outlet tank with a transparent plastic and then crimp to the core. The prototype outlet tank tool for eCBV system could be used to make the tanks with the alternate material if this is feasible. We are studying accumulation of condensation water in the CAC outlet tank in a test cell. 4 parts will be ordered if this is feasible.

Please advise.

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



From: Sent: To:

Subject:

Huang, Larry (L,.) Thursday, January 19, 2012 6:21 PM Kramer, Michael (M.T.); Palm, Jim (J.R.); Ladd, John (J.R.); Hayes, Kenneth (K.J.); Tyler, Jim (J.S.); Andersen, Erik (E.); Allan, Valerie (V.J.) RE: P415 CAC

Attached is an interested patent on condensate handling. Obviously, the author knows the issue very well.



Regards,



Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

 From:
 Huang, Larry (L,.)

 Sent:
 Tuesday, January 10, 2012 11:51 AM

 To:
 Kramer, Michael (M.T.); Palm, Jim (J.R.); Ladd, John (J.R.); Hayes, Kenneth (K.J.); Tyler, Jim (J.S.); Andersen, Erik (E.); Allan, Valerie (V.J.)

 Subject:
 RE: P415 CAC

Attached is the benchmark info on the condensation collector, on Chevey Cobalt 2L GTDI CAC, see the bottom of the first slide. It was compared to our EuCD, which has been runing on the road many years and never heard of white smoke/engine stumbling issue. It's hard to belive that the collector "really" was the solutions to the engine misfire issue, especially water accumulation after a half hour cruising. Thanks.

<<Chevy Cobalt Water-collector.ppt>>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From:	Kramer, Michael (M.T.)	
Sent:	Thursday, January 05, 2012 2:55 PM	
То:	Kramer, Michael (M.T.); Palm, Jim (J.R.); Ladd, John (J.R.); Hayes, Kenneth (K.J.); Tyler, Jim (J.S.); Huang, Larry (L,.); Andersen, Erik (E.)	
Subject:	Updated: P415 CAC	
When:	Monday, January 09, 2012 2:00 PM-3:00 PM (GMT-05:00) Eastern Time (US & Canada).	
Where:	My Office	

When: Monday, January 09, 2012 2:00 PM-3:00 PM (GMT-05:00) Eastern Time (US & Canada). Where: My Office

Note: The GMT offset above does not reflect daylight saving time adjustments.

Moving in attempt to better accommodate schedules. Larry, can we review the CAD pictures for item #1 at this meeting (now on Monday).

Circling the wagons. The Indians are on the horizon

1) Heat exchanger layout pics for RFR P415 RFR

2) Brainstorm potential cooling hardware ICAs.



(19) United States

(12) Patent Application Publication Quinn et al.

(10) Pub. No.: US 2011/0107760 A1 (43) Pub. Date: May 12, 2011

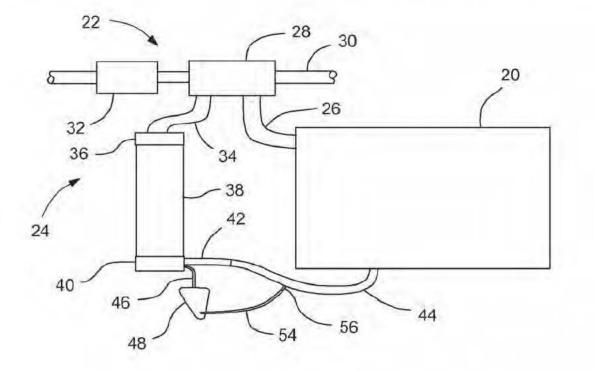
(54) INTERCOOLER HAVING CONDENSATE RESERVOIR

- (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)
- (73) Assignce: GM GLOBAL TECHNOLOGY OPERATIONS, INC., DETROIT, MI (US)
- (21) Appl. No.: 12/617,010
- (22) Filed: Nov. 12, 2009

Publication Classification

(57) ABSTRACT

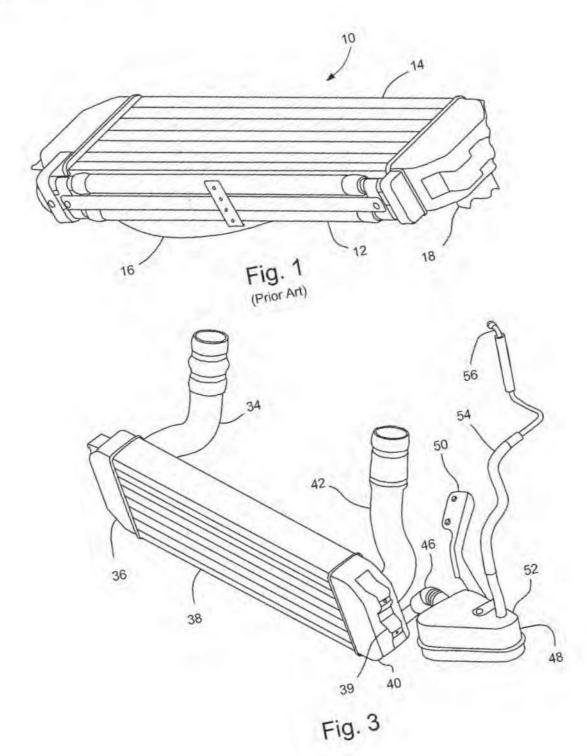
An engine air intake system for a vehicle having an internal combustion engine may include a turbocharger, a CAC heat exchanger having an inlet end for receiving compressed intake air from the turbocharger and an outlet end; a remote condensate reservoir spaced from the CAC heat exchanger, for storing 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.

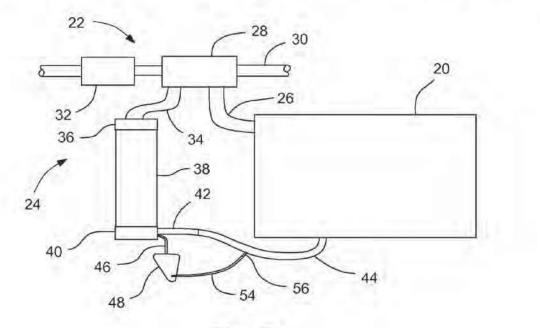


US 2011/0107760 A1

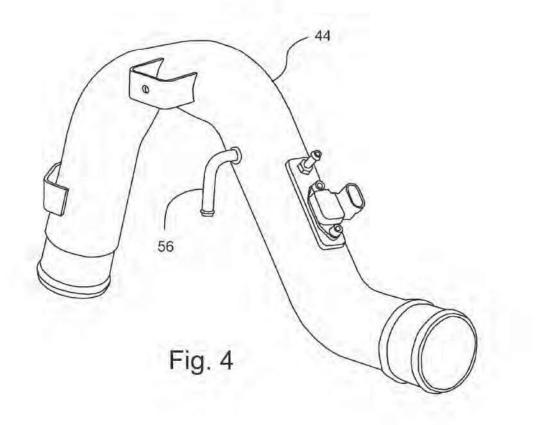
May 12, 2011 Sheet 1 of 3

Patent Application Publication









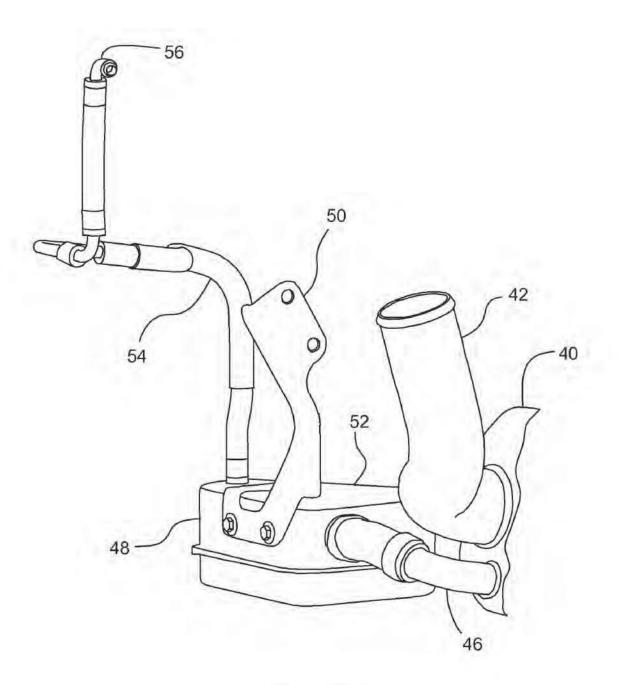


Fig. 5

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.

[0008] An advantage of an embodiment is that a remote 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:

 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 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.

3. 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.

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.

7. 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: Sent: To: Cc: Subject: Stoll, Bob (Robert E.) Tuesday, July 17, 2012 10:06 AM Kramer, Michael (M.T.) Tyler, Jim (J.S.); Smith, Craig (C.A.); Norman, Kristofor (K.R.) RE: P415 Charge Air Cooler Question

The charge air cooler is not listed in the emission certification application as an emission component so a White Paper is not required (assuming you aren't doing anything that would change air flow or temperature).

Regards, Bob Stoll (<u>rstoll@ford.com</u>) Certification Programs Car & Truck Documentation (313) 248-8620

From: Kramer, Michael (M.T.)
Sent: Monday, July 16, 2012 3:28 PM
To: Stoll, Bob (Robert E.)
Cc: Tyler, Jim (J.S.); Smith, Craig (C.A.); Kramer, Michael (M.T.); Norman, Kristofor (K.R.)
Subject: P415 Charge Air Cooler Question

We are making some changes to the P415 charge air cooler to address a condensation related misfire concern on the 3.5L GTDI. This change could affect all model years.

White paper needed?

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, April 02, 2013 6:35 PM
To:	'Peter GAUDINO'
Cc:	Tyler, Jim (J.S.); Satish NADELLA; Blas-Fernando GUTIERREZ; Alcaraz andrade, Alejandro
	(M.); Andersen, Erik (E.); Kramer, Michael (M.T.)
Subject:	RE: P415 Charged Air Cooler - 9L440

Thx.

1) Latest test results are looking favorable with a stick on external blocker covering a lower portion of the CAC. RFR P415 7 tubes + the 8th fin (count from the bottom). Expect testing to be complete by 4/12/13. We would like Valeo to investigate installation of these stick on shields at SLP.

2) Based on testing, there appears to be no opportunity to delete the internal cover on the ends of the tubes (27 mm opening). We were hoping.

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: Peter GAUDINO [mailto:peter.qaudino@valeo.com] Sent: Tuesday, April 02, 2013 2:33 PM To: Kramer, Michael (M.T.) Cc: Tyler, Jim (J.S.); Satish NADELLA; Blas-Fernando GUTIERREZ Subject: Re: P415 Charged Air Cooler - 9L440

Mike,

2 follow-up questions:

1.) What can Valeo do to support you?

2.) Will the tube cover be eliminated?

Regards, Peter Gaudino

On Tue, Apr 2, 2013 at 12:44 PM, Nicklaus, Ronald (R.R.) <rp>rnickla2@ford.com wrote:

Thanks Mike

Should we expect no change in sourcing location for the life of the part on the P415 and RFR from FZWEA (SLP, MX)?

Regards,

Ron Nicklaus II

Ford N.A. Material Logistics

Inbound Freight -- P473/P558/U22X/U55X

T 313-390-2898 F 313-323-6349 E mickla2@ford.com

5111 Auto Club Drive Dearborn, MI 48126 USA

From: Kramer, Michael (M.T.)
Sent: Tuesday, April 02, 2013 12:07 PM
To: Nicklaus, Ronald (R.R.)
Cc: peter.gaudino@valeo.com; Soberanis, Edmundo (E.); Curtright, John (J.H.); Digiovanni, Leyanna (L.C.); Jahimiak, Erik (E.J.); Tyler, Jim (J.S.); Alcaraz andrade, Alejandro (M.); Kramer, Michael (M.T.)
Subject: RE: P415 Charged Air Cooler - 9L440

There is low risk of any P415/RF CAC changes that would not be contained within the existing package envelope of the part.

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: Nicklaus, Ronald (R.R.)
Sent: Tuesday, April 02, 2013 11:59 AM
To: Kramer, Michael (M.T.)
Cc: peter.gaudino@valeo.com; Soberanis, Edmundo (E.); Curtright, John (J.H.); Digiovanni, Leyanna (L.C.); Jahimiak, Erik (E.J.)
Subject: P415 Charged Air Cooler - 9L440

Hello Michael,

The MP&L team has been working with Valeo on a packaging improvement for the Charged Air Cooler (9L440) for the P415. Peter has indicated that there may be some design changes to the CAC for the P415 in the

near future. He indicated either a design change (w/ possible resourcing) or the addition of an AGS to the CAC at Valeo or at DTP/KCAP.

Could you provide some additional details on what design changes are being considered and when a decision will be made. We would like to implement the packaging change sometime this month if the CAC will continue to come from Valeo for a significant freight savings.

Thank you ----

Ron Nicklaus II

Ford N.A. Material Logistics

Inbound Freight -- P473/P558/U22X/U55X

T 313-390-2898 F 313-323-6349 E <u>rnickla2@ford.com</u>

5111 Auto Club Drive Dearborn, MI 48126 USA

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From:	Khami, Roger (R.)
Sent:	Monday, April 09, 2012 10:10 AM
To:	Saeed, Muhammad (M.); Tyler, Jim (J.S.)
Cc:	'lenharts@tmdinc.com'; garrettm@TMDINC.COM; pirronej@tmdinc.com;
	schumakb@TMDINC.COM; Ahmad, Syed (S.); Mian, Mahfooz-UI-Haq (M.); Larry ENGEL; 'Joseph LUMETTA'; 'Jeff Hunter'; Kramer, Michael (M.T.); Siddigui, Abdul (Sami.)
Subject:	RE: P415 Core Tube Cover Plate: Moldflow analyses 040912

Jim Tyler,

We should go for Iteration six.

This requires addition of wall thickness.

Do we have time to incorporate the thickness change and does PTT have time to catch up on this?

From:	Saeed, Muhammad (M.)
Sent:	Monday, April 09, 2012 9:49 AM
To:	Tyler, Jim (J.S.)
Cc:	'lenharts@tmdinc.com'; garrettm@TMDINC.COM; pirronej@tmdinc.com; schumakb@TMDINC.COM; Ahmad, Syed (S.); Mian, Mahfooz-UI-Haq (M.); Larry ENGEL; 'Joseph LUMETTA'; 'Jeff Hunter'; Khami, Roger (R.); Kramer, Michael (M.T.); Siddiqui, Abdu (Sami.)
Subject:	P415 Core Tube Cover Plate: Moldflow analyses 040912

Please find attached six warp analysis pictures using different gate alternatives and thickness optamization for P415 Core Tube Cover Plate.

In Picture #6, Flow Channel 3mm helps to improve the warpage.

<< File: P415 Tube Cover Plate_ warp simulations_040912.ppt >>

Thanks,

Muhammad Saeed PTI CAE Ford Motor Company Building 2, Suite 24E21 Phone: (313)580-9789 Email: msaeed13@ford.com

The CAE request may be submitted at: http://www.edar.ford.com/home.do

From:Huang, Larry (L,.)Sent:Thursday, May 10, 2012 5:17 PMTo:Madej, Jeanette (J.)Cc:Ladd, John (J.R.); Allan, Valerie (V.J.); Kramer, Michael (M.T.); Andersen, Erik (E.)Subject:RE: P415 D35 GTDI Misfire Audio 742 280 62

This is only CAC we are aware of from the competitors, which was possibly designed for water condensation/white smoke issue. Some other patents or designs are for small amount of water condensation (water frozen issue) or oil collections (channel blocking or corrosion issue). Not sure what new design for misfiring prevention coming out from competitors recently.

It may be worth for us to benchmark this Modine CAC on our vehicle, and conduct component test to see if it (or how effectively) works. Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Madej, Jeanette (J.) Sent: Thursday, May 10, 2012 3:40 PM To: Huang, Larry (L,.); Kramer, Michael (M.T.) Cc: Ladd, John (J.R.); Allan, Valerie (V.J.) Subject: RE: P415 D35 GTDI Misfire Audio 742 280 62

Ok do we have the Denso one?

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

From:Huang, Larry (L,.)Sent:Thursday, May 10, 2012 2:30 PMTo:Kramer, Michael (M.T.)Cc:Madej, Jeanette (J.); Ladd, John (J.R.); Allan, Valerie (V.J.)Subject:RE: P415 D35 GTDI Misfire Audio 742 280 62

You are right. It is from Modine. Val suggested that we should also do the component test in TUV to understand the design and compare it to our CAC, in terms for misfiring. Thanks.

Regards,



Phone/Text Massage: 313 805 2617 E-mail: <u>lhuang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Kramer, Michael (M.T.) Sent: Thursday, May 10, 2012 1:50 PM To: Huang, Larry (L,.); Ladd, John (J.R.); Allan, Valerie (V.J.) Cc: Madej, Jeanette (J.) Subject: RE: P415 D35 GTDI Misfire Audio 742 280 62

Are we confident this is a Denso CAC? When this was brought up before it was stated this was a patented Modine 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: Huang, Larry (L,.) Sent: Thursday, May 10, 2012 1:01 PM To: Ladd, John (J.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.) Cc: Allan, Valerie (V.J.) Subject: RE: P415 D35 GTDI Misfire Audio 742 280 62

Denso CAC with the water connector was brought up in the meeting. We did have detail benchmarking info on it, as attached. From the water collector design, it seemed may not work effectively for the misfiring issue. Val had conversation with Denso on the design before. The part should be available to order from the dealer. It may worth to order one for our test on P415.

<< File: Chevy Cobalt Water-collector.ppt >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

-----Original Appointment-----From: Norman, Kristofor (K.R.) Sent: Monday, January 23, 2012 11:40 AM To: Norman, Kristofor (K.R.); Huang, Larry (L,.); Andersen, Erik (E.) Subject: Updated: P415 D35 GTDI Misfire Audio 742 280 62 When: Thursday, May 10, 2012 12:00 PM-1:00 PM (UTC-05:00) Eastern Time (US & Canada). Where: Bld-1 13F040 (20)

Kristofor Norman invites you to an online meeting using WebEx.

Online Meeting Summary

Meeting Link: <u>https://ford.webex.com/ford/j.php?J=719318688&PW=NMmE2NGY0MWYz</u> 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.

http://www.webex.com

MC06

From:	Allan, Valerie (V.J.)
Sent:	Friday, May 11, 2012 4:33 PM
То:	Madej, Jeanette (J.)
Cc:	Andersen, Erik (E.); Kramer, Michael (M.T.)
Subject:	RE: P415 D35 GTDI Misfire Audio 742 280 62

I talked to Rob Brinker at Denso. He's the same guy that Kris Norman spoke to.

Denso's approach is to use up-front system analysis to ensure that no band-aid fixes are needed. They work on the CAC tank and duct designs so that condensate doesn't pool in either the CAC or the AIS system. He suggested that we might try reducing the CAC outlet port diameter to increase the velocity and help drive condensate out of the CAC.

The only innovative Denso technology that Rob could point to was a patent pending dual layer duct that was designed to be a water separator on the vacuum side (low pressure side) of the AIS system. He thought maybe Denso could modify the technology for the high pressure side ducts and said that he'd send me the patent pending number. Still, this isn't a CAC effort - it's an AIS effort.

Other than that, when they've been unsuccessful in avoiding condensate buildup, Denso has been involved efforts to reduce effectiveness either by grill shutters or routing the charge air around the CAC.

To be frank, Rob didn't understand why Fascetti might think Denso could "do something". Should I talk to Kris Norman to understand what his impression was?

Valerie J. Allan Ford Motor Company Powertrain Cooling Heat Exchangers 313-805-4421 vallan@ford.com

From: Madej, Jeanette (J.) Sent: Friday, May 11, 2012 8:06 AM To: Allan, Valerie (V.J.) Subject: Re: P415 D35 GTDI Misfire Audio 742 280 62

Bob fascetti said densp c an do something. Can we call them

From: Allan, Valerie (V.J.) Sent: Friday, May 11, 2012 07:51 AM To: Madej, Jeanette (J.); Kramer, Michael (M.T.) Subject: RE: P415 D35 GTDI Misfire Audio 742 280 62

There's only Modine. Larry was confused when he started talking about Denso.

The engineering supervisor at Modine used to work at Visteon with me.

Valerie J. Allan Ford Motor Company Powertrain Cooling Heat Exchangers 313-805-4421 vallan@ford.com From:Madej, Jeanette (J.)Sent:Thursday, May 10, 2012 3:59 PMTo:Kramer, Michael (M.T.); Allan, Valerie (V.J.)Subject:RE: P415 D35 GTDI Misfire Audio 742 280 62

Is this something we can do? Is this good or not. Confused by whom you talked to Val. Denso or Modine?

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

From:Huang, Larry (L,.)Sent:Thursday, May 10, 2012 1:01 PMTo:Ladd, John (J.R.); Kramer, Michael (M.T.); Madej, Jeanette (J.)Cc:Allan, Valerie (V.J.)Subject:RE: P415 D35 GTDI Misfire Audio 742 280 62

Denso CAC with the water connector was brought up in the meeting. We did have detail benchmarking info on it, as attached. From the water collector design, it seemed may not work effectively for the misfiring issue. Val had conversation with Denso on the design before. The part should be available to order from the dealer. It may worth to order one for our test on P415.

<< File: Chevy Cobalt Water-collector.ppt >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E mail: <u>lhuang3@ford.com</u> Building #2 3M29, Mail Drop: 1215

-----Original Appointment-----From: Norman, Kristofor (K.R.) Sent: Monday, January 23, 2012 11:40 AM To: Norman, Kristofor (K.R.); Huang, Larry (L,.); Andersen, Erik (E.) Subject: Updated: P415 D35 GTDI Misfire Audio 742 280 62 When: Thursday, May 10, 2012 12:00 PM-1:00 PM (UTC-05:00) Eastern Time (US & Canada). Where: Bld-1 13F040 (20)

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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

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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.

http://www.webex.com

MC06

PE13-018 FORD 8-23-2013 APPENDIX G Engineering Review 6

From: Sent: To: Subject: Andersen, Erik (E.) Wednesday, May 01, 2013 9:29 AM Kramer, Michael (M.T.) RE: P415 External blocker - next steps

Yes.

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

From: Kramer, Michael (M.T.) Sent: Wednesday, May 01, 2013 8:48 AM To: Andersen, Erik (E.) Subject: RE: P415 External blocker - next steps

Still go into FMEM?

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: Wednesday, May 01, 2013 7:13 AM To: Kramer, Michael (M.T.) Subject: RE: P415 External blocker - next steps

Recent testing shows the 7-tube lower blocker on the original CAC is equal or better than PCA.

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

-----Original Appointment-----From: Kramer, Michael (M.T.) Sent: Wednesday, May 01, 2013 7:11 AM To: Andersen, Erik (E.) Subject: Accepted: P415 External blocker - next steps When: Wednesday, May 01, 2013 12:00 PM-12:30 PM (UTC-05:00) Eastern Time (US & Canada). Where: Kramer's Desk Am I recalling correctly that the misfire testing of the J1 CAC with lower 7 tubes/8 fin blocker did not show a difference from a customer perspective?

From:Sowards, John (J.)Sent:Wednesday, May 29, 2013 7:52 AMTo:Muntz, Sam (SAM.); Weber, Erik (E.M.); Andersen, Erik (E.); Huang, Larry (L,.)Cc:Rodgers, Thomas (T.A.); Widmann, Carl (C.A.); Harris, Wilding (W.G.)Subject:RE: P415 GTDI Data

Team,

I spoke with Sam this morning and will get the CAC to him within the next hour or two. Sorry for the delay.

From: Muntz, Sam (SAM.) Sent: Thursday, May 23, 2013 12:20 PM To: Weber, Erik (E.M.); Sowards, John (J.); Andersen, Erik (E.); Huang, Larry (L,.) Cc: Rodgers, Thomas (T.A.); Widmann, Carl (C.A.); Harris, Wilding (W.G.) Subject: RE: P415 GTDI Data

Erik, it will be tight timing but we should be able to do it. I will order new tires and 12v battery as soon as possible.

Thanks.

Sam Muntz

TASE Instrumentation Coordinator Roush Industries Bldg# 9 Email: <u>smuntz@ford.com</u> Cell:(313) 805 0322 Fax:(313) 845 2175

From: Weber, Erik (E.M.) Sent: Thursday, May 23, 2013 9:53 AM To: Sowards, John (J.); Andersen, Erik (E.); Huang, Larry (L,.) Cc: Rodgers, Thomas (T.A.); Widmann, Carl (C.A.); Harris, Wilding (W.G.); Muntz, Sam (SAM.) Subject: RE: P415 GTDI Data

Sam, can you support Wednesday COB delivery if the replacement CAC is in your hands Tuesday noon-ish?

Erik M. Weber

Ford Motor Company

TASE - FNA VE P552 Thermal & Cooling 313.805.4349

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

From: Sowards, John (J.)
Sent: Thursday, May 23, 2013 9:51 AM
To: Weber, Erik (E.M.); Andersen, Erik (E.); Huang, Larry (L,.)
Cc: Rodgers, Thomas (T.A.); Widmann, Carl (C.A.); Harris, Wilding (W.G.); Muntz, Sam (SAM.)
Subject: RE: P415 GTDI Data

Update:

Larry and I will be testing the PCA CAC RFR RFR The CAC is in the vehicle and ready to test. I can remove it and have it to Sam by late Tuesday morning.

Will this timing work?

From: Weber, Erik (E.M.)
Sent: Thursday, May 23, 2013 8:29 AM
To: Andersen, Erik (E.); Huang, Larry (L,.)
Cc: Sowards, John (J.); Rodgers, Thomas (T.A.); Widmann, Carl (C.A.); Harris, Wilding (W.G.); Muntz, Sam (SAM.)
Subject: RE: P415 GTDI Data

Original test date was Wednesday at 3:30pm, but I am moving that to Friday 5/31 at 7:30am. The truck needs new tires, a new battery, and (of course) the CAC installation prior to testing. I am on vacation tomorrow. The new CAC needs to go to Sam Muntz at Roush for instrumentation and installation. How soon can the CAC be delivered?

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: Thursday, May 23, 2013 8:26 AM To: Weber, Erik (E.M.); Huang, Larry (L.) Cc: Sowards, John (J.) Subject: RE: P415 GTDI Data

Erik,

Larry and John should be able to provide you with a PCA CAC minus internals for your testing next week.

Please let us know once you have a date for the test.

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

From: Weber, Erik (E.M.) Sent: Wednesday, May 22, 2013 4:22 PM To: Smith, Craig (C.A.) Cc: Andersen, Erik (E.); Whitehead, Joseph (J.P.); Horng, Margaret (M.) Subject: RE: P415 GTDI Data

I'm working on it. I will post the files to an APDM folder and send you the link.

Erik M. Weber

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

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

From: Smith, Craig (C.A.) Sent: Wednesday, May 22, 2013 3:45 PM To: Weber, Erik (E.M.) Cc: Andersen, Erik (E.); Whitehead, Joseph (J.P.); Horng, Margaret (M.) Subject: P415 GTDI Data

Erik,

Can you please provide ATI rec files or CSV data for your P415 GTDI TT72 runs:

- 1) 13MY baseline w/PCA CAC and 6 tube top blocker (current production)
- 2) 11/12MY w/proposed 7 tube blocker

Calibration is being asked to confirm transparency and I'd like the team to review the PCM data for these two configurations.

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:
 Monday, February 04, 2013 1:54 PM

 To:
 Sowards, John (J.); Ronzi, Bill (W.C.); Andersen, Erik (E.); Kramer, Michael (M.T.)

 Subject:
 RE: P415 GTDI Misfire - CAC moisture

 Attachments:
 Escalated Case* 2012 F-150 CAC Misfire TAR REOPENED AT SAYBROOK FOR...

 (57.9 KB)
 (57.9 KB)

INFO

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

-----Original Message-----From: Sowards, John (J.) Sent: Monday, February 04, 2013 1:05 PM To: Ronzi, Bill (W.C.); Andersen, Erik (E.); Kramer, Michael (M.T.) Cc: McDonagh, Scot (S.M.) Subject: RE: P415 GTDI Misfire - CAC moisture

We are testing a CAC with 21 TCs at the core outlet to better understand the CAC effectiveness and perhaps some internal blockers but nothing that would be considered an alternative at this time.

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, February 04, 2013 1:01 PM To: Sowards, John (J.); Andersen, Erik (E.); Kramer, Michael (M.T.) Subject: FW: P415 GTDI Misfire - CAC moisture

John/Erik, Pls see notes below. What alternative are you testing?

Mike, If you get an invite to discuss at C&C FQR, perhaps we should suggest that it should take place either in Cooling TDRM or Cooling Quality/VFG meeting instead.

Bill

From: Dixon, Mark (M.R.) Sent: Monday, February 04, 2013 12:54 PM To: Ronzi, Bill (W.C.) Subject: FW: P415 GTDI Misfire - CAC moisture

Info. Possible additional CAC revision. I thought we were at the end of the road on new non, passive CAC designs.

From: McDonagh, Scot (S.M.) Sent: Monday, February 04, 2013 12:29 PM To: Dixon, Mark (M.R.) Cc: Smith, Craig (C.A.); Leisenring, Kenneth (K.C.) Subject: RE: P415 GTDI Misfire - CAC moisture

Sowards advised he is testing a proposed CAC revision at DTF this weekend with our 13MY truck ... Assuming Roush gets the revised CAC instrumented in time

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

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

From:	Kramer, Michael (M.T.)
Sent:	Monday, August 27, 2012 5:51 AM
To:	McDonagh, Scot (S.M.); Sparks, Douglas (D.S.); Ronzi, Bill (W.C.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.)
Cc: Subject:	Dixon, Mark (M.R.); Madej, Jeanette (J.); Tyler, Jim (J.S.); Kramer, Michael (M.T.) RE: P415 GTDI Misfire QSF

I believe the ideal state is as follows:

- Both PCA CAC service parts (2011 2012 and 2013+) available coincident with production implementation (9/17/12)
- Continued use of 6 tube blocker only as it has been shown to be effective on some vehicles
- Use of PCA CAC on vehicles were 6 tube blocker only does not work
- Prioritization of service part availability for specific high incident customers and/or regionally where concern is most prevalent

Suggestions from the Quality and FCSD folks on how best to accomplish?

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: Monday, August 27, 2012 8:19 AM
To: Kramer, Michael (M.T.); Sparks, Douglas (D.S.); Madej, Jeanette (J.)
Cc: Dixon, Mark (M.R.); Ronzi, Bill (W.C.)
Subject: RE: P415 GTDI Misfire QSF
Importance: High

I was told to get FCSD Management approval to close the QSF with Internal Service Message(ISM). Has that direction changed ? Will be glad to draft TSB if that is what PT Management wants now. If we still plan to pursue ISM for QSF Closure and prior approval program in February 2013 I think this subject should be discussed in VP PDQR. Your thoughts ?

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

From: Kramer, Michael (M.T.) Sent: Friday, August 24, 2012 8:36 AM To: McDonagh, Scot (S.M.) Subject: FW: P415 GTDI Misfire QSF Assume you will pull in whomever you need

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: Friday, August 24, 2012 8:33 AM
To: Kramer, Michael (M.T.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.)
Cc: Tyler, Jim (J.S.)
Subject: RE: P415 GTDI Misfire QSF

Yes, needs to start draft the service message.

From: Kramer, Michael (M.T.) Sent: Friday, August 24, 2012 7:47 AM To: Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.) Cc: Tyler, Jim (J.S.) Subject: FW: P415 GTDI Misfire QSF Importance: High

Is there a TSB release planned for the PCA CAC? If so, we should start drafting 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: McDonagh, Scot (S.M.)
Sent: Thursday, August 23, 2012 2:15 PM
To: Ricks, Kevin (K.J.); Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Cc: Baum, Joe (J.M.); Sparks, Douglas (D.S.); Dixon, Mark (M.R.); Ronzi, Bill (W.C.); Wagner, Glen (G.C.); Madej, Jeanette (J.); Kramer, Michael (M.T.)
Subject: P415 GTDI Misfire QSF
Importance: High

Did Mr. Norton and Mr. Berardi agree to close the new QSF with Internal Service Message when 2011-2013MY 27mm PCA CAC is available in service on 10/5/12 ?

Mr. Ronzi- What is status of business case development for P415 GTDI CAC Prior Approval Program ?

Continued Moisture In CAC Misfire Aft TSB 12-6-4 And Production Cutoff Date

Concern Title:

Status: QSF	Open Date: 22/Aug/2012	VIN Count: 36 << OLE Object: Picture (Device Independent Bitmap) >>	Threshold: 25
Function: Powertrain	Days Open: 1	68 Day: 29/Oct/2012	90 Day: 20/Nov/2012
PCE:	Last Updated: 23/4	Aug/2012 10:10:18	AM
Functional Champion	n: JMCCOY Engine	ering Contact:	

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

From:	Andersen, Erik (E.)
Sent:	Friday, February 22, 2013 5:17 PM
То:	Widmann, Carl (C.A.)
Subject:	RE: P415 Loads for 110KPH 70 Ambient

By the way, will your model tell you what sort of vehicle load is being applied (weight / aero or grade) given an engine load and speed? For example, what does 1.0 engine load at 70 mph, 6th gear equate to?

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

From: Andersen, Erik (E.) Sent: Friday, February 22, 2013 2:28 PM To: Widmann, Carl (C.A.) Subject: RE: P415 Loads for 110KPH 70 Ambient

Vehicle Speed: 70mph Engine Load: 0.6 CAC In Temp: 132F AM: 5.2 lb / min Pressure: 36 in Hg

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

From: Widmann, Carl (C.A.) Sent: Friday, February 22, 2013 12:59 PM To: Andersen, Erik (E.) Subject: P415 Loads for 110KPH 70 Ambient

Erik, When you get a chance can you send info on 110KPH 70 ambient chassis roll test.

CAC inlet temperature

Flow through CAC Pressure in CAC

Thanks

Carl A Widmann Thermodynamics / Aerodynamics / System Engineering Manager Vehicle Engineering Cell Phone: 313-805-2073 VEMC AD02 E-Mail: <u>CWIDMANN@FORD.COM</u>

Andersen, Erik (E.) Tuesday, March 19, 2013 9:31 AM Norman, Kristofor (K.R.) RE: P415 Misfire and CAC Effectiveness

Thanks Kris, this is very helpful.

FYI....we did some testing on Friday with a lower blocker that had some encouraging results. Both RFR and P415 passed our test. We are reviewing with TSE and they are coordinating the vehicle level testing for tomorrow to understand any impacts on MCT. RF is testing tomorrow, P415 is still TBD.

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

From: Norman, Kristofor (K.R.)
Sent: Friday, March 15, 2013 5:15 PM
To: Andersen, Erik (E.)
Cc: Madej, Jeanette (J.); Norman, Kristofor (K.R.)
Subject: P415 Misfire and CAC Effectiveness

Erik, We rallied the technical specs here today to try to swag something for your upcoming discussions with Joe and a possible push for more CAC/blocker actions.

As discussed, our assessments of the PCA, met limits for change in fuel and performance without needing to recertify, etc.

Additional estimates would work as such:

For each 10^C increase in MCT, we would expect a decrease in fuel efficiency of 1% and peak performance of about 1.25%.

As you know, at moderate compressor loads, every 1% of CAC efficiency is worth upwards of 1^C or so.

If attributes constraints were relaxed, we could begin to hit an upper limit with regards to trailer tow derate at some point.

Regards,

Kristofor Norman Manager

1

Engine Performance Development Global Engine Engineering P: 313-390-7855 C: 313-805-8967 knorman1@ford.com From:Gorys, John (JPG.)Sent:Monday, April 23, 2012 1:04 PMTo:Whitehead, Joseph (J.P.); Jungbluth, Karl (K.); Kramer, Michael (M.T.); Palm, Jim (J.R.)Cc:Mazuchowski, James (J.A.); Madej, Jeanette (J.); Norman, Kristofor (K.R.); Smith, Craig
(C.A.); Bruck, Al (A.J.); Ladd, John (J.R.); Krygowski, Richard (R.J.)Subject:RE: P415 misfire investigation

Joe change fn32dd, fn32tow and fn32vs_fast to all numbers that are above 35 to 35, I just want to make sure it will work, 50 MPH with the 3.15 is like 42 MPH in shift scheduling so the schedules need to go below 42, 35 is just being safe.

Thank You

John P. Gorys Jr. 6R80 Calibration P415/U22X/V363/P552 E Mail JGORYS@FORD.COM Phone: 313-805-9112

From: Whitehead, Joseph (J.P.)
Sent: Monday, April 23, 2012 3:55 PM
To: Gorys, John (JPG.); Jungbluth, Karl (K.); Kramer, Michael (M.T.); Palm, Jim (J.R.)
Cc: Mazuchowski, James (J.A.); Madej, Jeanette (J.); Norman, Kristofor (K.R.); Smith, Craig (C.A.); Bruck, Al (A.J.); Ladd, John (J.R.); Krygowski, Richard (R.J.); Whitehead, Joseph (J.P.)
Subject: RE: P415 misfire investigation

All,

John and I discussed the 6-3 cal problems encountered on Friday and determined that the test vehicle's low axle ratio, 3.15, requires a larger cal change.

I will support Jim's testing for a couple hours Tuesday morning to complete this experiment.

John, Thanks for your help.

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

From: Gorys, John (JPG.)
Sent: Monday, April 23, 2012 3:05 PM
To: Jungbluth, Karl (K.); Kramer, Michael (M.T.); Whitehead, Joseph (J.P.); Palm, Jim (J.R.)
Cc: Bruck, Al (A.J.); Ladd, John (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.)
Subject: RE: P415 misfire investigation

At first it did do a 6/2 then I had the change the fast down curve and it still did a 6/2, then I found out they were running in tow haul and I had them change that schedule and it no longer did a 6/2 but it did a 6/3, Joe did you have problems with it or not.

Thank You

John P. Gorys Jr. 6R80 Calibration P415/U22X/V363/P552 E Mail JGORYS@FORD.COM Phone: 313-805-9112

From: Jungbluth, Karl (K.)
Sent: Monday, April 23, 2012 2:07 PM
To: Kramer, Michael (M.T.); Gorys, John (JPG.); Whitehead, Joseph (J.P.); Palm, Jim (J.R.)
Cc: Bruck, Al (A.J.); Ladd, John (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.)
Subject: RE: P415 misfire investigation

John,

Could you please review the files and see where the concerns lie. We can make adjustments before you re-run if necessary.

Regards,

Karl Jungbluth

Ford Motor Company 6R80 Calibration Phone: (313) 805-9187 e-mail: kjungblu@ford.com

From: Kramer, Michael (M.T.)
Sent: Monday, April 23, 2012 1:56 PM
To: Gorys, John (JPG.); Whitehead, Joseph (J.P.); Palm, Jim (J.R.)
Cc: Bruck, AI (A.J.); Ladd, John (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.); Jungbluth, Karl (K.); Kramer, Michael (M.T.)
Subject: RE: P415 misfire investigation

Based on feedback from last Friday's testing, there were concerns that the modified calibration (to get the 6-3 downshift) was functioning correctly.

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: Gorys, John (JPG.) Sent: Monday, April 23, 2012 1:50 PM To: Jungbluth, Karl (K.); Kramer, Michael (M.T.); Whitehead, Joseph (J.P.) Cc: Bruck, Al (A.J.); Ladd, John (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.) Subject: RE: P415 misfire investigation

I set Joe Whitehead up last week to do this, I,m thinking he tested this already. Joe did you run this already.

Thank You

John P. Gorys Jr. 6R80 Calibration P415/U22X/V363/P552 E Mail JGORYS@FORD.COM Phone: 313-805-9112

From: Jungbluth, Karl (K.)
Sent: Monday, April 23, 2012 1:29 PM
To: Kramer, Michael (M.T.); Gorys, John (JPG.)
Cc: Bruck, Al (A.J.); Ladd, John (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.)
Subject: RE: P415 misfire investigation

John,

Could you please help Mike tomorrow with his request at DTF? They want to test a schedule change for the misfire issue.

Thanks.

Regards,

Karl Jungbluth

Ford Motor Company 6R80 Calibration Phone: (313) 805-9187 e-mail: kjungblu@ford.com

From: Kramer, Michael (M.T.) Sent: Monday, April 23, 2012 1:04 PM

To: Jungbluth, Karl (K.)

Cc: Bruck, Al (A.J.); Ladd, John (J.R.); Norman, Kristofor (K.R.); Mazuchowski, James (J.A.); Madej, Jeanette (J.); Kramer, Michael (M.T.)

Subject: P415 misfire investigation

Karl, we are urgently evaluating several ICAs regarding the subject. The misfire is occurring due to condensation build up in the charge air cooler (3.5L GTDI) in conjunction with high internal air flow velocity which purges the water (from the CAC) at a rate that is intolerable to the engine.

The team would like to evaluate the effectiveness (addressing the misfire concern) of a 6-3 downshift instead of the present 6-2 downshift. Pending test results, other attribute tradeoffs would be a separate discussion.

We have a 12 hour (7:30 am – 7:30 pm) wind tunnel slot tomorrow (Tuesday 4/24). Could someone from your team support for a portion of this time to make the necessary temporary trans. calibration changes to evaluate?

There is extreme high level pressure to address this 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: Tyler, Jim (J.S.) Tuesday, June 26, 2012 11:30 AM Sent: Kramer, Michael (M.T.); Sparks, Douglas (D.S.) RE: P415 Misfire Test Summary Subject:

Attached are pictures of the installed CAC internal tube cover.

photo photo C Internal Tube CC Internal Tube C

To:

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

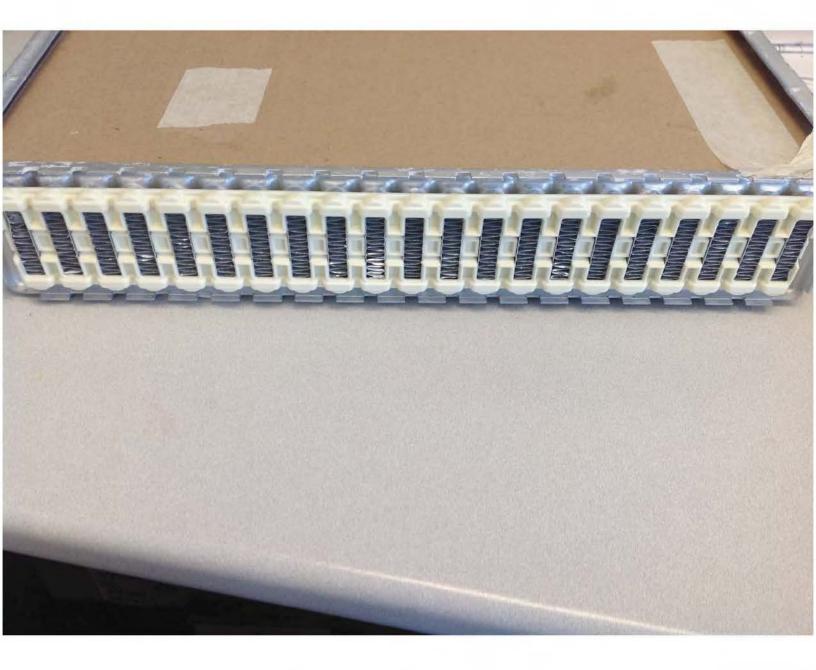
From:	Kramer, Michael (M.T.)	
Sent:	Tuesday, June 26, 2012 11:22 AM	
To:	Sparks, Douglas (D.S.); Tyler, Jim (J.S.)	
Subject:	P415 Misfire Test Summary	

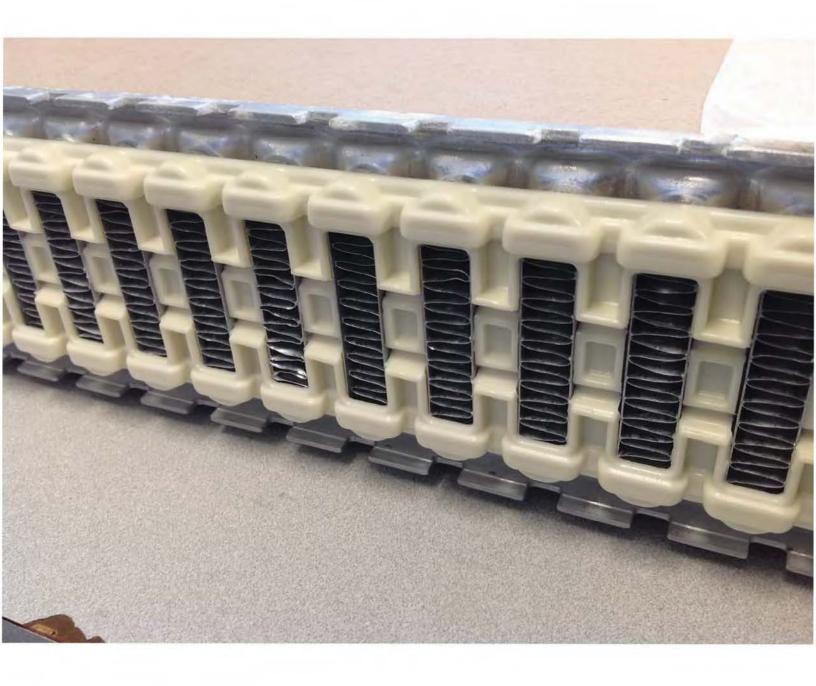
Doug. Attached is test summary (Excel) and CAD picture (ppt) of ICA. Jim is looking for pictures of the internal plates on the ends of the tubes (portion of PCA).

Jim, Doug is looking for by noon today.

<< File: Doug Sum.xlsx >> << File: P415 Misfire ICA.ppt >>

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:	Osepchook, William (W.R.)
Sent:	Tuesday, January 24, 2012 11:23 AM
То:	Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.); Dobbs, Dan (K.D.)
Cc:	Montgomery, Kerry (K.P.); Klump, Robert (R.F.)
Subject:	RE: P415 Misfire TSB Draft rev3.doc

Agree.

I do have :

TSB Action Follow Service Procedure steps to improve the concern.

I guess we can not include that type info in a TSB. We have been offered to reference the TSB in an SSM explaining the situation.

-----Original Message-----From: Nowaczyk, Rick (R.J.) Sent: Tuesday, January 24, 2012 11:05 AM To: Osepchook, William (W.R.); McDonagh, Scot (S.M.); Dobbs, Dan (K.D.) Subject: RE: P415 Misfire TSB Draft rev3.doc

There is no indication in the text to the dealer that this is not the final fix.

-----Original Message-----From: Osepchook, William (W.R.) Sent: Tuesday, January 24, 2012 10:52 AM To: McDonagh, Scot (S.M.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.) Subject: FW: P415 Misfire TSB Draft rev3.doc

Here is what TSO approved. Still need to make sure the P0340 is addressed. Direct to replace or diagnose?

-----Original Message-----From: Osepchook, William (W.R.) Sent: Tuesday, January 24, 2012 10:47 AM To: Cockerill, AI (C.A.) Subject: FW: P415 Misfire TSB Draft rev3.doc

-----Original Message-----From: Montgomery, Kerry (K.P.) Sent: Tuesday, January 24, 2012 10:44 AM To: Osepchook, William (W.R.) Cc: Rivera, Santos (S.) Subject: P415 Misfire TSB Draft rev3.doc

Kerry Montgomery Svc Information Development Commodity Lead Technical Support Operations Ford Motor Company 313-248-3164 <u>kmontgo1@ford.com</u> From:Cockerill, Al (C.A.)Sent:Wednesday, September 21, 2011 8:30 AMTo:Sims, Ivan (I.D.); Goodwin, William (W.R.); Garrett, David (D.P.); Reno, George (G.L.)Cc:Smith, Craig (C.A.)Subject:RE: P415 Misfire Work Plans

Regardless, of the misfire issue, we must have an answer with ICA and PCA actions or a work plan for the BSAQ project and our Form 4. By the way, the Form 4 gets pulled for review by Bennie Fowler this afternoon. This item is red for containment status and red for corrective actions.

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:	Sims, Ivan (I.D.)
Sent:	Wednesday, September 21, 2011 8:07 AM
To:	Goodwin, William (W.R.); Garrett, David (D.P.)
Cc:	Cockerill, AI (C.A.); Smith, Craig (C.A.)
Subject:	RE: P415 Misfire Work Plans

Bill, Dave,

Is the next step, to get aligned with the Misfire Team, for you to present the status of your investigation into the crank sensor warranty and findings which lead you to conclude it's a separate issue from the misfire concern?

Please advise.

<< Message: RE: Work Plan Needs For Hall CKP >>

IVAN D. SIMS

Hardware/Controls Interface Section Component Design C Department, GEE Phone: 313 805 9971

From:	Goodwin, William (W.R.)
Sent:	Tuesday, September 20, 2011 1:17 PM
To:	Sims, Ivan (I.D.)
Subject:	RE: P415 Misfire Work Plans

Ivan,

We can talk further about this but our own simple is/is not analysis does not tie the crank sensor failures to the misfire investigation....I see it as a separate warranty investigation specific to the sensor failures.

Regards, **Bill Goodwin**

Powertrain Sensors Technical Specialist Global Powertrain Control Systems Engineering Ford Motor Company / Building #2 / 22B19 E-mail: wgoodwin@ford.com

Tel: (313) 805-9111 ONE FORD: ONE Plan - ONE Team - ONE Goal

W.);
C.A.);
;
C.A

Attached is the latest summary of open work tasks on the P415 Misfire investigation.

The is a draft level for which I took the liberty of putting in names against the open work tasks. Your getting the note because I put your name against a task.

Please review and send recommendations, additions, and changes back to me for consolidation.

If there's work tasks missing, please add a row with the information.

Send the file back to me with a different filename.

<< File: Misfire open issues.V5.xls >>

Thanks,

IVAN D. SIMS

Hardware/Controls Interface Section Component Design C Department, GEE Phone: 313 805 9971

Ladd, John (J.R.) Wednesday, January 11, 2012 5:39 AM Kramer, Michael (MI.T.) RE: P415 Misfire

If we give a stp file to Beech Daley, they can probably turn it around in a week. Timing from Valeo?

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Kramer, Michael (M.T.) Sent: Wednesday, January 11, 2012 8:35 AM To: Ladd, John (J.R.); Tyler, Jim (J.S.) Cc: Palm, Jim (J.R.); Hayes, Kenneth (K.J.) Subject: RE: P415 Misfire

Likely easier to get an entire 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:	Ladd, John (J.R.)
Sent:	Wednesday, January 11, 2012 8:32 AM
To:	Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Cc:	Palm, Jim (J.R.); Hayes, Kenneth (K.J.)
Subject:	RE: P415 Misfire

Yes, but I assumed we can change that out ourselves...

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Kramer, Michael (M.T.) Sent: Wednesday, January 11, 2012 8:18 AM To: Ladd, John (J.R.); Tyler, Jim (J.S.) Cc: Palm, Jim (J.R.); Hayes, Kenneth (K.J.) Subject: RE: P415 Misfire John, I assume you want a CAC with a clear end tank (crimped on). Yes?

Jim. Please get details from Valeo. Obviously need quickly.

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:	Ladd, John (J.R.)
Sent:	Wednesday, January 11, 2012 8:14 AM
To:	Hayes, Kenneth (K.J.); Tyler, Jim (J.S.)
Cc:	Kramer, Michael (M.T.); Palm, Jim (J.R.)
Subject:	P415 Misfire

I would like to request that a clear outlet tank of the CAC be procured. This will be critical in aiding the development of minimizing condensate build up. Thanks.

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241 From:Kramer, Michael (M.T.)Sent:Tuesday, March 19, 2013 11:29 AMTo:Weber, Erik (E.M.); Widmann, Carl (C.A.); Andersen, Erik (E.)Cc:Alcaraz andrade, Alejandro (M.); Kramer, Michael (M.T.)Subject:RE: P415 Next-Level CAC Airflow Run Combos

So we are talking about the "hot air deflector" that has been on the CAC since 2011.5 MY J1 with no present plans to change 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: Weber, Erik (E.M.) Sent: Tuesday, March 19, 2013 10:47 AM To: Kramer, Michael (M.T.); Widmann, Carl (C.A.); Andersen, Erik (E.) Cc: Alcaraz andrade, Alejandro (M.) Subject: RE: P415 Next-Level CAC Airflow Run Combos

It's the divider plate that prevents the portion of the CAC that overlaps the condenser/radiator from exhaling into the condenser sub-cool region. It's affixed to the top of the CAC and covers the rear side of the upper 4-5 tubes.

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, March 19, 2013 10:26 AM To: Widmann, Carl (C.A.); Andersen, Erik (E.) Cc: Kramer, Michael (M.T.); Weber, Erik (E.M.); Alcaraz andrade, Alejandro (M.) Subject: FW: P415 Next-Level CAC Airflow Run Combos Lower 7 tube blocker plate data sheets (both with and without internal 27 mm tube end covers) request sent to Valeo this morning.

What is the upper rear blocker plate ("waterfall")? Additional data sheet needed?

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: Widmann, Carl (C.A.) Sent: Tuesday, March 19, 2013 9:06 AM To: Andersen, Erik (E.); Kramer, Michael (M.T.) Subject: FW: P415 Next-Level CAC Airflow Run Combos Importance: High

Erik / Mike, We are kicking off the 24 runs for the CAC change proposal. We will update as runs are completed.

Note need the CAC table from supplier to complete the analysis for MCT.

Carl A Widmann Thermodynamics / Aerodynamics / System Engineering Manager Vehicle Engineering Cell Phone: 313-805-2073 VEMC AD02 E-Mail: CWIDMANN@FORD.COM

From: Weber, Erik (E.M.) Sent: Monday, March 18, 2013 3:55 PM To: <u>ali.salari@esi-group-na.com</u>; Widmann, Carl (C.A.) Cc: Weber, Erik (E.M.) Subject: P415 Next-Level CAC Airflow Run Combos Importance: High

As we discussed earlier this afternoon:

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

One item of note: when calculating average face velocity for the lower blocker plate, please calculate using only the EXPOSED area of the CAC face, not the full face which includes the area underneath the blocker. The lower blocker should be inserted into the model so it is sealed to the CAC face.

Erik M. Weber

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

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

Huang, Larry (L..) Wednesday, March 20, 2013 9:34 AM Abarham, Mehdi (M.) RE: P415 outlet diameter

OD = 81 mm. The estimated wall thickness is 3 mm.

Regards,

farry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: <u>Inuang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Abarham, Mehdi (M.) Sent: Tuesday, March 19, 2013 5:49 PM To: Huang, Larry (L,.) Subject: RE: P415 outlet diameter

Not in that test. What is the outlet diameter of P415 end tank in general (production)?

Thanks,

From: Sent: To: Subject: Huang, Larry (L,.) Tuesday, March 19, 2013 5:47 PM Abarham, Mehdi (M.) RE: P415 outlet diameter

We did not install CAC out on CAC in that test.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: <u>Ihuang3@ford.com</u> Building #2-3M29. Mail Drop: 1215

From: Abarham, Mehdi (M.) Sent: Monday, March 18, 2013 2:01 PM To: Huang, Larry (L,.) Subject: P415 outlet diameter

Hi Larry,

I have a quick question. The outlet diameter of P415 (Outlet tube not the core info) is missing from the data sheet that you sent me. I have this info for the rest of the CACs but P415.

I wonder if by any chance you know the number.

Thanks, Mehdi.

Mehdi Abarham, Ph.D. Powertrain Research and Advanced Engineering Ford Motor Company <u>mabarham@Ford.com</u> Ph: (517) 643-0232

Huang, Larry (L,.) Tuesday, May 21, 2013 4:44 PM Tyler, Jim (J.S.) RE: P415 Performance

Thanks, Jim.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Tyler, Jim (J.S.) Sent: Tuesday, May 21, 2013 4:14 PM To: Huang, Larry (L,.); Andersen, Erik (E.) Subject: RE: P415 Performance

I checked my records and also with Guillermo at Valeo to confirm. No ICA (14 cell with louvers) performance was tested by Valeo with only the external 6 tube blocker.

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

From: Huang, Larry (L,.) Sent: Tuesday, May 21, 2013 12:32 PM To: Andersen, Erik (E.) Cc: Tyler, Jim (J.S.) Subject: P415 Performance

Attached is P415 Performance, J1, PCA, and J1+7t/8f Blocker. Jim is helping to get ICA performance. Thank.

<< File: P415 CAC Performance_2013 5 21.pptx >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

(E.)
21, 2013 1:11 PM
,.)
mance

Is this right? I wasn't aware the 7-tube blocker dropped the effectiveness more than the PCA.

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

From: Huang, Larry (L,.) Sent: Tuesday, May 21, 2013 12:32 PM To: Andersen, Erik (E.) Cc: Tyler, Jim (J.S.) Subject: P415 Performance

Attached is P415 Performance, J1, PCA, and J1+7t/8f Blocker. Jim is helping to get ICA performance. Thank.

<< File: P415 CAC Performance_2013 5 21.pptx >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

Andersen, Erik (E.) Friday, April 12, 2013 7:39 PM Huang, Larry (L..) RE: P415 Test Report

Thanks!

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

From: Huang, Larry (L,.) Sent: Friday, April 12, 2013 7:36 PM To: Andersen, Erik (E.) Subject: RE: P415 Test Report

Yes, we have been always, to push out all water before the next test.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Friday, April 12, 2013 7:34 PM To: Huang, Larry (L,.) Subject: RE: P415 Test Report

Thanks. That will allow us to determine if there is an improvement.

Are you guys doing the same 4 WOP events at the end of the 30 minute precondition (before starting the 60 minute test)? I assume you are.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966 Sent: Friday, April 12, 2013 7:29 PM To: Andersen, Erik (E.) Cc: Sowards, John (J.) Subject: RE: P415 Test Report

John just put production PCA CAC (with ICA blocker) on the vehicle. We just started 30min-preconditioning now.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Friday, April 12, 2013 7:21 PM To: Huang, Larry (L.) Subject: RE: P415 Test Report

Thanks. We need to make sure we get the baseline production PCA CAC with top 6-tube blocker. We don't have this test point in cell 7.

Test AB does not trend right with the data. Hotter temps, 27 mm x-section across all tools, same external blocker with 4 times the number of misfire. Doesn't make sense.

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

From: Huang, Larry (L,.) Sent: Friday, April 12, 2013 5:24 PM To: Andersen, Erik (E.) Subject: P415 Test Report

<< File: P415_WT Test Report.xlsx >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

Huang, Larry (L,.) Friday, April 12, 2013 5:38 PM Andersen, Erik (E.) RE: P415 Test Report

Test G on 2/22 is production PCA on P415, a Fail. It's likely in cell 7B.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Huang, Larry (L,.) Sent: Friday, April 12, 2013 5:24 PM To: Andersen, Erik (E.) Subject: P415 Test Report

<< File: P415_WT Test Report.xlsx >>

Regards,

farry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

Russo, Scott (S.) Monday, March 18, 2013 8:05 AM Andersen, Erik (E.); Madej, Jeanette (J.); Kramer, Michael (M.T.) RE: P415 Testing last night

Wow...We should talk this afternoon...

Scott Russo

Ford Motor Company PT Cooling Applications Manager srusso2@ford.com Phone: 313-805-3059 Page: <u>3138053059@vtext.com</u>

From: Andersen, Erik (E.)
Sent: Saturday, March 16, 2013 12:31 PM
To: Madej, Jeanette (J.); Russo, Scott (S.); Kramer, Michael (M.T.)
Subject: P415 Testing last night

P415 passed our condensate test last night with the lower 7-tube (8 fin) blocker. 10 misfires, No FMEM, No Codes, No hesitation.

RFR

Mike,

Can you get a data sheet from Valeo with the lower 7-tubes / 8 fins blocked? Carl will need this to run his assessment for both applications. We spoke to him Friday about **RFR** and he thought it would be okay. They are going run the **RF** in the tunnel on Wednesday to ensure no issues.

He will also need to schedule the P415 as well to understand if there are any MCT issues. I'm keeping my fingers crossed.

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

1

Huang, Larry (L,.) Tuesday, March 12, 2013 5:57 PM Tyler, Jim (J.S.) RE: P415 Traction Force

Thanks, Jim.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Tyler, Jim (J.S.) Sent: Tuesday, March 12, 2013 9:08 AM To: Huang, Larry (L,.); Weber, Erik (E.M.) Subject: RE: P415 Traction Force

The 8200 lb GVW and 17100 GCW weights are the correct max weights.

Erik, please confirm if the parameters look ok overall. Thanks.

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

From: Huang, Larry (L,.) Sent: Monday, March 11, 2013 4:06 PM To: Tyler, Jim (J.S.); Weber, Erik (E.M.) Subject: RE: P415 Traction Force

Yes. I have one, as attached. Would you please confirm that the parameters in it are correct? Thanks.

<< File: Traction Force v15 P415 3.5L GTDI HDTT 373 17100.xls >>

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Tyler, Jim (J.S.)

Sent: Monday, March 11, 2013 3:22 PM To: Huang, Larry (L,.); Weber, Erik (E.M.) Subject: RE: P415 Traction Force

Larry, I do not have any of the current P415 tractive sheets. Please confirm if you want these for the P415 3.5L GTDI max GVW, max GCW conditions.

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

From: Huang, Larry (L,.) Sent: Monday, March 11, 2013 9:21 AM To: Tyler, Jim (J.S.) Subject: P415 Traction Force

Jim, Do you have P415 traction force sheet that TASE is using? What is GVW, GCW, and drag coefficient CD for p415 truck? Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>Ihuang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From:	Hammoud, Mazen (M.)
Sent:	Monday, March 14, 2011 8:12 AM
То:	Smith, Craig (C.A.)
Subject:	RE: PCCN Launch Issues Summary

We didn't find the root of the root, but we know that it is a exothermic reaction in the catalyst that caused it. We can state it that way.

From: Smith, Craig (C.A.) Sent: Monday, March 14, 2011 8:10 AM To: Hammoud, Mazen (M.) Subject: FW: PCCN Launch Issues Summary

Mazen,

We never found a smoking gun for either of the two P415 GTDI issues (catalyst & misfire). How do you recommend that we handle the root cause-related columns?

Thanks, Craig Smith Supervisor - Engine Calibration 3.5L TIVCT GTDI & 3.5L IVCT GTDI Powerpacks Phone: 805-6345

From: Shanahan, John (J.L.)
Sent: Friday, March 11, 2011 4:32 PM
To: Ownsworth, Heather (H.); Smith, Jeffrey (J.); Morgan, Paul (P.); Bailey, Owen (O.R.); Sheeran, William (W.M.);
Nault, Ben (B.D.); Marzonie, Rob (R.M.); Bogema, John (P.); Smith, Craig (C.A.); Korpics, Frank (F.M.); Sonnichsen, John (J.W.); Hughes, Scott (S.R.); Jardine, Ross (R.A.); Roberts, Mark (M.A.); Williamson, Chris (C.P.); Norton, Jeremy (J.);
Cotgrove, Ian (I.); Shephard, Bill (W,J,J.); Deeb, Joe (J.S.); Badawi, Basil (B.R.); Moorhouse, Jon (J.); Muir, Robin (R.);
Lepley, Geoffrey (G.); Herbert, Jack (J.); Browning, Matthew (M.)
Cc: Cowher, Terry (T.); Baum, Joe (J.M.); Layden, Kevin (K.E.); Goodliff, Simon (S.); Webb, Timothy (T.J.); Hammoud,
Mazen (M.); Dona, Alan (A.R.); Lyon, Peter (P.M.); Leisenring, Kenneth (K.C.)
Subject: PCCN Launch Issues Summary

Again, thanks for the input to support this-afternoon's review with Phil. There have been no changes in the request summary pro-forma from Tuesday, except you will note that the individual spreadsheets have been combined onto 1 sheet (which is the planned final configuration). In today's review, we had some discussion around the PP builds, and the R06. With the official GPDS process defining R06 for the 1PP builds, there is concern we may be listing some R06s that actually met the program timing and requirements. These do need to be captured on this list. However, we've had some R06 releases that were late to program timing and drove in vehicle rework/reflash (opposed to the normal pre build bench PCM flash w/R06). Terry and I will remove the R06s listed, if there is no PP vehicle containment required (ie- if column N is 0). If you have concerns, or want to discuss please feel free to give me a call.

Phil requested completion of the document for a review Wednesday, March 16. This includes any adds, along with all cells populated. Please provide the remainder of your information by Noon (Dearborn time) Tuesday, to Terry Cowher for consolidation. Attached is the document as reviewed today and current status.

Thanks for your continued support.

John Shanahan

Manager, Powertrain Feature Calibration TEE Building Ph: 313-24-83713 Cell: 313-805-3004

From:	Alcaraz andrade, Allejandro (M.)
Sent:	Friday, May 17, 2013 11:26 AM
To:	Allan, Valerie (V.J.); Raver, Jon (J.A.); Huang, Larry (L.)
Cc:	Kramer, Michael (M.T.)
Subject:	RE: Picture of two P415 parts on their way to Greensburg for SWAAT test

All the blockers were changed for new ones and positioned as stated in the beginning 7 tubes and 8 fins. Thanks

From: Allan, Valerie (V.J.)
Sent: jueves, 16 de mayo de 2013 03:28 p.m.
To: Alcaraz andrade, Alejandro (M.); Raver, Jon (J.A.); Huang, Larry (L,.)
Cc: Kramer, Michael (M.T.)
Subject: RE: Picture of two P415 parts on their way to Greensburg for SWAAT test

I think the test should be valid in terms of approving the impact of the corrosion on tubes and fins. However, if the side support flange corrodes because the corrosive fluid is trapped with the blocker plate then we'll have to decide what to do.

Valerie J. Allan Ford Motor Company Powertrain Cooling Heat Exchangers 313-805-4421 vallan@ford.com

From: Alcaraz andrade, Alejandro (M.)
Sent: Wednesday, May 15, 2013 1:26 PM
To: 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 test

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 248-709-4710 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: Sent: To: Cc: Subject: Kramer, Michael (M.T.) Monday, June 24, 2013 1:24 PM Alcaraz andrade, Allejandro (M.) Kramer, Michael (M.T.) RE: RE: RPS 1330:314. With Label. wpts 12695680 000

What are the proposed dimensions of the label? Something in the ballpark of 4 in. x 3 in?

Also, suggest replacing "manifold charge temperatures" with "engine intake air temperature." Also, seems best to put the label on the side with the adhesive backing so it is removed when the backing as taken off. Also, have to look at this side of the blocker to remove the backing.

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: Alcaraz andrade, Alejandro (M.) Sent: Monday, June 24, 2013 12:56 PM To: Kramer, Michael (M.T.) Subject: FW: RE: RPS 1330314. With Label. wpts 12695680 000

Mike,

Here is the drawing of the blocker with the label, is the size of label ok or do you suggest making it bigger?

Thank you

From: Woodson, Maurice (M.G.)
Sent: lunes, 24 de junio de 2013 11:43 a.m.
To: James Graves; Alcaraz andrade, Alejandro (M.)
Cc: Donna Fusco; Stein, James (J.R.)
Subject: Fwd: RE: RPS 1330314. With Label. wpts 12695680 000

Hi Alejandro,

Attached is the revised drawing showing the placement of the red label. Cacsticker attached (JPEG) shows the wording. Label size (2" x 4"). Let me know if this meets your approval. Thanks, Maurice >>> James Graves 6/24/2013 11:57 AM >>> Looks good

>>> Steve Wood 6/24/2013 10:12 AM >>> See attached...

>>> Maurice Woodson 6/24/2013 9:22 AM >>> Hi Steve,

Part#: DL14 3G4610 AA Notice#: WPTS E 12695680 000

We worked on this drawing a couple of week ago. I need to make the final changes to the print so that we can kick the part off to production. Let me know a good time for us to get together. Keep in mine I need to send the drawing to Ford for approval today.

*Add Notice# *Add Label To Print

Thanks, Mo

>>> Jim Stein 6/24/2013 8:15 AM >>> Hello Maurice, Please add this notice # and red label to the print. Then send the print back to all on this e-mail. Please call me with any questions / concerns. Thank you,

>>> "Alcaraz andrade, Alejandro (M.)" <<u>malcara2@ford.com</u>> 6/23/2013 11:32 PM >>> James notice number would be wpts 12695680 000 add this and the sticker to the drawing.

Thanks

From: Kramer, Michael (M.T.)
Sent: domingo, 23 de junio de 2013 08:36 a.m.
To: Alcaraz andrade, Alejandro (M.); Stein, James (J.R.)
Cc: Kramer, Michael (M.T.)
Subject: RPS 1330314. With Label.

This is the order for 5000 P415 service only 7tube/8 fin stick-on blockers with the warning sticker. Please confirm sticker will be put on the back (ie. side where the adhesive covering will be removed prior to sticking the blocker on the CAC.

Is the print ready for release showing this sticker/placement/verbage?

Mike Kramer

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:	Dobbs, Dan (K.D.)
Sent:	Thursday, March 01, 2012 7:46 AM
То:	Cockerill, Al (C.A.); Smith, Craig (C.A.); McDonagh, Scot (S.M.); Osepchook, William (W.R.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Whitehead, Joseph (J.P.)
Cc:	Coisman, Michael (M.J.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.)
Subject:	RE: Report Summary for the CQIS Report#BKWD3006

Okay what is up with the intake valves that we would want them inspected?

From: Cockerill, AI (C.A.)
Sent: Wednesday, February 29, 2012 5:32 PM
To: Smith, Craig (C.A.); McDonagh, Scot (S.M.); Osepchook, William (W.R.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Whitehead, Joseph (J.P.)
Cc: Coisman, Michael (M.J.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.)
Subject: RE: Report Summary for the CQIS Report#BKWD3006

Fine with 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

From: Smith, Craig (C.A.)
Sent: Tuesday, February 28, 2012 7:54 AM
To: McDonagh, Scot (S.M.); Osepchook, William (W.R.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Whitehead, Joseph (J.P.); Cockerill, AI (C.A.)
Cc: Coisman, Michael (M.J.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.)
Subject: RE: Report Summary for the CQIS Report#BKWD3006

AI,

Are you aligned?

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: Tuesday, February 28, 2012 7:32 AM To: Osepchook, William (W.R.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.) Cc: Coisman, Michael (M.J.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.) Subject: RE: Report Summary for the CQIS Report#BKWD3006

Bill- Root cause investigation in progress

PT Team- Should enclosed dealer remove intake manifold and inspect the intake valves ?

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

From: Osepchook, William (W.R.) Sent: Tuesday, February 28, 2012 7:08 AM To: McDonagh, Scot (S.M.) Cc: Coisman, Michael (M.J.); Devries, Jason (J.E.) Subject: RE: Report Summary for the CQIS Report#BKWD3006

Scot.

See below. Any thoughts.

From: MCOISMAN@ford.com [mailto:MCOISMAN@ford.com] Sent: Monday, February 27, 2012 6:11 PM To: Devries, Jason (J.E.); Osepchook, William (W.R.) Subject: Report Summary for the CQIS Report#BKWD3006

Hi Guys, I'm going to be taking a look at this vehicle in the next day or two and was wondering if either of you has some suggestions on diagnostics or specifically what to look for. Tip in surge at cruising speeds that matches wastegate solednoid activation. Recal helped a little and solenoid was replaced twice with no change. Thanks for any input. Don't want to go into this one blind.

Attachments: 0

Report# : CCRG/EPRC:	BKWD3006 NHL Reviewed Status:			Received: Date:	11/23/2011
Vehicle:	,	2011,F150 4X4 ,F150 ,SUP CRW,STYSD ,1FTFW1ETXBK			07/28/2011
Odometer :	7,880 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES
Dealer:	USA 06370 Glacier Valley Ford, Inc.			Phone#:	(608) 356- 2222
City:	Baraboo	State:	Wisconsin	Country :	USA
Originator:	SCOTT BRENSON				
Symptom:	5 58 2 39 DRV I	PERF,ENGINE SURGE,ACC	CEL,INTERMI	ITENT	

Status:							
VFG:	V52 DRIVEABIL	V52 DRIVEABILITY					
Additional Symptom:	SURGE ON ACC	SURGE ON ACCEL					
Fix:	Causal Compone	ent:					
Condition Code:							
Hotliner: RSTE	V138	Phone:	313 248-8207]	Regn Cd: G1	Chicago	
Engineering:			Phone:		TAR: 0-30		
Dlr Contact: SC	COTT BRENSON		Phone:	608 356-2222	2 7	Fitle Cde:	SM
DTCs:							
KOEO:							
KOEC:							
KOER:							
Comments							
•							

REPAIR 11/23/2011 05:48PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:WHEN WARM AT 45 MPH AND LIGHT ACCELERATION

SURGES MOANS VERY LOUD. FUEL MILEAGE 12 MPG AND WHEN INCREASING SPEED

TURBO STARTS MAKING LOUD WHOOSING NOISES AND STARTS SURGING. DIAGNOSTICS: EEC TESTS AND TEST DROVE ALL PASS AND CUSTOMER CAN MAKE TRUCK DO IT ALL THE TIME WITH TECHNICIAN PARTS REPLACED:NONE TECH QUESTION:WE HAVE SEEN OTHER COMPLAINTS ON MESSAGE BOARDS ABOUT THE ECO BOOST WITH SAME CONCERNS, BUT NO HELP.

LOOKING FOR A DIRECTION TO GO

RECOMM11/23/2011 05:48PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINESCOTT, IF YOU HAVEN'T ALREADY, SMOKE TEST THE CAC SYSTEM AND INSPECTFOR ANY LEAKS. IT MAY BE NECESSARY TO PRESSURIZE THE CAC SYSTEM WITH15LBS OF PRESSURE WHILE SMOKE TESTING. SPRAY ANY SUSPECTED AREAS
WITHSOAPY WATER TO VERIFY ANY LEAKS. IF FOUND, REPAIR AS NECESSARY. USE
THE IDS TO MONITOR TIP_PRES_BOOST, TP, WASTEGATE DUTY CYCLE DURING
THECONCERN. IF THE PIDS BECOME ERRATIC WHEN THE CONCERN IS PRESENT,
DISCONNECT THE TURBO BYPASS VALVES AND PETEST. ENGINEERING IS

DISCONNECT THE TURBO BYPASS VALVES AND RETEST. ENGINEERING IS CURRENTLY INVESTIGATING THIS CONCERN.

REPAIR 12/16/2011 08:55AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE

WILL CHECK SPARK PLUGS. HAS THERE BEEN ANY FIXES FOR THE SURGE

RECOMM 12/16/2011 08:55AM PHIL JACOBS MSS - FCSD - TECH SVC HOTLINE SCOTT, RECOMMEND TO PERFORM AN IDS HIGH PRESSURE FUEL SYSTEM TEST AS

WELL, WHICH INCLUDES AN INJECTOR FLOW TEST. IF NOT ALREADY DONE, CHANGE THE OIL AND FILTER TO REMOVE THE FUEL DILUTED FUEL. THE SURGE CONCERN AT 45 MPH IS A KNOWN CONCERN THAT ENGINEERING IS CURRENTLY INVESTIGATING. IF NO PROBLEM IS FOUND, NO FURTHER ACTION SHOULD BE TAKEN AT THIS TIME. PLEASE MONITOR OASIS FOR UPDATES.

REPAIR 12/16/2011 09:18AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE WEB - R-HAGER6 - 12/16/2011 8:18:26 AM CHECKED CAC FOR LEAKS ALL OK. MONITOR PIDS FOUND TURBOBPASS,TURBO WGATE, ECTACT,ECTDSD,TIP PRES BOOST ALL SURGE. ALSO CUSTUMER WAS COMPLAINING OF OIL OVER FULL AND SMELLS LIKE GAS. FOUND OIL LEVEL HALF WAY UP BENDS IN DIPSTICK AND HAS STRONG FUEL SMELL. PERFORMED FUEL SYSTEM TEST HIGH AND LOW BOTH PASS.

ANY HELP WOULD BE GREAT

RECOMM 12/16/2011 09:18AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE WEB - LSTANL22 - 12/16/2011 8:29:47 AM SCOTT, RECOMMEND VERIFYING THAT A MECHANICAL FUEL GAUGE WAS USED ON THE LOW SIDE, WITH THE FUEL

PRESSURE BEING 62-73 PSI. ALSO TESTING FOR EXCESSIVE ETHANOL IN THE FUEL. 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.

REPAIR12/20/2011 12:57PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINEWE REMOVED ALL 6 SPARK PLUGS ALL APEAR TO BE BLACK AROUND THE SIDE
AND

EXTERMELY WHITE PORCLAIN WITH GRAYISH BLACK ELECTRODE. DID PERFORM

HIGH PRESSURE FUEL TEST ALL PASS. CUSTOMER COMPLAINED ABOUT MISSFIRE AGAIN, WE REPLACED CYL 2,&4 PLUGS AND COILS NOW MODE 6 SHOES CYL 6. OIL HAS VERY STRONG FUEL SMELL. CUSTOMERS EXTREMELY CONSERNED WITH ENGINE LONGJEVITY AND WANTS TO KNOW ETA OF FIX FOR SURGE.

RECOMM 12/20/2011 12:57PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE SCOTT, RECOMMEND TO MONITOR TURBO_WGATE, TP1/2, LOAD, AND TURBO_BPASS/2 WHILE TRYING TO DUPLICATE THE CONCERN. IF THE WASTEGATE

> FLUCTUATES AT THE TIME OF THE CONCERN CONSISTENT WITH THE BYPASS VALVES CHANGING FROM ON TO OFF, ENGINEERING IS CURRENTLY INVESTIGATING

THE CONCERN. RECOMMEND TO MONITOR OASIS FOR UPDATES.

REPAIR 12/20/2011 01:23PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE WE HAVE ALREADY DUPLICATED THAT CONCERN. WE ARE CURENTLY WORKING ON THE FUEL IN THE OIL CONCERN. CUSTOMER WANTS MORE INFO ON A FIX FOR

THE FUEL IN THE OIL CONCERN. CUSTOMER WANTS MORE INFO ON A FIX FOR THE

SURGE BUT HAS IT IN THE SHOP NOW FOR OIL CONTAMINATION.

RECOMM 12/20/2011 01:23PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE SCOTT, RECOMMEND TO PERFORM A FUEL PRESSURE LEAK DOWN TEST USING A MECHANICAL FUEL PRESSURE GAUGE. IF FUEL PRESSURE DROPS MORE THAN 5PSI

> IN 60 SECONDS OR 18PSI IN 30 MINUTES EXCESSIVE FUEL PRESSURE LEAK DOWN IS PRESENT. REMOVE THE SPARK PLUGS AND INSPECT FOR FUEL PUDDLING IN THE CYLINDER. IF FOUND, REPLACE THE LEAKING INJECTORS. THERE IS CURRENTLY NO NEW INFORMATION AVAILABLE RELATED TO THE SURGE CONCERN. IF FURTHER ASSISTANCE IS NEEDED CONTACT THE TECHNICAL HOTLINE BY PHONE REFERRING TO THE CONTACT ID IN RED AT THE TOP OF THE PAGE.

REPAIR 12/20/2011 02:24PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE THE ENGINES OIL LEVEL INCREASES WHILE DRIVING. THE OIL IS CONTAMINATED WITH FUEL. THE FUEL INJECTORS PASS A FLOW TEST, FUEL PRESSURE BLEED DOWN TEST ALSO PASSES. ENGINE HAS A INTERMITTENT ENGINE MISS, SURGE ON

TIP IN THROTTLE.

- **RECOMM 12/20/2011 02:24PM DALE BARRETT MSS FCSD TECH SVC HOTLINE** SINCE THE FUEL INJECTOR TESTS PASS REPLACE THE FUEL PUMP FOR THE FUEL CONTAMINATED OIL CONCERN. THE ENGINE MISFIRE AND TIP IN SURGE ARE CURRENTLY BEING INVESTIGATED BY ENGINEERING.
- **REPAIR** 01/12/2012 02:20PM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: ENGINE STILL MISSES AND SURGES. DIAGNOSTICS ALREADY COMPLETED: PERFORMED EEC TEST ALL OK NO CODES. CHECK MODE 6 FOUND CYL 1,6 HAVE MISSFIRE COUNTS. TEST DRIVE VERIFIED CYL MISSFIRES. PARTS REPLACED: WE HAVE ALREADY REPLACED CYL 2,4,6 PLUGS AND COILS IN THE PAST. TECH'S QUESTION: IS THERE ANY OTHER

KNOWN CONSERNS OR TESTS TO CHECK? I HAD TALKED TO HOTLINE PREVEOSLY

ABOUT THE MISS AND A SURGE AT 40 MPH IS THERE ANY OTHER INFO TO GIVE THE CUSTOMER ABOUT THE SURGE? ANY HELP WOULD BE GREAT DTC: NONE MODULE: NONE

RECOMM 01/12/2012 02:20PM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE RYAN, IF YOU HAVEN'T ALREADY, RECOMMEND YOU PERFORM A FUEL SYSTEM LEAKDOWN TEST. VERIFY THE LOW PRESSURE SIDE FUEL PRESSURE IS 65PSI. THEN, TURN THE KEY OFF AND MONITOR THE FUEL PRESSURE FOR 30 MINUTES. IF THERE IS MORE THAN 18PSI LOST WITHIN 30 MINUTES, THIS INDICATES A CONCERN. IF FOUND, SUSPECT LEAKING FUEL INJECTORS. REPEAT THE TEST, THEN BORESCOPE THE CYLINDERS TO CHECK FOR SIGNS OF RAW/LIQUID FUEL. IF

FOUND, REPLACE THE FUEL INJECTORS AS NECESSARY AND RETEST. ALSO, IF THE SPARK PLUGS AND IGN COILS ARE SWAPPED WITH KNOWN GOOD CYLINDERS,

AND THE MISFIRES DO NOT FOLLOW EITHER OF THESE COMPONENTS, REPLACE THE

FUEL INJECTORS AS NECESSARY AND RETEST. BE SURE TO FOLLOW THE PROPER WSM PROCEDURE AND USE THE RECOMMENDED TOOLS WHEN REPLACING INJECTORS. ALSO INSPECT GROUND G105 IF YOU HAVE NOT ALREADY. 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. ALSO DETERMINE IF THE CONCERN IS MORE PREVALENT IN WET/HIGH HUMIDITY CONDITIONS. ALSO MONITOR TURBO_WGATE, TP1/2, LOAD AND TURBO_BPASS/2 DURING THE TIME OF THE SURGE CONDITION. IF THE DUTY CYCLE FOR THE TURBO CHARGER WASTE GATE IS FLUCTUATING RAPIDLY IN PERCENTAGE (THUS

BEING PORTRAYED AS SPIKES ON THE IDS GRAPH) AND THE BYPASS VALVES CHANGE STATE FROM "ON" TO "OFF" CONSISTENTLY WITH THE WASTE GATE SPIKES, THIS CONCERN IS CURRENTLY UNDER INVESTIGATION BY ENGINEERING. CONTINUE TO MONITOR OASIS FOR UPDATES AND FIX INFORMATION REGARDING

THIS CONCERN.

AUDIT 01/12/2012 02:20PM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE ODOMETER 5096 M CHANGED TO 6189 M BY DKVENVOL

REPAIR 01/12/2012 02:50PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE HAVE PERFORMED ALL FUEL SYSTEM TESTS AT LAST REPAIR 100 MILES AGO. ALL

TESTED OK. I CHECKED G105 IT WAS TIGHT AND CLEAN. MONITERED PIDS ALSO, THATS WHAT THE TRUCKS DOING, CUSTOMER WAS WANTING ANY NEW INFO

ON AN ETA OF A FIX FOR SURGE. SWAPED PLUGS AND COILS MISS FOLLOWS WILL

BE REPLACING PLUGS AND COILS

- **RECOMM 01/12/2012 02:50PM TONY ROMANO MSS FCSD TECH SVC HOTLINE** RYAN, THERE IS NO NEW INFORMATION TO PROVIDE ON THE SURGE/SHUDDER FEELING TO INFORM YOU OF. THERE IS NO INDICATION IF A HARDWARE CHANGE OR CALIBRATION CHANGE WILL BE MADE.
- REPAIR 02/21/2012 11:56AM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: SURGE AT CRUSE OR SLIGHT TIP IN AT CRUSING SPEEDS. DIAGNOSTICS ALREADY COMPLETED: REPLACED MULTIPLE COILS AND PLUGR FOR MISSFIRES. PERFORMED REFLASH FOR TSB 12/2/10 PARTS REPLACED: MULTIPLE PLUGS AND COILS TECH'S QUESTION: WE HAVE PERFORMED TSB 12/2/10, READ OVER SSM 22225, 4327. SURGE HAS NOT CHANGED WITH REFLASH FROM TSB, CUSTOMER VERY UPSET OVER THE WAIT FOR

TSB TO FIX HIS SURGE AND RUNNING ROUGH ONLY TO HAVE IT SURGE WHEN HE LEFT THE DEALERSHIP AND EVERY DAY AFTER SAINCE REFLASH. CUSTOMER HAS

HAD MANY PROBLEMS WITH DRIVEABILITY. IS THERE ANY ANSWERS I GAN GIVE THE CUSTOMER BESIDES WAIT AND SEE?

RECOMM 02/21/2012 11:56AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE RYAN, IT IS RECOMMENDED TO REPLACE THE WASTEGATE REGULATING SOLENOID

(LOCATED NEAR THE INTAKE MANIFOLD) AND RETEST. ALSO BE SURE TO THOROUGHLY BLOW OUT ALL OF THE VACUUM LINES TO VERIFY THERE IS NO MOISTURE, WATER, OR OBSTRUCTIONS PRESENT. IF THE CONCERN IS STILL PRESENT AFTER REPLACING THE WATEGATE SOLENOID AND BLOWING OUT ALL LINES/HOSES, PLEASE CONTACT THE TECHNICAL SERVICE HOTLINE BY PHONE. REFERENCE THE 9 DIGIT CONTACT ID IN RED WHEN CALLING.

ESCLHD 02/21/2012 11:56AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE CONSULTED JORDAN DODDS ON THIS CONTACT. IT IS RECOMMENDED TO ESCALATE

THIS CONTACT FOR FURTHER REVIEW UPON THE NEXT UPDATE.

REPAIR 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE RYAN STATED THAT THIS VEHICLE STILL HAS THE SURGE CONCERN AFTER PERFORMING THE TSB 12-2-10, WASTE-GATE SOLENOID HAS BEEN REPLACED TWICE. WASTE-GATE LINES WERE CLEANED AND THE CAC TUBES NEAR THE TURBOCHARGERS ARE MOISTURE FREE. HIGH SIDE PUMP AND VARIOUS COILS AND PLUGS HAVE BEEN REPLACED, WITH MODE 6 SHOWING NO MISFIRE COUNTS.

RECOMM 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE RYAN , 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 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE NOTE TO EH: THIS CONCERN HAS BEEN ESCALATED DUE TO THE NUMBER OF CONTACTS, AND THE LATEST REPAIR ATTEMPT, PERFORMING TSB 12-02-10 MADE NO DIFFERENCE TO THIS CONCERN. WASTE-GATE SOLENOID HAS BEEN REPLACED

> TWICE, LINES FOR THE WASTEGATE HAVE BEEN CLEANED. NO CAC MOISTURE NOTED NEAR THE TURBOCHARGERS, HIGH SIDE FUEL PUMP WAS PREVIOUSLY REPLACED AS WERE VARIOUS COILS AND PLUGS. LOW SIDE FUEL PRESSURE WAS ADEQUATE, WITH GOOD FUEL QUALITY BEING PRESENT. LASTLY NOTING MODE 6

SHOWS NO MISFIRE COUNTS AT THIS TIME, AND G105 HAS BEEN VALIDATED TO BE DEFECT FREE.

- AUDIT 02/24/2012 10:10AM LAWRENCE STANLEY MSS FCSD TECH SVC HOTLINE ODOMETER 6189 M CHANGED TO 7880 M BY LSTANL22
- ADD-ON 02/24/2012 10:11AM LAWRENCE STANLEY MSS FCSD TECH SVC HOTLINE CONSULTANT: CASEY WAGONER
- **REPAIR** 02/24/2012 12:44PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE THE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEEN PLACED TO THE DEALER TO DISCUSS THIS CONCERN IN GREATER DETAIL. RYAN HAS STATED THAT THE VEHICLE SEEMS TO DRIVE SMOOTHER AND FUEL ECONOMY

HAS IMPROVED SLIGHTLY. HOWEVER THE WASTE GATE IS STILL SPIKING AS IT HAD DONE BEFORE THE REFLASH.

RECOMM02/24/2012 12:44PM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINERYAN, WE'VE REFERRED THIS CONCERN TO THE FIELD SERVICE ENGINEER (FSE)IN YOUR MARKET AREA. THE FSE SHOULD CONTACT YOU OR DEALERSHIPMANAGEMENT (SERVICE MANAGER OR SERVICE DIRECTOR) WITHIN ONE (1)BUSINESS DAY. IF THE FSE DOES NOT CONTACT YOU DIRECTLY, PLEASECONSULTWITH DEALERSHIP MANAGEMENT TO DISCUSS FURTHER RECOMMENDATIONSANDSTEPS TO ASSIST IN THE RESOLUTION OF THIS VEHICLE CONCERN.

TAR02/24/2012 12:44PM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINEA TAR HAS BEEN OPENED AT THE REQUEST OF THE HOTLINE DUE TO THE LACK
OF

DIRECTION WITH THIS CONCERN. THIS VEHICLE EXHIBITS A SURGE CONCERN WHILE UNDER CRUISE/LIGHT TIP IN. THE PCM HAS BEEN REPROGRAMMED PER TSB

12-2-10. THE CONDITION HAS BEEN IMPROVED SLIGHTLY. HOWEVER, THE VEHICLE STILL EXHIBITS A SURGE CONCERN AS IT DID BEFORE THE REFLASH. THE TECHNICIAN HAS INSPECT THE CAC SYSTEM FOR EVIDENCE OF WATER CONTAMINATION AND NONE WAS PRESENT. THE WASTE GATE SOLENOID WAS SWAPPED FROM A LIKE UNIT AND THE CONDITION PERSISTED. THE HIGH PRESSURE FUEL PUMP HAS BEEN REPLACED WITH NO CHANGE. ADDITIONALLY, THE

TECHNICIAN PREVIOUSLY THOUGHT THAT A MISFIRE CONCERN WAS PRESENT AND

HAS SWAPPED SEVERAL COILS/PLUGS. HOWEVER, IT IS SLIGHTLY UNCLEAR AT THIS TIME WHICH COMPONENTS HAVE BEEN REPLACED. PLEASE ASSIST THE DEALER WITH THIS CONCERN. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 3 ESTIMATED DAYS OUT OF SERVICE: 15

ADD-ON 02/27/2012 01:39PM MICHAEL COISMAN(FSE) MSS - FCSD - REG - CHICAGO SPOKE TO TECHNICIAN WHO STATES THE FUEL IN THE OIL CONCERN HAS BEEN REPAIRED WITH THE HPP REPLACEMENT. TECH STATES THE MISSFIRE ISSUE HAS ALSO BEEN REPAIRED. THE ONLY REMAINING CONCERN IS THE SURGE ON TIP IN ACCEL DURING CRUISE. TECH STATES THE ONLY OBVIOUS PID DATA INDICATED THE WASTEGATE SOLENOIDS CYCLING IN RHYTHM WITH THE SURGE. TECH STATES

THE WASTEGATE SOLENOID WAS REPLACED AT 1000 MILES AND THEY REPLACED IT

AGAIN SHORTLY AFTER THE TSB REPROGRAM WITH NO CHANGE IN THE SURGE CONDITION.

From:	Coisman, Michael (M.J.)
Sent:	Tuesday, February 28, 2012 3:00 PM
То:	Oyafuso, Kevin (K.G.); Osepchook, William (W.R.)
Cc:	Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.);
	Dixon, Mark (M.R.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject:	RE: Report Summary for the CQIS Report#BKWD3006

Will do. Thanks for the information.

Mike Coisman Field Service Engineer, TO2 Ford Motor Company Chicago G1 <u>mcoisman@ford.com</u> P: 630-532-9554 F: 866-638-1196

"When everything seems to be going against you, remember that the airplane takes off against the wind, not with it" -- Henry Ford

From: Oyafuso, Kevin (K.G.)
Sent: Tuesday, February 28, 2012 1:58 PM
To: Coisman, Michael (M.J.); Osepchook, William (W.R.)
Cc: Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject: RE: Report Summary for the CQIS Report#BKWD3006

Mike,

This doesn't sound like the CAC condensation misfire - this looks like the surge at moderate to light loads. Please confirm PCM software ID by running mode 9 and log this data to the session, use the IDS data transfer icon and send session to the hotline server (call me if you need assistance).

Might help if you got an IDS datalogger recording use this list of pids: APP (PER), BARO (PRESS), CHT (TEMP), CYL_(1-6)_ACCL,DTCCNT, EQ_RAT11 (RATIO), EQ_RAT21 (RATIO), ETC_ACT, EVAPCP, FLI, FRP (PRESS), FRP_DSD, FTP_H20, GEAR, IAT2 (TEMP), KNOCK_1, KNOCK_2, KNOCK_SPRK, LOAD (PER), LONGFT1, LONGFT2, MAP (PRESS), NUM_MISFIRE, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, SPARKADV, SYNC, TQ_CNTRL,TIP_PRS-Boost, TR, TURBO_BPASS, TURBO_BPASS_2, TURBO_WGATE, VCT_INT_DIF2, VPWR, VSS, TCC.

If the vehicle has the latest calibration and still has surge concern then try disconnecting (electrically) the bypass valves and repeat drive cycle that induced surge. Many of the vehicles have the surge eliminated by doing this which may indicate there is some interaction with bypass valves/wastegate control that is not fully understood yet.

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 From: Coisman, Michael (M.J.)
Sent: Tuesday, February 28, 2012 2:05 PM
To: Osepchook, William (W.R.)
Cc: Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.);
Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject: RE: Report Summary for the CQIS Report#BKWD3006

Thanks for all the quick feedback. To answer some of the questions posed:

The customer is actually the parts manager at the dealership, although I've been told he has a short temper and no patience. His initial issue was an over boost condition around 1,000 miles in which they replaced the waste gate solenoid to repair that concern. The rising oil level was repaired with the HPP replacement. They don't really experience the misfires anymore, only the surge.

His average drive is about 15 miles one way to work. 10 miles worth of hills and curves and another 5 miles of rolling hills but straight roads with almost no stop and go traffic. The surge will start to occur about 4-5 miles into his trip at steady state cruise, top gear, around 40-60 mph light tip in. He says that any time he goes to WOT, it takes off like a rocket. He has never experienced the complete loss of power, check engine light flashing condition. External weather conditions seem to have no effect on the concern. The tech states the waste gate command is the only thing he sees that coincides with the surge.

I had the technician remove the CAC and tubes. He said he found light fuel/oil residue up near the throttle body but the CAC tubes and outlet port of the CAC are bone dry. I will likely be inspecting this tomorrow if you have any specific information or diagnostics you would like me to perform. Thanks for the help.

Mike Coisman Field Service Engineer, TO2 Ford Motor Company Chicago G1 <u>mcoisman@ford.com</u> P: 630-532-9554 F: 866-638-1196

"When everything seems to be going against you, remember that the airplane takes off against the wind, not with it" -- Henry Ford

From: Osepchook, William (W.R.)
Sent: Tuesday, February 28, 2012 8:33 AM
To: Coisman, Michael (M.J.)
Cc: Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.); McDonagh, Scot (S.M.); Dixon, Mark (M.R.);
Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Subject: RE: Report Summary for the CQIS Report#BKWD3006

Good Morning Michael,

Reading through the claims, it appears that the vehicle could be experiencing the condensation in the Charge Air Cooler. (CAC)

Claims say misses under load, shakes, and runs rough under load. The diagnosis shows miss fires. Does it happen after a long cruise? Does wet cool weather play a factor.

The GCQIS reports shows that no condensate was present at the turbo charger. The condensate happens in the CAC, after the turbos. I would check for moisture at the CAC outlet to the engine.

If evidence of condensate is present assume condensate in the CAC is the cause. Reference SSM 22225. The team is currently working on a fix.

Please give me a call if you have any questions.

William Ösepchook

GEE

Global Engine Engineering V-Engine Service Engineer 313-805-9191 wosepcho@ford.com

From: McDonagh, Scot (S.M.)
Sent: Tuesday, February 28, 2012 7:32 AM
To: Osepchook, William (W.R.); Dixon, Mark (M.R.); Oyafuso, Kevin (K.G.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Cc: Coisman, Michael (M.J.); Devries, Jason (J.E.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.)
Subject: RE: Report Summary for the CQIS Report#BKWD3006

Bill- Root cause investigation in progress

PT Team- Should enclosed dealer remove intake manifold and inspect the intake valves ?

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

From: Osepchook, William (W.R.) Sent: Tuesday, February 28, 2012 7:08 AM To: McDonagh, Scot (S.M.) Cc: Coisman, Michael (M.J.); Devries, Jason (J.E.) Subject: RE: Report Summary for the CQIS Report#BKWD3006

Scot,

See below. Any thoughts.

From: MCOISMAN@ford.com [mailto:MCOISMAN@ford.com] Sent: Monday, February 27, 2012 6:11 PM To: Devries, Jason (J.E.); Osepchook, William (W.R.) Subject: Report Summary for the CQIS Report#BKWD3006

Hi Guys, I'm going to be taking a look at this vehicle in the next day or two and was wondering if either of you has some suggestions on diagnostics or specifically what to look for. Tip in surge at cruising speeds that matches wastegate solednoid activation. Recal helped a little and solenoid was replaced twice with no change. Thanks for any input. Don't want to go into this one blind.

Attachments : 0

Report# :	BKWD3006 NHL			Received:	11/23/2011
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2011,F150 4X4 ,1FTFW1ETXE	,F150 ,SUP CRW,STYSD 3K		Build Date:	07/28/2011
Odometer :	7,880 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	3.73 LOCK	A/C:	YES
Dealer:	USA 06370 Gla	acier Valley Ford, Inc.		Phone#:	(608) 356- 2222
City:	Baraboo	State:	Wisconsin	Country :	USA
Originator:	SCOTT BRENS	SON			
Symptom:	5 58 2 39 DRV	PERF,ENGINE SURGE,A	CCEL,INTERMI	ITENT	
Status:					
VFG:	V52 DRIVEAB	BILITY			
Additional Symptom:	SURGE ON ACCEL				
Fix:	Causal Compo	nent :			
Condition Code:					
Hotliner: RSTE	ZV138	Phone: 313 248-8207	Regn	Cd: G1 Chica	go

Engineering:	Phone:	TAR: 0-30
Dlr Contact: SCOTT BRENSON	Phone: 608 356-222	2 Title Cde: SM

DTCs:

KOEO: KOEC:

KOER:

:

Comments

REPAIR 11/23/2011 05:48PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:WHEN WARM AT 45 MPH AND LIGHT ACCELERATION

SURGES MOANS VERY LOUD. FUEL MILEAGE 12 MPG AND WHEN INCREASING SPEED

TURBO STARTS MAKING LOUD WHOOSING NOISES AND STARTS SURGING. DIAGNOSTICS: EEC TESTS AND TEST DROVE ALL PASS AND CUSTOMER CAN MAKE TRUCK DO IT ALL THE TIME WITH TECHNICIAN PARTS REPLACED:NONE TECH QUESTION:WE HAVE SEEN OTHER COMPLAINTS ON MESSAGE BOARDS ABOUT THE ECO BOOST WITH SAME CONCERNS, BUT NO HELP.

LOOKING FOR A DIRECTION TO GO

RECOMM 11/23/2011 05:48PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE SCOTT, IF YOU HAVEN'T ALREADY, SMOKE TEST THE CAC SYSTEM AND INSPECT FOR ANY LEAKS. IT MAY BE NECESSARY TO PRESSURIZE THE CAC SYSTEM WITH 15LBS OF PRESSURE WHILE SMOKE TESTING. SPRAY ANY SUSPECTED AREAS WITH

SOAPY WATER TO VERIFY ANY LEAKS. IF FOUND, REPAIR AS NECESSARY. USE THE IDS TO MONITOR TIP_PRES_BOOST, TP, WASTEGATE DUTY CYCLE DURING THE

CONCERN. IF THE PIDS BECOME ERRATIC WHEN THE CONCERN IS PRESENT, DISCONNECT THE TURBO BYPASS VALVES AND RETEST. ENGINEERING IS CURRENTLY INVESTIGATING THIS CONCERN.

- **REPAIR**12/16/2011 08:55AM PHIL JACOBS MSS FCSD TECH SVC HOTLINEWILL CHECK SPARK PLUGS. HAS THERE BEEN ANY FIXES FOR THE SURGE
- RECOMM 12/16/2011 08:55AM PHIL JACOBS MSS FCSD TECH SVC HOTLINE SCOTT, RECOMMEND TO PERFORM AN IDS HIGH PRESSURE FUEL SYSTEM TEST AS

WELL, WHICH INCLUDES AN INJECTOR FLOW TEST. IF NOT ALREADY DONE, CHANGE THE OIL AND FILTER TO REMOVE THE FUEL DILUTED FUEL. THE SURGE CONCERN AT 45 MPH IS A KNOWN CONCERN THAT ENGINEERING IS CURRENTLY INVESTIGATING. IF NO PROBLEM IS FOUND, NO FURTHER ACTION SHOULD BE TAKEN AT THIS TIME. PLEASE MONITOR OASIS FOR UPDATES.

REPAIR 12/16/2011 09:18AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE WEB - R-HAGER6 - 12/16/2011 8:18:26 AM CHECKED CAC FOR LEAKS ALL OK. MONITOR PIDS FOUND TURBOBPASS,TURBO WGATE, ECTACT,ECTDSD,TIP PRES BOOST ALL SURGE. ALSO CUSTUMER WAS COMPLAINING OF OIL OVER FULL AND SMELLS LIKE GAS. FOUND OIL LEVEL HALF WAY UP BENDS IN DIPSTICK AND HAS STRONG FUEL SMELL. PERFORMED FUEL SYSTEM TEST HIGH AND LOW BOTH PASS.

ANY HELP WOULD BE GREAT

RECOMM 12/16/2011 09:18AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE WEB - LSTANL22 - 12/16/2011 8:29:47 AM SCOTT, RECOMMEND VERIFYING THAT A MECHANICAL FUEL GAUGE WAS USED ON THE LOW SIDE, WITH THE FUEL PRESSURE BEING 62-73 PSI. ALSO TESTING FOR EXCESSIVE ETHANOL IN THE FUEL. 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.

REPAIR 12/20/2011 12:57PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE WE REMOVED ALL 6 SPARK PLUGS ALL APEAR TO BE BLACK AROUND THE SIDE AND

EXTERMELY WHITE PORCLAIN WITH GRAYISH BLACK ELECTRODE. DID PERFORM

HIGH PRESSURE FUEL TEST ALL PASS. CUSTOMER COMPLAINED ABOUT MISSFIRE AGAIN, WE REPLACED CYL 2,&4 PLUGS AND COILS NOW MODE 6 SHOES CYL 6. OIL HAS VERY STRONG FUEL SMELL. CUSTOMERS EXTREMELY CONSERNED WITH

ENGINE LONGJEVITY AND WANTS TO KNOW ETA OF FIX FOR SURGE.

RECOMM 12/20/2011 12:57PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE SCOTT, RECOMMEND TO MONITOR TURBO_WGATE, TP1/2, LOAD, AND TURBO_BPASS/2 WHILE TRYING TO DUPLICATE THE CONCERN. IF THE WASTEGATE

FLUCTUATES AT THE TIME OF THE CONCERN CONSISTENT WITH THE BYPASS VALVES CHANGING FROM ON TO OFF, ENGINEERING IS CURRENTLY INVESTIGATING

THE CONCERN. RECOMMEND TO MONITOR OASIS FOR UPDATES.

REPAIR 12/20/2011 01:23PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE WE HAVE ALREADY DUPLICATED THAT CONCERN. WE ARE CURENTLY WORKING ON

THE FUEL IN THE OIL CONCERN. CUSTOMER WANTS MORE INFO ON A FIX FOR THE

SURGE BUT HAS IT IN THE SHOP NOW FOR OIL CONTAMINATION.

RECOMM 12/20/2011 01:23PM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE SCOTT, RECOMMEND TO PERFORM A FUEL PRESSURE LEAK DOWN TEST USING A MECHANICAL FUEL PRESSURE GAUGE. IF FUEL PRESSURE DROPS MORE THAN 5PSI

IN 60 SECONDS OR 18PSI IN 30 MINUTES EXCESSIVE FUEL PRESSURE LEAK DOWN IS PRESENT. REMOVE THE SPARK PLUGS AND INSPECT FOR FUEL PUDDLING IN THE CYLINDER. IF FOUND, REPLACE THE LEAKING INJECTORS. THERE IS CURRENTLY NO NEW INFORMATION AVAILABLE RELATED TO THE SURGE CONCERN. IF FURTHER ASSISTANCE IS NEEDED CONTACT THE TECHNICAL HOTLINE BY PHONE REFERRING TO THE CONTACT ID IN RED AT THE TOP OF THE PAGE.

REPAIR12/20/2011 02:24PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE
THE ENGINES OIL LEVEL INCREASES WHILE DRIVING. THE OIL IS
CONTAMINATED
WITH FUEL. THE FUEL INJECTORS PASS A FLOW TEST, FUEL PRESSURE BLEED
DOWN TEST ALSO PASSES. ENGINE HAS A INTERMITTENT ENGINE MISS, SURGE
ON

TIP IN THROTTLE.

- **RECOMM 12/20/2011 02:24PM DALE BARRETT MSS FCSD TECH SVC HOTLINE** SINCE THE FUEL INJECTOR TESTS PASS REPLACE THE FUEL PUMP FOR THE FUEL CONTAMINATED OIL CONCERN. THE ENGINE MISFIRE AND TIP IN SURGE ARE CURRENTLY BEING INVESTIGATED BY ENGINEERING.
- REPAIR 01/12/2012 02:20PM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: ENGINE STILL MISSES AND SURGES. DIAGNOSTICS ALREADY COMPLETED: PERFORMED EEC TEST ALL OK NO CODES. CHECK MODE 6 FOUND CYL 1,6 HAVE MISSFIRE COUNTS. TEST DRIVE VERIFIED CYL MISSFIRES. PARTS REPLACED: WE HAVE ALREADY REPLACED CYL 2,4,6 PLUGS AND COILS IN THE PAST. TECH'S QUESTION: IS THERE ANY OTHER KNOWN CONSERNS OR TESTS TO CHECK? I HAD TALKED TO HOTLINE PREVEOSLY

ABOUT THE MISS AND A SURGE AT 40 MPH IS THERE ANY OTHER INFO TO GIVE THE CUSTOMER ABOUT THE SURGE? ANY HELP WOULD BE GREAT DTC: NONE MODULE: NONE

RECOMM 01/12/2012 02:20PM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE RYAN, IF YOU HAVEN'T ALREADY, RECOMMEND YOU PERFORM A FUEL SYSTEM LEAKDOWN TEST. VERIFY THE LOW PRESSURE SIDE FUEL PRESSURE IS 65PSI. THEN, TURN THE KEY OFF AND MONITOR THE FUEL PRESSURE FOR 30 MINUTES. IF THERE IS MORE THAN 18PSI LOST WITHIN 30 MINUTES, THIS INDICATES A CONCERN. IF FOUND, SUSPECT LEAKING FUEL INJECTORS. REPEAT THE TEST, THEN BORESCOPE THE CYLINDERS TO CHECK FOR SIGNS OF RAW/LIQUID FUEL. IF

> FOUND, REPLACE THE FUEL INJECTORS AS NECESSARY AND RETEST. ALSO, IF THE SPARK PLUGS AND IGN COILS ARE SWAPPED WITH KNOWN GOOD CYLINDERS,

AND THE MISFIRES DO NOT FOLLOW EITHER OF THESE COMPONENTS, REPLACE THE

FUEL INJECTORS AS NECESSARY AND RETEST. BE SURE TO FOLLOW THE PROPER WSM PROCEDURE AND USE THE RECOMMENDED TOOLS WHEN REPLACING INJECTORS. ALSO INSPECT GROUND G105 IF YOU HAVE NOT ALREADY. 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. ALSO DETERMINE IF THE CONCERN IS MORE PREVALENT IN WET/HIGH HUMIDITY CONDITIONS. ALSO MONITOR TURBO_WGATE, TP1/2, LOAD AND TURBO_BPASS/2 DURING THE TIME OF THE SURGE CONDITION. IF THE DUTY CYCLE FOR THE TURBO CHARGER WASTE GATE IS FLUCTUATING RAPIDLY IN PERCENTAGE (THUS

BEING PORTRAYED AS SPIKES ON THE IDS GRAPH) AND THE BYPASS VALVES CHANGE STATE FROM "ON" TO "OFF" CONSISTENTLY WITH THE WASTE GATE SPIKES, THIS CONCERN IS CURRENTLY UNDER INVESTIGATION BY ENGINEERING. CONTINUE TO MONITOR OASIS FOR UPDATES AND FIX INFORMATION REGARDING

THIS CONCERN.

AUDIT 01/12/2012 02:20PM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE ODOMETER 5096 M CHANGED TO 6189 M BY DKVENVOL

REPAIR 01/12/2012 02:50PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE HAVE PERFORMED ALL FUEL SYSTEM TESTS AT LAST REPAIR 100 MILES AGO. ALL

> TESTED OK. I CHECKED G105 IT WAS TIGHT AND CLEAN. MONITERED PIDS ALSO, THATS WHAT THE TRUCKS DOING, CUSTOMER WAS WANTING ANY NEW INFO

ON AN ETA OF A FIX FOR SURGE. SWAPED PLUGS AND COILS MISS FOLLOWS WILL

BE REPLACING PLUGS AND COILS

RECOMM 01/12/2012 02:50PM TONY ROMANO MSS - FCSD - TECH SVC HOTLINE

RYAN, THERE IS NO NEW INFORMATION TO PROVIDE ON THE SURGE/SHUDDER FEELING TO INFORM YOU OF. THERE IS NO INDICATION IF A HARDWARE CHANGE OR CALIBRATION CHANGE WILL BE MADE.

REPAIR 02/21/2012 11:56AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE DESCRIPTION OF VEHICLE CONCERN: SURGE AT CRUSE OR SLIGHT TIP IN AT CRUSING SPEEDS. DIAGNOSTICS ALREADY COMPLETED: REPLACED MULTIPLE COILS AND PLUGR FOR MISSFIRES. PERFORMED REFLASH FOR TSB 12/2/10 PARTS REPLACED: MULTIPLE PLUGS AND COILS TECH'S QUESTION: WE HAVE PERFORMED TSB 12/2/10, READ OVER SSM 22225, 4327. SURGE HAS NOT CHANGED WITH REFLASH FROM TSB, CUSTOMER VERY UPSET OVER THE WAIT FOR

TSB TO FIX HIS SURGE AND RUNNING ROUGH ONLY TO HAVE IT SURGE WHEN HE LEFT THE DEALERSHIP AND EVERY DAY AFTER SAINCE REFLASH. CUSTOMER HAS HAD MANY PROBLEMS WITH DRIVEABILITY. IS THERE ANY ANSWERS I GAN GIVE THE CUSTOMER BESIDES WAIT AND SEE?

RECOMM 02/21/2012 11:56AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE RYAN, IT IS RECOMMENDED TO REPLACE THE WASTEGATE REGULATING SOLENOID

> (LOCATED NEAR THE INTAKE MANIFOLD) AND RETEST. ALSO BE SURE TO THOROUGHLY BLOW OUT ALL OF THE VACUUM LINES TO VERIFY THERE IS NO MOISTURE, WATER, OR OBSTRUCTIONS PRESENT. IF THE CONCERN IS STILL PRESENT AFTER REPLACING THE WATEGATE SOLENOID AND BLOWING OUT ALL LINES/HOSES, PLEASE CONTACT THE TECHNICAL SERVICE HOTLINE BY PHONE. REFERENCE THE 9 DIGIT CONTACT ID IN RED WHEN CALLING.

ESCLHD 02/21/2012 11:56AM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE CONSULTED JORDAN DODDS ON THIS CONTACT. IT IS RECOMMENDED TO ESCALATE

THIS CONTACT FOR FURTHER REVIEW UPON THE NEXT UPDATE.

REPAIR 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE RYAN STATED THAT THIS VEHICLE STILL HAS THE SURGE CONCERN AFTER PERFORMING THE TSB 12-2-10, WASTE-GATE SOLENOID HAS BEEN REPLACED TWICE. WASTE-GATE LINES WERE CLEANED AND THE CAC TUBES NEAR THE TURBOCHARGERS ARE MOISTURE FREE. HIGH SIDE PUMP AND VARIOUS COILS AND

PLUGS HAVE BEEN REPLACED, WITH MODE 6 SHOWING NO MISFIRE COUNTS.

RECOMM 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE RYAN , 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 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE NOTE TO EH: THIS CONCERN HAS BEEN ESCALATED DUE TO THE NUMBER OF CONTACTS, AND THE LATEST REPAIR ATTEMPT, PERFORMING TSB 12-02-10 MADE NO DIFFERENCE TO THIS CONCERN. WASTE-GATE SOLENOID HAS BEEN REPLACED

TWICE, LINES FOR THE WASTEGATE HAVE BEEN CLEANED. NO CAC MOISTURE NOTED NEAR THE TURBOCHARGERS, HIGH SIDE FUEL PUMP WAS PREVIOUSLY REPLACED AS WERE VARIOUS COILS AND PLUGS. LOW SIDE FUEL PRESSURE WAS ADEQUATE, WITH GOOD FUEL QUALITY BEING PRESENT. LASTLY NOTING MODE 6

SHOWS NO MISFIRE COUNTS AT THIS TIME, AND G105 HAS BEEN VALIDATED TO BE DEFECT FREE.

AUDIT 02/24/2012 10:10AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE ODOMETER 6189 M CHANGED TO 7880 M BY LSTANL22

- ADD-ON 02/24/2012 10:11AM LAWRENCE STANLEY MSS FCSD TECH SVC HOTLINE CONSULTANT: CASEY WAGONER
- **REPAIR** 02/24/2012 12:44PM JORDAN DODDS MSS FCSD TECH SVC HOTLINE THE ESCALATION TEAM HAS REVIEWED THIS REPORT AND AN OBC HAS BEEN PLACED TO THE DEALER TO DISCUSS THIS CONCERN IN GREATER DETAIL. RYAN HAS STATED THAT THE VEHICLE SEEMS TO DRIVE SMOOTHER AND FUEL ECONOMY

HAS IMPROVED SLIGHTLY. HOWEVER THE WASTE GATE IS STILL SPIKING AS IT HAD DONE BEFORE THE REFLASH.

RECOMM 02/24/2012 12:44PM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE RYAN, 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.

TAR02/24/2012 12:44PM JORDAN DODDS MSS - FCSD - TECH SVC HOTLINE

A TAR HAS BEEN OPENED AT THE REQUEST OF THE HOTLINE DUE TO THE LACK OF

DIRECTION WITH THIS CONCERN. THIS VEHICLE EXHIBITS A SURGE CONCERN WHILE UNDER CRUISE/LIGHT TIP IN. THE PCM HAS BEEN REPROGRAMMED PER TSB

12-2-10. THE CONDITION HAS BEEN IMPROVED SLIGHTLY. HOWEVER, THE VEHICLE STILL EXHIBITS A SURGE CONCERN AS IT DID BEFORE THE REFLASH. THE TECHNICIAN HAS INSPECT THE CAC SYSTEM FOR EVIDENCE OF WATER CONTAMINATION AND NONE WAS PRESENT. THE WASTE GATE SOLENOID WAS SWAPPED FROM A LIKE UNIT AND THE CONDITION PERSISTED. THE HIGH PRESSURE FUEL PUMP HAS BEEN REPLACED WITH NO CHANGE. ADDITIONALLY, THE

TECHNICIAN PREVIOUSLY THOUGHT THAT A MISFIRE CONCERN WAS PRESENT AND

HAS SWAPPED SEVERAL COILS/PLUGS. HOWEVER, IT IS SLIGHTLY UNCLEAR AT THIS TIME WHICH COMPONENTS HAVE BEEN REPLACED. PLEASE ASSIST THE DEALER WITH THIS CONCERN. ESTIMATED NUMBER OF REPAIR ATTEMPTS: 3 ESTIMATED DAYS OUT OF SERVICE: 15

ADD-ON 02/27/2012 01:39PM MICHAEL COISMAN(FSE) MSS - FCSD - REG - CHICAGO SPOKE TO TECHNICIAN WHO STATES THE FUEL IN THE OIL CONCERN HAS BEEN REPAIRED WITH THE HPP REPLACEMENT. TECH STATES THE MISSFIRE ISSUE HAS ALSO BEEN REPAIRED. THE ONLY REMAINING CONCERN IS THE SURGE ON TIP IN ACCEL DURING CRUISE. TECH STATES THE ONLY OBVIOUS PID DATA INDICATED THE WASTEGATE SOLENOIDS CYCLING IN RHYTHM WITH THE SURGE. TECH STATES

THE WASTEGATE SOLENOID WAS REPLACED AT 1000 MILES AND THEY REPLACED IT

AGAIN SHORTLY AFTER THE TSB REPROGRAM WITH NO CHANGE IN THE SURGE CONDITION.

From:	Osepchook, William (W.R.)
Sent:	Tuesday, January 17, 2012 10:59 AM
To:	Dodds, Jordan (J.); Oyafuso, Kevin (K.G.); Cockerill, Al (C.A.)
Cc:	McCoy, Jim (D.); Dixon, Mark (M.R.); Wagers, Sue (S.K.)
Subject:	RE: Report Summary for the CQIS Report#CAPAN003

Probably the right repair direction. Thinking possible porosity in the cylinder head.....what else could it be...

From: Dodds, Jordan (J.) Sent: Tuesday, January 17, 2012 9:48 AM To: Oyafuso, Kevin (K.G.); Osepchook, William (W.R.); Cockerill, AI (C.A.) Cc: McCoy, Jim (D.); Dixon, Mark (M.R.); Wagers, Sue (S.K.) Subject: RE: Report Summary for the CQIS Report#CAPAN003

Per the Tech's comments, he left a sheet of paper on top of the valve cover to see if coolant was leaking in that way. However, the paper was dry and coolant was in the well. I feel that cylinder head replacement would be necessary at this time.

Jordan Dodds Service Engineer - Gas Engine 3.0/3.5/3.7/GTDI Subject Matter Expert Escalated Handling Diagnostic Service Center 1 1700 Fairlane Drive Allen Park, MI 48101 313-248-8183 Cube # 338

From: Oyafuso, Kevin (K.G.) Sent: Tuesday, January 17, 2012 9:41 AM To: Osepchook, William (W.R.); Cockerill, AI (C.A.) Cc: McCoy, Jim (D.); Dixon, Mark (M.R.); Dodds, Jordan (J.); Wagers, Sue (S.K.) Subject: FW: Report Summary for the CQIS Report#CAPAN003

Jordan,

Not aware of any concerns with coolant getting into the spark plug wells, although we are seeing a few vehicles coming in with a P0316 dtc.

Al/Bill, Any comments on this type of coolant leak?

From: Dodds, Jordan (J.) Sent: Tuesday, January 17, 2012 9:33 AM To: Oyafuso, Kevin (K.G.) Cc: Nowaczyk, Rick (R.J.) Subject: Report Summary for the CQIS Report#CAPAN003

Kevin,

Are you aware of any issues in regards to coolant in the plug wells on the F150 GTDI? I have seen a couple of these recently. The Tech states that he pressurized the cooling system over night and coolant was present in the well.

Thanks for the help.

Jordan Dodds Service Engineer - Gas Engine 3.0/3.5/3.7/GTDI Subject Matter Expert Escalated Handling Diagnostic Service Center 1 1700 Fairlane Drive Allen Park, MI 48101 313-248-8183 Cube # 338

From: JDODDS6@ford.com [mailto:JDODDS6@ford.com] Sent: Tuesday, January 17, 2012 9:31 AM To: Dodds, Jordan (J.) Subject: Report Summary for the CQIS Report#CAPAN003

Attachments : 0

Report# :	CAPAN003	NHL			Received:	01/16/2012
CCRG/EPRC:		Reviewed Stat	us:		Date:	
Vehicle:	2011,F150 4 ,1FTFW1E7	X4 ,F150 ,SUP CR T3BF	W,STYSD		Build Date:	06/03/2011
Odometer :	5,538 M	Engine:		3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:		3800F3.55L	A/C:	YES
Dealer:	USA 02968	Tyler Ford, LTD			Phone#:	(903) 597- 9331
City:	Tyler	State:		Texas	Country :	USA
Originator:	RICHARD '	TRAYWICK				
Symptom:	2 27 Q 68 A	ID/INFO,WNG INI	D/MESS/C,E	NGINE IMAGI	E,STAYS ON	
Status:						
VFG:	V29 CHECI	K ENGINE LIGHT				
Additional Symptom:	P0316 COO	P0316 COOLANT IN PLUG WELL				
Fix:	Causal Con	nponent :				
Condition Code:						
Hotliner: RSTE	EV138	Phone: 313	248-8207	Re	gn Cd: C1 Dal	las
Engineering:			Phone:		TAR:	
Dlr Contact: R	ICHARD TRA	AYWICK	Phone	: 903 597-933	1 Tit l	e Cde: T

DTCs: KOEO:P0316 KOEC:

KOER:

Comments

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REPAIR 01/16/2012 10:28AM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:COOLANT ON TOP OF NO 3 SPARK PLUG DIAGNOSTICS: EEC TEST PRESSURE TESTING COOLANT SYSTEM PARTS REPLACED:NONE TECH QUESTION:I HAVE PRESSURE TESTOR ON ENGINE NOW SHOWS NO LEAKS AM GOING TO LET SET AND COOL OFF WITH PRESSURE ON SYSTEM. WHERE COULD COOLANT POSSIBLY BE COMING FROM TO GET ON SPARK

PLUG. BEEN LOOKING AT HEATER HOSES BUT ENGINE HAS COVER OVER COILS. COOLANT STANDING COMPLETELY OVER SPARK PLUG

RECOMM 01/16/2012 10:28AM RICHARD STEVENSON MSS - FCSD - TECH SVC HOTLINE RICHARD, AT THIS TIME THERE ARE NO PREVIOUS REPORTS RELATED TO THIS CONCERN. RECOMMEND TO CONTINUE WITH PRESSURE TESTING THE COOLING SYSTEM WHILE PERFORMING A THERMAL CYCLE TO HELP PINPOINT WHERE THE COOLANT IS COMING FROM. ONCE ROOT CAUSE HAS BEEN DETERMINED REPAIR AS

NECESSARY AND RE-EVALUATE.

REPAIR 01/17/2012 09:26AM RUSSELL CUSHION MSS - FCSD - TECH SVC HOTLINE HAVE PRESSURE TESTED ENGINE OVERNIGHT SMALL AMOUNT OF COOLANT IN SPARK

PLUG HOLE PUT A SHEET OF PAPER OVER PLUG HOLE NO COOLANT ON PAPER FROM

LOOKING DOWN PLUG HOLE LOOKS LIKE A BAD SPOT IN THE TUBE IN SPARK PLUG

HOLE. DO WE GET A HEAD FOR THIS TRUCK

RECOMM 01/17/2012 09:26AM RUSSELL CUSHION MSS - FCSD - TECH SVC HOTLINE RICHARD, 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.

From:	Nowaczyk, Rick (R.J.)
Sent:	Monday, October 22, 2012 9:52 AM
То:	Cockerill, Al (C.A.); Osepchook, William (W.R.); Sheffer, Kirk (K.W.)
Subject:	RE: Report Summary for the CQIS Report#CJQBE007

Ok, I updated the report below.

From: Cockerill, Al (C.A.) Sent: Monday, October 22, 2012 9:29 AM To: Nowaczyk, Rick (R.J.); Osepchook, William (W.R.); Sheffer, Kirk (K.W.) Subject: FW: Report Summary for the CQIS Report#CJQBE007

Rick, per our conversation, see report entry 10-17-12. I have been working with Bill and Kirk with this customer. History,

After getting the service part number from Bill, Kirk communicated the information to the service manager, who intern ordered the part, (BL3Z-6K775-B). They were told that they would receive the part this week. We want to cover the reporting aspect of this. Please let me know what you need me to do.

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: Monday, October 22, 2012 9:20 AM To: Cockerill, Al (C.A.) Subject: Report Summary for the CQIS Report#CJQBE007

Attachments : 0

Report# :	CJQBE007 NHL			Received:	10/17/2012
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2012,F150 4X4 ,F150 ,1FTFW1ET2CF	,SUP CRW,STYSD		Build Date:	04/10/2012
Odometer :	21,689 M	Engine:	3.5L-GTDI	Calibration:	CF613C0N
Transmission:	6R80E	Axle:		A/C:	YES
Dealer:	USA 04372 Fowlervil	le Ford		Phone#:	(517) 223- 7777
City:	Fowlerville	State:	Michigan	Country :	USA
Originator:	BRIAN KORPI				
Symptom:	2 27 Q 68 AID/INFO,	WNG IND/MESS/C,ENGINE	E IMAGE,STA	YS ON	

1

Engineering	•	Phone:	TAR:
Hotliner: SN	MASSE16	Phone: 313 317-4491	Regn Cd: G2 Detroit
Condition Code:			
Fix:	Causal Compo	nent :	
Additional Symptom:	HESITATION	ON ACCEL/RUNS ROUGH	
VFG:	V29 CHECK E	NGINE LIGHT	
Status:			

Dlr Contact: BRIAN KORPI

Phone: 000 000-0000

Title Cde: SM

DTCs:

KOEO:

KOEC:

KOER:

Comments

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REPAIR 10/17/2012 11:07AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CUST STATES AT TIMES VEHICLE WILL RUN POORLY,

> LOSE POWER, CK ENGINE LIGHT COMES ON, ALL THE CHARACTERISTICS OF TSB 12-6-04. WE HAVE ALREADY PERFORMED THE TSB, REPLACED CAT AND SHIELD AND REFLASH PER TSB. DIAGNOSTICS: CAME BACK IN TODAY AN PULLED CODES PO430 AGAIN, RUNNING GOOD NOW AND CAN NOT RE-DUPLICATE NOW PARTS REPLACED:LAST VISIT LEFT CAT, SHIELD AND REFLASH PER TSB TECH QUESTION:ANY KNOWN CONCERNS AFTER TSB PERFORMED--ISSUE RE-OCCURING ??

RECOMM 10/17/2012 11:07AM STEPHEN MASSEY MSS - FCSD - TECH SVC HOTLINE BRIAN, PLEASE NOTE THAT IF THE P0430 DTC HAS SET, THE BANK 2 CATALYST WILL REQUIRE REPLACEMENT. PLEASE REPLACE THE FAILED CATALYST AND CONTINUE WITH DIAGNOSIS. PLEASE MONITOR MODE 6 AND POWER BALANCE DATA TO DETERMINE IF A MISFIRE IS OCCURRING OR HAS OCCURRED, CAUSING THIS CONCERN. ALSO, RECOMMEND TO MONITOR AND RECORD ALL ENGINE RELATED PIDS DURING THE CONCERN. COMPARE YOUR RESULTS TO SECTION 6 OF THE PC/ED. THIS WILL HELP DETERMINE WHICH COMPONENT OR SYSTEM MAY BE CAUSING THIS CONCERN. 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 AND RE-EVALUATE THE

CONCERN. IF THE MISFIRE FOLLOWS THE COMPONENT SWAP, REPLACE THE FAULTY

IGNITION COMPONENTS AND RE-EVALUATE THE CONCERN. IF THE MISFIRE DOES NOT FOLLOW THE COMPONENT SWAP, RECOMMEND TO PERFORM A HIGH AND

LOW PRESSURE FUEL SYSTEM TEST ON THE IDS. IF THE TESTS PASS, RECOMMEND

TO PERFORM A MANUAL COMPRESSION TEST ON ALL CYLINDERS. IF COMPRESSION

IS LOW ON ANY CYLINDER, PERFORM A CYLINDER LEAKAGE TEST TO DETERMINE

WHERE THE LOSS OF COMPRESSION IS OCCURRING. IF MISFIRES ARE NOTED, AND NO OTHER CONCERNS ARE FOUND, PLEASE INSPECT THE CAC, CAC TUBING, AND THROTTLE PLATE FOR SIGNS OF WATER/WATER SPOTS (SOME MINOR CONDENSATION IS NORMAL). IF EXCESSIVE SIGNS OF WATER/WATER SPOTS ARE FOUND, PLEASE NOTE THAT THIS CONCERN IS CAUSED BY CONDENSATION BUILDING IN THE CAC. 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. ENGINEERING IS CURRENTLY VALIDATING FIX INFORMATION FOR THIS CONCERN. A RELEASE DATE FOR FIX INFORMATION HAS NOT YET BEEN DETERMINED. From: Sent: To: Cc: Subject: Bishop, Chris (C.B.) Wednesday, May 02, 2012 12:42 PM Huang, Larry (L,.); Godlewski, Tony (T.E.) White, Douglas (D.B.); Andersen, Erik (E.) RE: Sat F150 I-94 drive update.

Larry, we don't have the parts. You'll have to order them via GPIRS, or drive to Chicago and bring some back.

Chris Bishop Senior Engineer Ford Air Induction Systems Product Development cbishop2@ford.com 313 248 8624

From:Huang, Larry (L,.)Sent:Wednesday, May 02, 2012 12:25 PMTo:Godlewski, Tony (T.E.)Cc:White, Douglas (D.B.); Bishop, Chris (C.B.); Andersen, Erik (E.)Subject:RE: Sat F150 I-94 drive update.

We need these **rfr** for the urgent misfire issue. I will appreciate it if you can support the parts in any way (any available production or prototype parts.). We are running the test in flow lab next Monday. 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: Godlewski, Tony (T.E.)
Sent: Wednesday, May 02, 2012 12:07 PM
To: Huang, Larry (L,.)
Cc: White, Douglas (D.B.); Bishop, Chris (C.B.)
Subject: RE: Sat F150 I-94 drive update.

Larry,

Sorry. I just checked my cabinet of parts, no luck finding anything worthy for your study.

Attached is a list of the parts you could order:

BA53-6C646-AA DCT ASY-ENG CHG AIR COOL (HOT-RH ENG END) AA53-6C646-CB DCT ASY-ENG CHG AIR COOL (HOT-RH CAC END) BA53-6C646-BA DCT ASY-ENG CHG AIR COOL (HOT-LH) AA53-6F073-CB TUB ASY-ENG AIR COOL OUTLET (COLD)

Regards,

Tony Godlewski Ford Motor Company AIS D&R Engineer D3/D4/U502/U38X Bldg, #2 Cube 23M20 Cell 313 805-8301 Tgodlews@ford.com

 From:
 Bishop, Chris (C.B.)

 Sent:
 Tuesday, May 01, 2012 12:58 PM

 To:
 Godlewski, Tony (T.E.)

 Cc:
 White, Douglas (D.B.)

 Subject:
 FW: Sat F150 I-94 drive update.

Tony G - can I get a set of current model 3.5L GDTI hot and cold high pressure ducts?

They'll be used to support a P415 3.5L GTDI CAC issue (cobbled into the truck).

Chris Bishop Senior Engineer Ford Air Induction Systems Product Development <u>cbishop2@ford.com</u> 313 248 8624

From:	Huang, Larry (L,.)
Sent:	Tuesday, May 01, 2012 12:55 PM
To:	Bishop, Chris (C.B.); Palm, Jim (J.R.)
Cc:	Yamada, Shuya Shark (S.Y.)
Subject:	RE: Sat F150 I-94 drive update.

Chris,

We need to run Shark's test (water condensate blowing out from CAC) in flow lab with D3 full face CAC and routing. Would you please help to get rfr high-pressure hose (hot and cold)?

Jim,

We need your help in modifying the inlet tank with Y ports on Irfr with the clear outlet tank. Do you want me to drop the CAC to you in DTF this afternoon, or just leave it on your desk?

Thank you all.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Yamada, Shuya Shark (S.Y.)

Sent: Tuesday, May 01, 2012 9:04 AM To: Huang, Larry (L,.) Subject: RE: Sat F150 I-94 drive update.

Please talk to Jim Palm how he got the Dyno access. I had mine since day 1. Ladd has the Clear end tank for the rfr

I can drive us to the Dyno and back together.

Please come to my desk in Building 1 at 10am. Please bring the rfr

Shark.

From: Huang, Larry (L,.) Sent: Tuesday, May 01, 2012 8:36 AM To: Yamada, Shuya Shark (S.Y.) Subject: RE: Sat F150 I-94 drive update.

Who is the contact in Dyno for the test setup? Who has **rfr** with clear end tank)? I planning to stop by Dyno, but haven't got access to the building yet. Can we meet in Dyno at 10:00am to understand the tests you have done? I am going to do the test in the way you did, to make the test results to be consistent. Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>Ihuang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Yamada, Shuya Shark (S.Y.) Sent: Tuesday, May 01, 2012 8:09 AM To: Huang, Larry (L,.) Cc: Andersen, Erik (E.) Subject: RE: Sat F150 I-94 drive update.

<< File: IMG_1336.JPG >> << File: IMG_1334.JPG >> << File: IMG_1335.JPG >>

Larry,

Please convert the flow bench stand and plumbing to fit your Irfr as shown in these photo. The flow bench is in the basement of the Dyno A-wing.

Shark.

From: Huang, Larry (L,.) Sent: Monday, April 30, 2012 12:49 PM To: Yamada, Shuya Shark (S.Y.) Cc: Andersen, Erik (E.); Lizotte, Brian (B.W.) Subject: RE: Sat F150 I-94 drive update.

Shark,

I will meet you to go through the test plan, as well as any other things needed for this project. Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Monday, April 30, 2012 12:27 PM To: Huang, Larry (L..) Subject: FW: Sat F150 I-94 drive update.

Can you contact Shark to see what would be required?

Erik Andersen eanderse@ford.com 313-805-2966

From:Madej, Jeanette (J.)Sent:Monday, April 30, 2012 12:23 PMTo:Ladd, John (J.R.); Andersen, Erik (E.)Cc:Allan, Valerie (V.J.); Huang, Larry (L,.); Palm, Jim (J.R.)Subject:RE: Sat F150 I-94 drive update.

Makes sense

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

From:Ladd, John (J.R.)Sent:Monday, April 30, 2012 12:21 PMTo:Andersen, Erik (E.)Cc:Allan, Valerie (V.J.); Huang, Larry (L,.); Madej, Jeanette (J.); Palm, Jim (J.R.)Subject:RE: Sat F150 I-94 drive update.

Would Larry be available to help Shark?

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Yamada, Shuya Shark (S.Y.) Sent: Monday, April 30, 2012 11:56 AM To: Ladd, John (J.R.) Cc: Lizotte, Brian (B.W.) Subject: RE: Sat F150 I-94 drive update.

John, (Brian's my boss)

You do a good job dangling a carrot for me.

This flow bench test takes a solid 4 hours with me working like a NASCAR pit crew. I will be in the F150 tonight until midnight again. I have my engine customers knocking on my door since January because of my CAC support.

Who owns the Flex CAC? Isn't it logical that the component owner should learn a little about his part?

Here's a proposal.

If I run it one more time later this week, I want one CAC engineer to be with me to learn my procedure for future testing and knowledge transfer.

Also, I will have to make new adjustable cables to hold that rfr together because F150 cables are too short.

Shark.

From: Ladd, John (J.R.)
Sent: Monday, April 30, 2012 11:42 AM
To: Yamada, Shuya Shark (S.Y.)
Cc: Tyler, Jim (J.S.); Norman, Kristofor (K.R.); Lizotte, Brian (B.W.); Palm, Jim (J.R.); Kramer, Michael (M.T.)
Subject: RE: Sat F150 I-94 drive update.

Manpower is the issue.

Jim is in the tunnel tomorrow and won't be able to do any flow stand work until Wednesday. I was hoping that you could complete the same analysis that you provided before on the P415 system. You would also be best suited to qualitatively see the water flow from the outlet tank. Is there something that would prevent you from running the analysis? You are the best for these flow studies...

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241 From: Yamada, Shuya Shark (S.Y.)
Sent: Monday, April 30, 2012 11:35 AM
To: Ladd, John (J.R.); Norman, Kristofor (K.R.); Lizotte, Brian (B.W.); Palm, Jim (J.R.); Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Subject: RE: Sat F150 I-94 drive update.

John,

I will share and mentor my procedure how to run this test. Can you supply an engineer to run this test with the rfr

Thanks.

Shark.

From: Ladd, John (J.R.)
Sent: Monday, April 30, 2012 11:29 AM
To: Yamada, Shuya Shark (S.Y.); Norman, Kristofor (K.R.); Lizotte, Brian (B.W.); Palm, Jim (J.R.); Kramer, Michael (M.T.); Tyler, Jim (J.S.); McCoy, Jim (D.); Cockerill, Al (C.A.); Mazuchowski, James (J.A.)
Subject: RE: Sat F150 I-94 drive update.

We have a **rfr** that we would like evaluated in the flow lab to see if it moves water differently than the P415. Can you perform a similar analysis like you did last week where we capture water weight with different air flow rates? Flex does not misfire during the proposed CETP procedure.

CAC with clear end tank at Jim Palm's desk...

Regards, John Ladd Supervisor - Cooling Development Engineering Ph: (313) 62-16626 Cell: (313) 805-4627 Fax: (313) 317-9241

From: Yamada, Shuya Shark (S.Y.)
Sent: Monday, April 30, 2012 11:06 AM
To: Norman, Kristofor (K.R.); Lizotte, Brian (B.W.); Palm, Jim (J.R.); Ladd, John (J.R.); Kramer, Michael (M.T.); Tyler, Jim (J.S.); McCoy, Jim (D.); Cockerill, Al (C.A.); Mazuchowski, James (J.A.)
Subject: Sat F150 I-94 drive update.

Mr. McCoy gave me a verbal update. "No Misfire" on the F150 Maine buy back vehicle with 5000lb trailer from Saturday 6am to 2pm test drive.

It should have hit the rain on I-94 but I have to verify. Kris saw rain in Kalamazoo Sat AM.

I installed a kitchen sink on this vehicle.

-8cell 30mm shortened Flex CAC -Shark Sonic Agitator water ingestion delay device in the end tank -6 tube RAM air blocker equivalent which blocks 9 of 29 tubes on this CAC.

I'll be in the 3pm drive tonight if we get rain. I will remove the 6 tube blocker plate later. Call me if you want to ride with me.

Shark.

From: Sent: To: Subject: Andersen, Erik (E.) Tuesday, March 12, 2013 9:13 AM Ronzi, Bill (W.C.) RE: SSM

done

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

From: Ronzi, Bill (W.C.) Sent: Tuesday, March 12, 2013 9:11 AM To: Andersen, Erik (E.) Subject: RE: SSM

Thanks... We'll have the Roush meeting asap. Can you forward Friday meeting notice to me?

From: Andersen, Erik (E.) Sent: Tuesday, March 12, 2013 9:08 AM To: Ronzi, Bill (W.C.) Subject: RE: SSM

It is P415 CAC specific. Meeting notice came out yesterday. Sparks is on the agenda for presenting warranty for it.

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

From: Ronzi, Bill (W.C.) Sent: Tuesday, March 12, 2013 9:07 AM To: Andersen, Erik (E.) Subject: RE: SSM

Is the Bakaj review specific to CAC misfire? P415 only or all programs?

From: Andersen, Erik (E.) Sent: Tuesday, March 12, 2013 9:03 AM To: Ronzi, Bill (W.C.) Subject: RE: SSM

Okay. Let's try to do it before the Bakaj review on Friday.

Erik Andersen

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

From: Ronzi, Bill (W.C.) Sent: Tuesday, March 12, 2013 9:00 AM To: Andersen, Erik (E.) Subject: RE: SSM

Not scheduled yet. We're trying to find the most appropriate Roush team to help. We'll be sure to include you and Scott.

From: Andersen, Erik (E.) Sent: Monday, March 11, 2013 8:56 PM To: Ronzi, Bill (W.C.) Subject: RE: SSM

When is the meeting with Roush?

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

From: Ronzi, Bill (W.C.) Sent: Monday, March 11, 2013 7:41 PM To: Andersen, Erik (E.); Russo, Scott (S.) Subject: RE: SSM

Erik/Scott, Perhaps we can use a subset of the same document when we meet with Roush to scope the CAC shutter service kit project.

From: Sparks, Douglas (D.S.) Sent: Monday, March 11, 2013 12:29 PM To: Andersen, Erik (E.); Russo, Scott (S.) Cc: Ronzi, Bill (W.C.) Subject: FW: SSM

Erik/Scot,

Please put together a small package on the grill shutters. We need to share with FCSD and show the test data; and the 100% fix.

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: Monday, March 11, 2013 12:25 PM To: Sparks, Douglas (D.S.) Subject: RE: SSM

I'm back.... Does someone have a paper we could take a look at please? I don't want to wait until the 26th meeting with Fasceti.

From: Sparks, Douglas (D.S.) Sent: Wednesday, March 06, 2013 7:59 PM To: Ricks, Kevin (K.J.) Subject: Re: SSM

A stand alone controller will power the shutters closed until the inlet temp requires them to open. Thank you, Douglas Sparks PT Quality and PVT Manager FNA PT Integration and Program Management (PTIM) <u>dsparks3@ford.com</u>, 313 805 6096

From: Ricks, Kevin (K.J.) Sent: Wednesday, March 06, 2013 04:27 PM To: Sparks, Douglas (D.S.) Subject: RE: SSM

Thanks Doug, You know we are aligned on the stand alone system. I know you are getting tired of us questioning the engineering judgment. Help me understand (and be able to explain to John) how we can predict the high humidity misfire event and close the shutters to prevent the initial misfires that would put the customer in FMEM.

Also, I am out the next two days on vacation, back Monday. Don't wait for me though, if you have something, send it along, I will access periodically.

From: Sparks, Douglas (D.S.) Sent: Wednesday, March 06, 2013 3:44 PM To: Ricks, Kevin (K.J.); Ronzi, Bill (W.C.) Cc: McDonagh, Scot (S.M.); Dobbs, Dan (K.D.) Subject: RE: SSM

Kevin,

Ok. The system works, it was tested in the wind tunnel, and there is data to support. The active grill shutters shut off air follow to the CAC and prevent condensation by controlling the air temp in the CAC. So this concept prevents the issue and is not reactive as you mention below. The issue we have in PD timing for service. A production solution with PCM control is not a service solution, timing an prove out are timed with forward model programs and are too complicated for P415. I'm pushing for a standalone service fix (cac shutters). I'm meeting with Julie McCoy tomorrow morning to obtain alignment on my proposal. Upon approval of this proposal I'll want to meet with you and issue the SSM immediately.

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: Ricks, Kevin (K.J.) Sent: Wednesday, March 06, 2013 9:25 AM To: Sparks, Douglas (D.S.) Cc: McDonagh, Scot (S.M.); Dobbs, Dan (K.D.) Subject: SSM

Doug, spoke to Norton on the SSM. We would like to have a review of the proposed system and your test results before we go out with a SSM that says we are still working on it. Won't this proposal engage after an event? If the proposal does not prevent it from happening to begin with, we need to talk. Can we get a review set up ASAP?

In the meantime, we are publishing the SSM as an ISM for Hotline only right now.

Kevin Ricks

Manager - Truck Service Engineering

FCSD - Service Engineering Operations

KRICKS@Ford.com

313-323-6574

From: Sent: To: Cc: Ricks, Kevin (K.J.) Thursday, May 24, 2012 12:23 PM Kramer, Michael (M.T.) Dobbs, Dan (K.D.); Mazuchowski, James (J.A.); Madej, Jeanette (J.); Rodgers, Thomas (T.A.); Weber, Erik (E.M.) RE: The Blocker Plate

Thanks.

Subject:

-----Original Message-----From: Kramer, Michael (M.T.) Sent: Thursday, May 24, 2012 3:15 PM To: Ricks, Kevin (K.J.) Cc: Dobbs, Dan (K.D.); Mazuchowski, James (J.A.); Madej, Jeanette (J.); Rodgers, Thomas (T.A.); Weber, Erik (E.M.); Kramer, Michael (M.T.) Subject: RE: The Blocker Plate

Our TSE team validated that the new air blocker shield did not have a negative impact on performance.

The challenge with any passive CAC is to have enough thermal efficiency to provide needed charge air cooling under worst case extreme conditions without being too efficient at lower load conditions to avoid generating the condensation. We are not the only OEM experiencing this concern (we know GM and VW have had similar concerns in the field).

Very high level. Considering the external airflow is not uniform over the entire face of the CAC (less airflow thus less cooling cooling occurs at the top portion of the CAC - package related), a little charge air cooling margin under high ambient high load conditions was traded off to improve the condensation 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: <u>mkramer1@ford.com</u> -----Original Message-----From: Ricks, Kevin (K.J.) Sent: Thursday, May 24, 2012 11:27 AM To: Madej, Jeanette (J.) Cc: Dobbs, Dan (K.D.); Kramer, Michael (M.T.); Mazuchowski, James (J.A.) Subject: FW: The Blocker Plate

Hi Jeanette, Seeing this executed on a vehicle, I think we should be prepared to respond to customer questions about impact of the blocker plate on vehicle cooling. Can you provide some words of wisdom we can use to assure customers that we have done our due diligence and the guy pushing his truck in high load / ambient / altitude and grade operating modes will not experience any performance or durability issues. This issue is already on blogs so I want to be consistent and careful. Thanks.

----Original Message----From: Dobbs, Dan (K.D.) Sent: Thursday, May 24, 2012 11:17 AM To: Ricks, Kevin (K.J.); Nowaczyk, Rick (R.J.)

Subject: The Blocker Plate

Regards K.D. Dan Dobbs FCSD Service Engineering Operations F-150 PVT Program Manager Certified 6-Sigma Master Black Belt Level II Phone:313-845-6078 kdobbs@ford.com

One cartload of the enemy's provisions is equivalent to twenty of one's own.

Sun Tzu

From: Sent: To: Subject: Andersen, Erik (E.) Tuesday, February 19, 2013 9:02 AM Huang, Larry (L,.); Sowards, John (J.) RE: thoughts on test plan for Friday

Instead of the 2.3psi truck I'm thinking we just use the second P415 to do all the testing and use the shop air and eCBV to get us what we need.

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

From: Huang, Larry (L,.) Sent: Tuesday, February 19, 2013 12:00 PM To: Andersen, Erik (E.); Sowards, John (J.) Subject: RE: thoughts on test plan for Friday

If #2 is a "pass", we may want to add 0.8 load

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313-805-2617 E-mail: <u>Ihuang3@ford.com</u> Building #2-3M29, Mail Drop; 1215

From: Andersen, Erik (E.) Sent: Tuesday, February 19, 2013 9:13 AM To: Sowards, John (J.); Huang, Larry (L,.) Subject: thoughts on test plan for Friday

Here's what I'm thinking:

- 1. P415 w/ 2.3psi wastegates and eCBV open at 1.0 load
- 2. P415 w/ 2.3psi wastegates and eCBV open and no internal blockers at 0.6 load.
- 3. Second P415 with CAC shutters from Kramer shutters open
- 4. Second P415 with CAC shutters from Kramer shutters closed.

That's all I can think of unless we can get one of the other vehicles. The mustang or a competitor vehicle.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966 From: Sent: To: Subject: Kramer, Michael (NI.T.) Thursday, June 28, 2012 5:38 AM Madej, Jeanette (J.); Sparks, Douglas (D.S.); Hammoud, Mazen (M.); Lewis, Jeffrey (J.E.) RE: Timing for F150 Misfire fix

Yes, based on the information we have today 9/17/12 target implementation is ok for the 11 cell louverless 27 mm plate CAC. We will push to beat this date.

WERS release completed yesterday. We are pushing to get the tool order out by COB 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

From: Madej, Jeanette (J.)
Sent: Thursday, June 28, 2012 2:26 AM
To: Sparks, Douglas (D.S.); Hammoud, Mazen (M.); Lewis, Jeffrey (J.E.)
Cc: Kramer, Michael (M.T.)
Subject: Re: Timing for F150 Misfire fix

We need to say est date. We are trying to push thru the system. Any help from you or kim will be good. We reviewed yesterday the bigger worry is fuel economy and perf. Jeff will know after shut down. Put 9-17 as an est. Ok mike?

From: Sparks, Douglas (D.S.) Sent: Wednesday, June 27, 2012 03:52 PM To: Madej, Jeanette (J.); Hammoud, Mazen (M.) Subject: Timing for F150 Misfire fix

Jeanette/Mazen,

Do we have a detailed timing plan for the misfire fix? At yesterday's PDQR Kim asked that we review the timing plan details (tool kick-off, DV/PV, calibration, plant trial, and plant implementation) at the next PDQR (7/10/12). Kim is also looking for an plant incorporation date for the draft QPM paper filing this Friday. Do you want to use 9/3 or 9/10?

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: Sent:	Kramer, Michael (M.T.) Tuesday, April 09, 2013 12:32 PM
То:	Ronzi, Bill (W.C.); Russo, Scott (S.)
Cc:	Sparks, Douglas (D.S.); Andersen, Erik (E.)
Subject:	RE: Topic for 4/9/13 Widmann Review

A-B 7 tube with 8 fin lower blocker is a significant robustness improvement to existing PCA CAC. MCT being run today.

Still need to confirm potential interactions with proposed 2014 MY lower bumper opening grill insert.

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: Ronzi, Bill (W.C.) Sent: Monday, April 08, 2013 3:55 PM To: Kramer, Michael (M.T.); Russo, Scott (S.) Cc: Sparks, Douglas (D.S.); Andersen, Erik (E.) Subject: RE: Topic for 4/9/13 Widmann Review

Did the lower blocker re-test pass for misfire counts? The prior confirmation test was a fail w/ very high number of misfires; suspected to be a vehicle issue.

From: Kramer, Michael (M.T.) Sent: Monday, April 08, 2013 2:56 PM To: Russo, Scott (S.) Cc: Sparks, Douglas (D.S.); Ronzi, Bill (W.C.); Andersen, Erik (E.) Subject: RE: Topic for 4/9/13 Widmann Review

Erik and I discussed today. Key next step is need TSE to assess MCT. There are some cross-functional wind tunnel priority concerns to contend with. I have a meeting with Frantzeskakis on this overall P415 topic at 3:00 pm this afternoon.

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: Ronzi, Bill (W.C.) Sent: Monday, April 08, 2013 2:51 PM To: Andersen, Erik (E.) Cc: Kramer, Michael (M.T.); Russo, Scott (S.); Sparks, Douglas (D.S.) Subject: RE: Topic for 4/9/13 Widmann Review

Erik, Can you give Doug and I an update?

Thx Bill From: Russo, Scott (S.)
Sent: Monday, April 08, 2013 2:49 PM
To: Monte, Veronica (V.)
Cc: Widmann, Carl (C.A.); Andersen, Erik (E.); Ronzi, Bill (W.C.); Rodgers, Thomas (T.A.); Kramer, Michael (M.T.)
Subject: Topic for 4/9/13 Widmann Review

Veronica-

Can you add 15min topic to Carl's Meeting tomorrow? Topic is "P415 7-Tube CAC Blocker Performance Results". I'd like to discuss current status and next steps. Thanks.

Scott Russo

Ford Motor Company PT Cooling Applications Manager srusso2@ford.com Phone: 313-805-3059 Page: <u>3138053059@vtext.com</u> From: Sent: To: Cc: Subject: Ridolfi, Dominic (D.R.) Tuesday, November 20, 2012 12:58 PM Osepchook, William (W.R.); Nowaczyk, Rick (R.J.) Schiltges, Dave (D.); Selthofer, Adam (A.) RE: TSB 12-10-19 F150 GTDI - CAC Backorder

Looks like it.

Rec Loc	Loc Description	Avail	In Transit to Asn	Back Order	Last Recv Dte	SDI	Res Ind
AF1KA	FORD MEMPHIS HIGH VOLUME CENTER	0	0	100	10-25-2012	1	
AF1NA	FORD HOUSTON PDC HIGH VELOCITY CENT	0	0	139	11-08-2012	1	
AF1PA	FORD FORT WORTH PDC HIGH VELOCITY C	0	0	70	11-06-2012	1	
AF1SA	FORD PORTLAND HIGH VELOCITY CENTER	0	0	29	11-07-2012	1	
AF1TA	FORD SACRAMENTO HIGH VELOCITY CENTE	0	0	41	10-30-2012	1	
AF1UA	FORD HARTFORD PDC HIGH VELOCITY CEN	0	0	32	11-01-2012	1	
AF1VA	FORD MERRIFIELD HIGH VELOCITY CENTE	0	0	71	11-01-2012	1	
AF1WA	FORD RAMSEY HIGH VELOCITY CENTER	0	0	18	11-01-2012	1	
AF1XA	FORD TWIN CITIES PDC HIGH VELOCITY	0	0	75	11-12-2012	1	
AF1YA	FORD EVANSVILLE HIGH VELOCITY CENTE	0	0	26	11-02-2012	1	
AF1ZA	FORD CHICAGO HIGH VELOCITY CENTER	0	0	26	11-01-2012	1	
AF2AA	FORD DENVER HIGH VELOCITY CENTER	0	0	23	11-05-2012	1	
AF2BA	FORD KANSAS CITY HIGH VELOCITY CENT	0	0	35	11-06-2012	1	
AF2CA	FORD LAKELAND HIGH VELOCITY CENTER	0	0	31	11-07-2012	1	
AF2DA	FORD GREENSBORO HIGH VELOCITY CENTE	0	0	43	11-02-2012	1	
AF2EA	FORD ATLANTA HIGH VELOCITY CENTER	0	0	44	11-07-2012	1	
AF2FA	FORD DETROIT HIGH VELOCITY CENTER	0	0	167	11-07-2012	1	
AF30A	PARTS REDISTRIBUTION CENTER	0	0	0	10-31-2012	1	
CA02C	BRAMALEA PARTS DISTRIBUTION CENTER	2	0	606	11-15-2012	1	
CA02G	EDMONTON PARTS DISTRIBUTION CENTER	0	0	0		1	
H751B	HLM TEXAS OPERATIONS	0	650	0	11-16-2012	1	

From: Osepchook, William (W.R.)
Sent: Tuesday, November 20, 2012 12:56 PM
To: Ridolfi, Dominic (D.R.); Nowaczyk, Rick (R.J.)
Cc: Schiltges, Dave (D.); Selthofer, Adam (A.)
Subject: RE: TSB 12-10-19 F150 GTDI - CAC Backorder

Are these still on back order?

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: Sent: To: Subject: Britton, Eric (E.J.) Monday, May 13, 2013 11:44 AM Ronzi, Bill (W.C.) RE: TSB

Thanks!

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, May 13, 2013 11:44 AM To: Britton, Eric (E.J.) Subject: RE: TSB

Eric, I confirmed that we are now OK on stock. No back-orders remaining.

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, May 13, 2013 10:32 AM To: Britton, Eric (E.J.) Subject: RE: TSB

There had been a significant shortage of latest level charge air coolers (~4000) but I believe that is now resolved (I will confirm).

Bill

-----Original Message-----From: Britton, Eric (E.J.) Sent: Monday, May 13, 2013 10:30 AM To: Ronzi, Bill (W.C.) Subject: RE: TSB

Thanks. Do you know if there is any problem with parts availability.

Eric Britton

Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, May 13, 2013 10:29 AM To: Britton, Eric (E.J.) Subject: RE: TSB

That's the only way I'm aware of.

-----Original Message-----From: Britton, Eric (E.J.) Sent: Monday, May 13, 2013 10:23 AM To: Ronzi, Bill (W.C.) Subject: RE: TSB

Yep. I thought there was an easier way. Should I just do an AWS run?

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268

-----Original Message-----From: Ronzi, Bill (W.C.) Sent: Monday, May 13, 2013 10:21 AM To: Britton, Eric (E.J.) Subject: RE: TSB

Eric, Do you mean the number of repairs charged against each TSB? If so, I'll need to pull some data to get an answer for you.

Thanks Bill Ronzi

From: Britton, Eric (E.J.)

Sent: Monday, May 13, 2013 7:20 AM To: Ronzi, Bill (W.C.) Subject: TSB

Bill, do you know how many of these TSBs have been performed?

TSB 13-3-3 12-11-15 12-10-19 12-6-4

Eric Britton Government Investigations Tel. 313-323-2966 Fax: 313-594-2268 From: Sent: To: Subject: Britton, Eric (E.J.) Thursday, May 09, 2013 11:39 AM Smith, Craig (C.A.) RE: UPDATE 1. Emission Problem Review Committee Fact Sheet Request - 11EPRC20 -2011 F150 3.5L Charge Air Cooler

Thanks Craig!

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 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 ½ 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 Cooler

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 Cooler

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

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yes
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>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

Marie,

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: To: Subject: Tyler, Jim (J.S.) Monday, August 06, 2012 10:37 AM Mapes, Jim (J.E.); Madej, Jeanette (J.); Kramer, Michael (M.T.) RE: UPDATED. P415 CAC Misfire Actions Key Dates One Pager for Jeanette

Slide update attached.

2013 P415 D35 CAC Misfire Acti...

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

From: Tyler, Jim (J.S.)
Sent: Monday, August 06, 2012 9:02 AM
To: Madej, Jeanette (J.); Kramer, Michael (M.T.)
Cc: Mapes, Jim (J.E.)
Subject: RE: UPDATED. P415 CAC Misfire Actions Key Dates One Pager for Jeanette

I will make a slide and send out before 12 today.

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

From: Madej, Jeanette (J.)
Sent: Monday, August 06, 2012 7:34 AM
To: Kramer, Michael (M.T.); Tyler, Jim (J.S.)
Cc: Mapes, Jim (J.E.)
Subject: RE: UPDATED. P415 CAC Misfire Actions Key Dates One Pager for Jeanette

Jim Tyler, can you make up 1 slide and send to Jim Mapes before 12 pm?

Jeanette Madej Global Cooling Systems Manager Phone: 313-805-0189

From: Kramer, Michael (M.T.)
Sent: Sunday, August 05, 2012 8:21 AM
To: Madej, Jeanette (J.); Tyler, Jim (J.S.)
Cc: Kramer, Michael (M.T.)
Subject: RE: UPDATED. P415 CAC Misfire Actions Key Dates One Pager for Jeanette

Jeanette. Added PV complete date below.

Jim. Please confirm PSW date and provide to Jeanette tomorrow. Bennie Fowler PT review is on Tuesday.

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: Friday, August 03, 2012 11:38 AM
To: Tyler, Jim (J.S.)
Cc: Kramer, Michael (M.T.)
Subject: P415 CAC Misfire Actions Key Dates One Pager for Jeanette

Please complete and send directly to Jeanette with cc to me following the 4:00 pm meeting with Valeo today.

- Parts for DEMS fleet. 8/3/12
- DEMS fleet retrofit. Week of 8/6/12
- PV complete. 8/23/12
- Valeo start production. 8/31/12
- CAC PSW.
- Production start at DTP & KCAP. 9/17/12
- 2012 MY service part availability. 10/5/12
- 2013 MY service part availability. 10/5/12
- TSB release. 10/5/12

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 2013 P415 3.5L CAC Misfire Actions Internal 27mm Tube Covers and No Louver Internal Fins Parts released on WPTS E 12559964 001 DL34-9L440-AC (2013 prod) and BL34-9L440-AE (2012 serv)

- Parts for DEMS fleet. 8/3/12
- DEMS fleet retrofit. Week of 8/6/12
- PV complete. 8/23/12
- Valeo start production. 8/31/12
- CAC PSW. 9/17/12
- Production start at DTP & KCAP. 9/17/12
- 2012 MY service part availability. 10/5/12
- 2013 MY service part availability. 10/5/12
- TSB release. 10/5/12

From:Andersen, Erik (E.)Sent:Friday, February 17, 2012 5:54 AMTo:'Satish NADELLA'Subject:RE: Updated: P415 CAC Design Change Options, Timing, and Cost - Webex Added

Satish,

we have a meeting this afternoon to continue our discussion, get status, develop plan, etc. There is a lot of energy around this and we will need Valeo's full support to deliver these updates quickly. I asked Peter to engage your toolshop so that we can go through various options. Would like to have that conversation at this afternoons meeting.

Thanks for your help!

Erik Andersen eanderse@ford.com 313-805-2966

From: Satish NADELLA [mailto:satish.nadella@valeo.com] Sent: Thursday, February 16, 2012 10:38 PM To: Andersen, Erik (E.) Subject: Fwd: Updated: P415 CAC Design Change Options, Timing, and Cost - Webex Added

Hello Erik,

I was in a all day meeting and did not listen to your message until later. I believe Peter followed up on your cost estimate request. Please let me know if you are looking for any additional information.

Regards, Satish Nadella

------ Forwarded message ------From: **Satish NADELLA** <<u>satish.nadella@valeo.com</u>> Date: Thu, Feb 16, 2012 at 2:04 PM Subject: Re: Updated: P415 CAC Design Change Options, Timing, and Cost - Webex Added To: "Huang, Larry (L,.)" <<u>lhuang3@ford.com</u>>

Larry,

I have a conflict - Joe will be attending this meeting.

Regards, Satish On Thu, Feb 16, 2012 at 1:59 PM, Huang, Larry (L,.) <<u>lhuang3@ford.com</u>> wrote: When: Thursday, February 16, 2012 2:00 PM-3:00 PM (GMT-05:00) Eastern Time (US & Canada). Where: Audio Conference, Dial 313-621-3673, Meeting ID: 85694781#

Note: The GMT offset above does not reflect daylight saving time adjustments.

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Webex link and info:

WebEx Meeting ID: 719 285 382 Meeting Password: P1A2U3s9

_____ Online Meeting Summary _____ TOPIC: Ihuang3's meeting Meeting Link: https://ford.webex.com/ford/e.php?AT=MI&EventID=170991737&UID=0&PW=NZWEyOWE0ZmRI&RT=MiMxMQ%3D%3 D WebEx Meeting ID: 719 285 382 Meeting Password: P1A2U3s9 Audio: %TeleconferencingInfo% None _____ **Complete Meeting Details TELECONFERENCE:** %TeleconferencingInfo% **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

WebEx Meeting ID: 719 285 382 Meeting Password: P1A2U3s9

This meeting is currently in progress.

Here's what to do: 1. Click the following link or copy and paste it into your Web browser: D

2. If prompted, enter your name, your email address, and the meeting password, if a password is required. Then click Join.

3. If the meeting includes a teleconference, follow the instructions that automatically appear on your screen.

That's it! You're in the web meeting!

For Help or Support:

Go to https://ford.webex.com/ford/mc click Assistance, then Click Help or click Support.

To contact Larry Huang , email: https://www.uhang.com (https://www.uhang.com

MC02

Joseph, Would you invide Valeo people who may involve in this topic? I will start Webex in the begining of the meeting

Larry, can you please set up a meeting for us to review proposals, timing, etc. with Valeo? We need to progress this quickly and I want to ensure we are aligned going forward.

Erik Andersen eanderse@ford.com 313-805-2966

From: Satish NADELLA [mailto:satish.nadella@valeo.com] Sent: Tuesday, February 14, 2012 7:05 PM To: Andersen, Erik (E.) Cc: Huang, Larry (L,.) Subject: Re: FW: P415 CAC - Review potential options for internal condensation issue - follow up from 2/2 PM meeting Hi Erik,

I have discussed with the team - they want to come up with a workable concept before providing timing and cost estimates. Mainly, the 2 options are to fuse a plate inside (like you have mentioned) or to vibration weld plastic material on the outside. I will discuss with the team tomorrow and keep you posted.

On your question before on who will be handling it here - I am going to have Joe Lumetta be the interface with you (he will work with the team in SLP).

Regards, Satish Nadella

On Mon, Feb 13, 2012 at 1:11 PM, Andersen, Erik (E.) <<u>eanderse@ford.com</u>> wrote:

Satish,

Please advise if you were able to develop the timing / costs we discussed for the perforated baffle / chamber proposal.

We need to get something more accurate to work from than our estimates.

Thanks,

Erik Andersen

eanderse@ford.com

313-805-2966

From: Huang, Larry (L,.) Sent: Wednesday, February 08, 2012 4:30 PM

To: Eduardo BARRIOS; Satish NADELLA

Cc: Tyler, Jim (J.S.); Allan, Valerie (V.J.); Andersen, Erik (E.); Blas-Fernando GUTIERREZ; Guillermo GUADARRAMA; Joseph LUMETTA Subject: RE: P415 CAC - Review potential options for internal condensation issue - follow up from 2/2 PM meeting

The outlet tank proposal, as attached, is one step closer to a real direction now. Would you please provide a ball-park timing estimate for this proposal, by tomorrow, just based on your knowledge on your production. Four big timings first: Design, Prototype Tooling, and Production Tooling, as well as the time needed for Tank PPAP and CAC PPAP.

Satish,

We have discussed this proposal a couple of times with your SLP team, and we appreciate their input. Would you please support this from Valeo Core/Global team, with your global experience/resource? This is our very highly-exposed issues that needs a direction on the resolution very urgently. Would you please make sure we have the feedback by tomorrow? I will schedule a follow-up meeting after we get your feed back tomorrow. Thank you very much.

Regards,

Larry Huang

Global Cooling/Heat Exchangers

Phone/Text Massage: 313-805-2617 E-mail: <u>lhuang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Tyler, Jim (J.S.)

Sent: Thursday, February 02, 2012 2:03 PM

To: Tyler, Jim (J.S.); Huang, Larry (L,.); Allan, Valerie (V.J.); Andersen, Erik (E.); Blas-Fernando GUTIERREZ; Guillermo GUADARRAMA; Eduardo BARRIOS; Satish NADELLA; Joseph LUMETTA

Subject: P415 CAC - Review potential options for internal condensation issue - follow up from 2/2 PM meeting

When: Friday, February 03, 2012 4:00 PM-4:30 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Conf call 313-621-3673 (ID 71351008)

When: Friday, February 03, 2012 4:00 PM-4:30 PM (GMT-05:00) Eastern Time (US & Canada).

Where: Conf call 313-621-3673 (ID 71351008)

Note: The GMT offset above does not reflect daylight saving time adjustments.

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

- Review results of Valeo re-test with 2 minute vertical drain time, weigh each tube separately (5 tubes w/o coating, 5 tubes with coating).

- Valeo team review of design and tooling options based on the perforated outlet tank with baffle concept that successfully prevented engine water ingestion in Ford testing.

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From: Sent: To: Subject: Andersen, Erik (E.) Thursday, April 25, 2013 3:52 PM Huang, Larry (L,.) RE: updates

But isn't it difficult to change the environmental conditions in the cell quickly enough to run the tests? Also, Erik said his vehicle instrumentation was not compatible with wind tunnel 7

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

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 3:51 PM To: Andersen, Erik (E.) Subject: RE: updates

We can collect MCT in either DTF or Wind Tunnel 4/5.

Weber is trying to get a slot to continue his test.

We can use this vehicle (with the CAC) for the misfiring testing in DTF tomorrow.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Thursday, April 25, 2013 3:43 PM To: Huang, Larry (L,.) Subject: RE: updates

Where would we test them? We need to have the MCT info.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966 From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 3:24 PM To: Andersen, Erik (E.) Subject: RE: updates

We should be able to do some of them tomorrow. They are easy to be marked up.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Thursday, April 25, 2013 3:08 PM To: Huang, Larry (L,.) Subject: RE: updates

Do you have time to test some of those variants.

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

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 1:56 PM To: Andersen, Erik (E.) Subject: RE: updates

It's a good idea, with the room of top water and blocking did not show too big impact on it. It may help reduce the hot air flow through AC subcooled area also. We can start with 17, then 14, 11, until cooling is ok.

The next try can be to extend the deflector up to the bottom of the condenser, to totally cut of hot air flow from CAC.

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

Regards,



Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Thursday, April 25, 2013 1:37 PM To: Huang, Larry (L,.) Subject: RE: updates

Yes please.

Also, now I'm thinking it makes sense to block the top 17 tubes and leave the bottom 4 open. Apparently they don't do anything.

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

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 1:25 PM To: Andersen, Erik (E.) Cc: Sowards, John (J.) Subject: RE: updates

Weber said the AC was not cutoff for the baseline, without any ext. blocker.

I couldn't tell the AC cutting off time from the data trace on the screen (the time span in the data trace on the screen was only 5 min, while the test last about 15min). Next time, I will ask him to set it to 20 min. Weber is organizing the data now, and will present it (with the curves) to the team at 4:00pm. Do you want me to schedule the meeting?

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Thursday, April 25, 2013 1:07 PM To: Huang, Larry (L,.) Cc: Sowards, John (J.) Subject: RE: updates

How far into the test is it cutting off? Did the baseline do okay?

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

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 12:47 PM To: Andersen, Erik (E.) Cc: Sowards, John (J.) Subject: RE: updates

"3tube/4fins + 50% 7tube/8fins" had similar results on Top water and AC cut off. To have meeting at 4:00pm.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 12:20 PM To: Andersen, Erik (E.) Cc: Sowards, John (J.) Subject: RE: updates

4tube/5fins has AC cut off (Top water 120C)

To test "3tube/4fins + 50% 7tube/8fins"

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 12:10 PM To: Andersen, Erik (E.) Cc: Sowards, John (J.) Subject: RE: updates

The deflector did not make difference for the cooling

7tube/8fins had top water of 120C (comparing allowed 122 deviation). AC was cut off during the test, which means fail.

Looks like the top water won't be any issue for the "external blocking strategy". But the AC cut off would be. We may need to focus on the length of time period, cut off between the "blocking config" to see the impact. Now, 4tube/5fins is on.

Test has to be ended at 1:00pm, due to the facility issue. We may run one more, 3tube/4fins + 50% 7tube/8fins

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.) Sent: Thursday, April 25, 2013 11:09 AM To: Huang, Larry (L,.) Cc: Sowards, John (J.) Subject: RE: updates

Good catch. Please keep us posted.

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

From: Huang, Larry (L,.) Sent: Thursday, April 25, 2013 11:08 AM To: Andersen, Erik (E.) Cc: Sowards, John (J.) Subject: RE: updates

Sure. I will here all time for the test. Just found that the top deflector was installed in the front, which was wrong. Installed to back. Restarted test.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From: Andersen, Erik (E.)

Sent: Thursday, April 25, 2013 10:49 AM To: Huang, Larry (L,.); Sowards, John (J.) Subject: updates

Please stay close to the Erik Weber testing today. Looking for you guys to help define the test plan for P415 tomorrow based on what you see today on his tests. Could pick 1 or 2 configurations to run.

Erik Andersen Core P/T Cooling <u>eanderse@ford.com</u> 313-805-2966 From:Weber, Erik (E.M.)Sent:Monday, June 04, 2012 10:28 AMTo:Kramer, Michael (M.T.); Rodgers, Thomas (T.A.)Cc:Ladd, John (J.R.); Madej, Jeanette (J.); Norman, Kristofor (K.R.); Rohrhoff, Bob (J.); Weber,
Erik (E.M.)Subject:RE: URGENT. P415 CAC Evaluation

I have written TR# AC5805 for vehicle 566w329 requesting completion by Friday June 15th.

Bob Rohrhoff - as we discussed, here's the TR#.

Erik M. Weber

Ford Motor Company TASE - FNA VE P415 / U22x Thermal & Cooling 313.805.4349

TASE

 From:
 Kramer, Michael (M.T.)

 Sent:
 Monday, June 04, 2012 8:36 AM

 To:
 Rodgers, Thomas (T.A.); Weber, Erik (E.M.)

 Cc:
 Ladd, John (J.R.); Madej, Jeanette (J.); Norman, Kristofor (K.R.); Kramer, Michael (M.T.)

 Subject:
 URGENT. P415 CAC Evaluation

Follow-up to note from last week. A PCA has been identified that addresses the CAC condensation related misfire concern. Now need a CAC/vehicle performance assessment. How quickly can this happen? There will be much visibility and pressure to get this done ASAP. We are planning on having a CAC by Friday this week.

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:	Mazuchowski, James (J.A.) Friday, February 24, 2012 2:09 PM
То:	Weber, Erik (E.M.); Ladd, John (J.R.); Cockerill, Al (C.A.); Bishop, Chris (C.B.); Palm, Jim
Cc: Subject:	(J.R.); McCoy, Jim (D.); Whitehead, Joseph (J.P.) Norman, Kristofor (K.R.); Fabien, Phil (P.A.); Smith, Craig (C.A.) RE: URGENT Need for WT Slot

Erik, great work & thank you !!

John, Jim, Al, Chris: looks like Erik Weber can get back into WT on Monday to do Davis Dam with the correct vehicle - see below.

I think we need (2) sets of hardware. One for Erik, one for Palm. Both testing Monday. Let's support pls. Should be good day!!

Erik, can you lay out your test plan in an Outlook note? Assume it's something like:

- Baseline test vehicle as is
- Add GTDI misfire hardware revised AIS tube and CAC blocker shield approx. top 1/3.

Jim Mazuchowski Manager, New V6 Engine Programs V-Engine Eng'r; 33-79935

From:	Weber, Erik (E.M.)
Sent:	Friday, February 24, 2012 1:47 PM
To:	Dominski, Joseph (J.); Davenport, Keith (K.E.)
Cc:	Piechocki, Dawn (D.M.); Mazuchowski, James (J.A.); Lewis, Jeffrey (J.E.)
Subject:	RE: URGENT Need for WT Slot

Excellent. Truck's already there and can be prepped.

Erik M. Weber

Ford Motor Company TASE - FNA VE P415 / U22x Thermal & Cooling 313.805.4349

<< OLE Object: Picture (Metafile) >>

From:	Dominski, Joseph (J.)
Sent:	Friday, February 24, 2012 1:44 PM
To:	Davenport, Keith (K.E.)
Cc:	Piechocki, Dawn (D.M.); Mazuchowski, James (J.A.); Lewis, Jeffrey (J.E.); Weber, Erik (E.M.)
Subject:	RE: URGENT Need for WT Slot

Scheduled for 2/27-730am WT 4.

From:Davenport, Keith (K.E.)Sent:Friday, February 24, 2012 12:53 PMTo:Dominski, Joseph (J.)

Cc:Piechocki, Dawn (D.M.); Mazuchowski, James (J.A.); Lewis, Jeffrey (J.E.); Weber, Erik (E.M.); Davenport, Keith (K.E.)Subject:RE: URGENT Need for WT SlotImportance:High

Joe, it looks like WT 4 is open 2/27 at 7:30 AM. If this is correct please schedule TR AC0995 (590W986) in this slot.

Thanks.

Keith Davenport / KDAVENPO TASE - FNA Small Car Development and Sign Off

4704B, AEC 313 805 7387

From:Weber, Erik (E.M.)Sent:Friday, February 24, 2012 11:55 AMTo:Davenport, Keith (K.E.); Dominski, Joseph (J.)Cc:Piechocki, Dawn (D.M.); Mazuchowski, James (J.A.); Lewis, Jeffrey (J.E.)Subject:URGENT Need for WT SlotImportance:High

Keith/Joe,

I am assisting the Powertrain group with resolving a field issue on P415 EcoBoost that involves condensation build-up in the charge air cooler and results in engine misfires. I have an urgent need to run a wind tunnel test to understand if the proposed field service action will compromise cooling performance. I already have a truck at the wind tunnel - 590W986, under TR#AC0995. The slot is needed within the next few business days; I am willing/able to run just about any slot that can be made available in eitherr WT4 or 5. If it comes to it, we will have to bump another test out as this request is high priority. I might be able to take less than 8hrs for my testing if that would help.

Please let me know what we can work out ASAP - I need a decision today.

FYI, I am currently out of the office sick but can be reached by phone or email.

Erik M. Weber Ford Motor Company TASE - FNA VE P415 / U22x Thermal & Cooling 313.805.4349

« OLE Object: Picture (Metafile) »

From:Huang, Larry (L,.)Sent:Thursday, February 23, 2012 9:27 AMTo:Kramer, Michael (M.T.)Cc:Andersen, Erik (E.)Subject:RE: URGENT. Need input by 11:00 am Thur. 2/23 for JBAKAJ P415 CAC condensation
mtg.

This is the first time we knew the request for "retrofit". We, Bob, Jim, and I, discussed the "retrofit" yesterday, after saw your matrix. Yes, we agreed to pick the Alternative III in the tank design change proposals (see the note I sent out yesterday) as a starting point of retrofit. Bob agreed to work with the supplier on the timing and cost. We will discuss how to implement retrofit with Valeo in the meeting this afternoon. Thanks.

Regards,

Larry Huang

Global Cooling/Heat Exchangers Phone/Text Massage: 313 805 2617 E-mail: <u>huang3@ford.com</u> Building #2-3M29, Mail Drop: 1215

From:Kramer, Michael (M.T.)Sent:Thursday, February 23, 2012 8:44 AMTo:Andersen, Erik (E.); Huang, Larry (L.)Subject:FW: URGENT. Need input by 11:00 am Thur. 2/23 for JBAKAJ P415 CAC condensation mtg.

Agree on preferred option? Need cost and timing this morning.

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:Meyer, Robert (R.H.)Sent:Wednesday, February 22, 2012 4:49 PMTo:Joseph LUMETTA; Peter GAUDINOCc:Kramer, Michael (M.T.); Tyler, Jim (J.S.)Subject:FW: URGENT. Need input by 11:00 am Thur. 2/23 for JBAKAJ P415 CAC condensation mtg.

Please provide cost and timing for a retrofit kit and PSW Proveout for the Option 3 (tube installed from outboard/above Port) as a Service Kit, and installed in the production CAC. We need this information early tomorrow morning. Thanks.

Sincerely, Robert H. Meyer Ford P/T Cooling, 313-805-4624 rmeyer2@ford.com Building 2: 23Q26 From:Kramer, Michael (M.T.)Sent:Wednesday, February 22, 2012 4:24 PMTo:Tyler, Jim (J.S.); Meyer, Robert (R.H.); Huang, Larry (L,.); Andersen, Erik (E.); Bishop, Chris (C.B.); Stec, Randall (A.)Cc:Hermann, Erik (E.H.); Madej, Jeanette (J.); Kramer, Michael (M.T.); Ladd, John (J.R.)Subject:URGENT. Need input by 11:00 am Thur. 2/23 for JBAKAJ P415 CAC condensation mtg.

Please add your input to the matrix and send back to me by 11:00 am. Sorry for the short fuse. This is moving fast.

<< File: P415 CAC Condensation Actions 02222012.xls >>

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:	Cockerill, Al (C.A.)
Sent:	Monday, October 31, 2011 5:49 PM
То:	Nowaczyk, Rick (R.J.); Oyafuso, Kevin (K.G.); McDonagh, Scot (S.M.); Sims, Ivan (I.D.); Boerger, Jim (J.G.); Osepchook, William (W.R.);
	Morrow, Bill (N.W.); Donahue, Francis (Fran.); Smith, Craig (C.A.); Whitehead, Joseph (J.P.)
Cc:	Dobbs, Dan (K.D.); Mazuchowski, James (J.A.)
Subject:	RE: 2011 F-150 3.5 GTDI Misfire CQIS Report#BHJCG001

Rick, I think the confusion is with, what we communicated to the dealer a while back.

Let me describe the history for all to understand.

1. Original process tightened to 10 Nm and rundown **monitored torque rate** which was not effective.

2. 6/1/11 process tightens 16 Nm plus 45 degrees and monitors rundown angle from cycle start to detect defects. **This is also what the Hot Line tells the dealer**.

3. Current process, 10Nm +45Deg on 6-23-11 due to the bolt break problem. New rundown **monitors rundown angle** which is more effective at detecting cross threads.

So, to detect a loose ground, please have the dealer complete the below process. Tightening from 10 to 16 Nm will get the results as you discribe below, 1 1/4 turn.

Proposal

Ground Stud Check at Dealership

- Diagnostic check for vehicles with misfire
- First attempt to loosen ground wire and stud by hand (fingers). Do not use socket or wrench.
 - Typical person can apply 0.4 to 0.7 Nm to this size bolt. This is greater than torque required to assure no misfire on dyno.
- Next attempt to tighten the stud using socket and 6 to 8 inch long 3/8 inch extension. Grasp extension with hand. Do not use wrench.
 - Typical person can apply 3 to 4.5 Nm to a medium size screw drive handle. 3/8 inch extension is smaller so estimate 1-3 Nm for typical mechanic.
- Ask dealership to report results of these two test.
 - Failure of first test indicates loose ground screw
 - Pass of both test removes all doubt concerning screw tightness
- Running confirmation of this test method no 4x4 today

Note:

- Dealerships do not have torque wrench for checking break away torque
- Cannot get access with torque wrench on 4x4 to check break away torque

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.

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

From: Nowaczyk, Rick (R.J.) Sent: Monday, October 31, 2011 10:32 AM To: Oyafuso, Kevin (K.G.); McDonagh, Scot (S.M.); Cockerill, AI (C.A.) Cc: Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.) Subject: 2011 F-150 3.5 GTDI Misfire CQIS Report#BHJCG001 Importance: High

Engineering Team,

I just received a call from one of our PSMAC representatives from the dealer listed below. The customer came in with the misfire concern and the dealer tech found the grounds for the COP loose by as much as 1 ¼ turns. Being there been some concerns with plug fouling It sounds like we should think about a SSM to the dealers to inspect the COP grounds. This customer has the vehicle, the dealer will continue to monitor the situation.

From: RNOWACZY@ford.com [mailto:RNOWACZY@ford.com] Sent: Monday, October 31, 2011 10:21 AM To: Nowaczyk, Rick (R.J.) Subject: Report Summary for the CQIS Report#BHJCG001

Attachments : 0

Report# :	BHJCG001 NHL			Received:	08/10/2011			
CCRG/EPRC:		Reviewed Status:						
Vehicle:	2011,F150 4X4 ,F150	,SUP CRW,STYSD ,1FTF	W1ET9BF	Build Date:	02/25/2011			
Odometer :	9,255 M	Engine:	3.5L-GTDI	Calibration:	BF613C0A			
Transmission:	6R80E	Axle:	3800F3.55L	A/C:	YES			
Dealer:	USA 03060 Max Plat	t Ford-Lincoln, Inc.		Phone#:	(260) 347-3153			
_City:	Kendallville	State:	Indiana	Country :	USA			
Öriginator:	ANDREW RENNHA	ANDREW RENNHACK						
Symptom:	5 57 2 02 DRV PERF,HESITATES/STUM,ACCEL,ALWAYS							
001059			3					
59								

Status:				
VFG:	V52 DRIVEABILI	TY		
Additional Sym	ptom: MISFIRE SENSAT	ΓΙΟΝ		
Fix:	Causal Componer	nt :		
Condition Code	:			
Hotliner: RGA	ARY4	Phone: 313 317-7041	Regn Cd: G2 Detr	roit
Engineering:		Phone:	TAR	•
Dlr Contact:	ANDREW RENNHACK	Phone: 000	000-0000	Title Cde: SD
DTCs: KOEO: KOEC: KOER:				
Comments :				
REPAIR	WEB FORM DATA - CON	ERT GARY MSS - FCSD - TECH SVC HOTL CERN: VEHICLE HAS A MISFIRE DIAGNO ECH QUESTION: IS THERE ANY ISSUES O E ON THE ECOBOOST	OSTICS:	
RECOMM	ANDREW, RECOMMEND CYLINDER(S) ARE MISF UNIDENTIFIED, RECOM AND HIGH PUMP PRESS CLEAN AND TIGHT. PER	ERT GARY MSS - FCSD - TECH SVC HO TO MONITOR POWER BALANCE TO DET IRING. ONCE THE MISSING CYLINDERS F MEND TO MONITOR PIDS: UEGO'S, FUEL URE DURING THE CONCERN. ALSO CHEC FORM THE HIGH PRESSURE INJECTOR F RING THE CONCERN AND REMOVE THE	TERMINE WHICH HAVE BEEN TRIMS, MAP, MAF CK G105 THAT IT IS LOW TEST,	
<u>п</u>	LOOK FOR DAMAGE. AI	DDITIONALLY, PERFORM A STATIC AND	RUNNING	

COMPRESSION TESTS, TO PERFORM A RUNNING COMPRESSION TEST (TO ISOLATE IF THERE IS A STICKING VALVE) BY REMOVING THE SCHRADER VALVE FROM THE COMPRESSION TESTER OR HITTING THE PRESSURE RELEASE BUTTON REPEATEDLY, WITH THE TESTED INSTALLED, START THE ENGINE AND NOTE WHERE THE NEEDLE STOPS BOUNCING. IT WILL BE NECESSARY TO PERFORM THE TEST TO THE ENTIRE BANK FOR COMPARISON, THE RESULTS SHOULD BE WITHIN 5% OF EACH OTHER. IF A STICKING VALVE IS FOUND, RECOMMEND TO TAKE A FUEL SAMPLE AS CONTAMINATED FUEL IS THE MOST COMMON CAUSE FOR STICKING VALVE. THERE ARE NO COMMON REPAIRS FOR A MISFIRE IN THE DATA BASE AT THIS TIME.

- REPAIR08/11/2011 10:06AM LAWRENCE STANLEY MSS FCSD TECH SVC HOTLINETIM STATED THAT THE OWNER OF THIS VEHICLE IS COMPLAINING OF A MISFIRECONCERN, WITH NOTHING NOTED ON THE LAST VISIT. MODE 6 HAS NOT AS OFYET BEEN TESTED.
- RECOMM 08/11/2011 10:06AM LAWRENCE STANLEY MSS FCSD TECH SVC HOTLINE TIM, RECOMMEND TO RETRIEVE MODE 6 INFORMATION TO SEE IF ANY MISFIRES ARE NOTED. ADDITIONALLY CHECK THE FUEL PRESSURE USING A MECHANICAL FUEL GAUGE SHOULD BE 62-73 PSI, IF LOWER ROOT CAUSE FOR THIS WILL NEED TO BE DETERMINED. LASTLY COMPARE TO A LIKE UNIT AS THE MAY BE A NORMAL OPERATING CHARACTERISTIC FOR THIS POWER PLANT PLAT-FORM
 AUDIT 08/11/2011 10:06AM LAWRENCE STANLEY MSS - FCSD - TECH SVC HOTLINE

ODOMETER 7000 M CHANGED TO 9255 M BY LSTANL22

REPAIR08/11/2011 03:51PM MICHAEL SCHOBER MSS - FCSD - TECH SVC HOTLINE
TECHNICIAN REPLY: CHECKED MODE 6 NO HISTORY OF ANY MISFIRES. WAS
CONTACTED BY FSE WAS TOLD ENGINEERING IS INVESTIGATING. FSE ALSO
METIONED THAT THE ECOBOOST TRUCK HE WAS DRIVING LACKED POWER AND FELT
LIKE IT HAD A MISSFIRE TOO. JUST TO KNOW WHAT TO TELL CUSTOMER IS
CONCERN BEING INVESTIGATED OR NOT? FSE ADVISED TO CHECK PCM CONNECTOR
CAUSE PROBLEM SEEMED TO SHOW UP AFTER A HARD RAIN. REMOVED CONNECTOR

AND DID FIND MOISTURE INSIDE OF IT. SEALS SEEM TO BE IN PLACE ON THE CONNECTOR DONT SEE HOW MOISTURE IS GETTING IN THERE.

RECOMM08/11/2011 03:51PM MICHAEL SCHOBER MSS - FCSD - TECH SVC HOTLINETIM, THERE HAVE BEEN ISOLATED REPORTS OF SIMILAR CONCERNS AND IT ISCURRENTLY BEING REVIEWED BY ENGINEERING. RECOMMEND DRYING OUT THE PCMCONNECTOR BEFORE RECONNECTING AND RETEST.

 From:
 Cockerill, Al (C.A.)

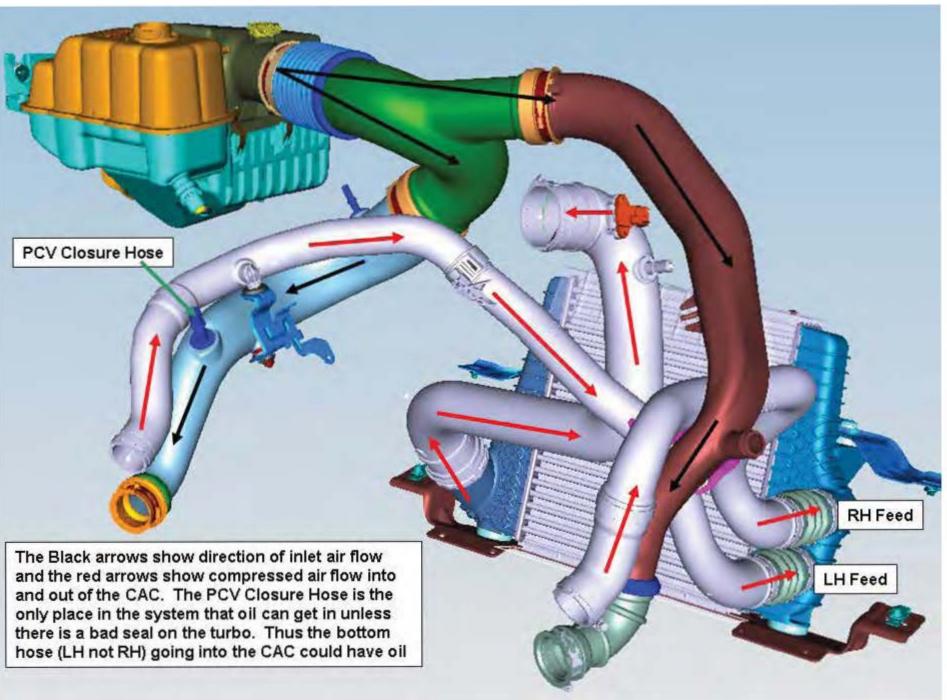
 Sent:
 Wednesday, November 30, 2011 4:36 PM

 To:
 Nowaczyk, Rick (R.J.)

 Cc:
 Dodds, Jordan (J.)

 Subject:
 RE: 2011 F-150 3.5L GTDI - Oil in RH CAC Tube (CQIS Report#BK3DM001)

Please see my explanation below. Please have technician check oil level to ensure there are no issues.



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: Nowaczyk, Rick (R.J.) Sent: Wednesday, November 30, 2011 10:38 AM To: Cockerill, AI (C.A.) Cc: Dodds, Jordan (J.) Subject: 2011 F-150 3.5L GTDI - Oil in RH CAC Tube (CQIS Report#BK3DM001) I mportance: High

Al,

Is there any known concerns for oil accumulation in the RH CAC tube?

From: Dodds, Jordan (J.) Sent: Wednesday, November 30, 2011 9:47 AM To: Nowaczyk, Rick (R.J.) Subject: FW: Report Summary for the CQIS Report#BK3DM001

I have seen a few reports where the Tech's are stating oil is found in the RH CAC tube only and no turbo issues have been detected. The Hotline advised to replace the RH valve cover and separator assembly per an ISM for the iVCT GTDI which I will correct them on. However, do you have any info on this?

As always, your help is greatly appreciated.

Jordan Dodds Service Engineer - Gas Engine 3.0/3.5/3.7/GTDI Subject Matter Expert Diagnostic Service Center 1 1700 Fairlane Drive Allen Park, MI 48101 313-248-8183 Cube # 338 From: DCHATFIE@ford.com [mailto:DCHATFIE@ford.com] Sent: Wednesday, November 30, 2011 9:26 AM To: Dodds, Jordan (J.) Subject: Report Summary for the CQIS Report#BK3DM001

11 f150 3.5gtdi 1/4 qt of oil in cac tube.

Attachments : 0

Report# :	BK3DM001 NHL				Received:	11/29/2011
CCRG/EPRC:		Reviewed Status:			Date:	
Vehicle:	2011,F150 4X4 ,F150	,SUP CRW,STYSD ,1FT	FW1ET2BF		Build Date:	04/02/2011
Odometer :	7,713 M	Engine:		3.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:		3800F3.55L	A/C:	YES
Dealer:	USA 04120 Coconut I	Point Ford			Phone#:	(239) 498-3673
City:	Estero	State:		Florida	Country :	USA
Originator:	BRYAN NEHILA					
Symptom:	5 54 2 02 DRV PERF,	LACK/LOSS PWR ,ACC	CEL,ALWAYS			
Status:						
VFG:	V52 DRIVEABILITY					
Additional Sympton	n: OIL IN INTAKE, LA	CK OF POWER				
Fix:	Causal Component :					
Condition Code:						
Hotliner: DKVEN	IVOL	Phone: 313	317-9289	Regn	Cd: S4 Miami	
Engineering:			Phone:		TAR:	
Dir Contact: BRY	AN NEHILA		Phone: 000 000-000	0	Title Cde	: Т
DTCs:	P0430		4			

KOEC:

KOER:

Comments :

REPAIR 11/29/2011 01:16PM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN: LACKS POWER, SEEMS LIKE TRANS IS NOT SHIFTING POPERLY DIAGNOSTICS: KOER, KOEC P0299, P0175, P0430. FOUND WHAT SEEMS TO BE A BANK 2 CONVERTOR FAILURE. ALSO HERE A SCRAPPING NOISE WHEN TURBO IS SPOOLED UP COMING FROM THE DRIVERS. SIDE. REMOVED THE INLET PIPE TO THE BANK 2 TURBO AND FOUND ALOT OF OIL IN THE TURBO INLET. CHECKED OIL LEVEL AND FOUND TO BE FULL TO TOP MARK ON DIPSTICK BUT NOT OVER. FOUND OIL IN THE AIR INLET SIDE OF THE AIRDUCT COMING FROM WHAT LOOKS LIKE THE VACUUM LINE FROM THE THROTTLE BODY AREA. FOUND NO SIGN OF OIL OR WATER CONTAMINTAION ON THE AIR FILTER. PARTS REPLACED:NONE. TECH QUESTION:LOOKING FOR ANY KNOWN CONCERNS. IS THERE ANY KNOWN CONCERNS WITH THE PCV SYSTEM? OR THE TURBOS? RECOMM 11/29/2011 01:16PM DEREK KVENVOLD MSS - FCSD - TECH SVC HOTLINE BRYAN, DUE TO THE P0430 DTC, THE BANK 2 CATALYST WILL HAVE TO BE REPLACED. IF THERE IS A SCRAPING TYPE SOUND COMING FROM THE TURBOCHARGER, IT WILL BE NECESSARY TO CHECK FOR PLAY IN THE COMPRESSOR (INTAKE SIDE) AND TURBINE (EXHAUST SIDE) TURBOCHARGER WHEELS. IF YOU CAN MOVE THE WHEEL SIDE TO SIDE TO THE POINT IT WILL CONTACT THE HOUSING, OR IF THERE IS ANY IN AND OUT PLAY IN THE TURBO, REPLACEMENT WILL BE NECESSARY. ALSO, DETERMINE IF THERE IS OIL PRESENT IN THE EXHAUST SIDE OF THE TURBOCHARGER, SIMILAR TO THE INTAKE SIDE. THIS MAY INDICATE A FAILED SEAL IN THE CENTER SECTION OF THE TURBOCHARGER. VERIFY IF THE OIL IS COMING FROM THE INTAKE-THROTTLE BODY LINE AS YOU MENTIONED, OR IF IT IS COMING FROM THE TURBOCHARGER ITSELF. PAST REPORTS INDICATE THAT THIS TYPE OF CONCERN COULD BE CAUSED BY A FAILED

BEARING AND SEAL IN THE TURBOCHARGER. IF FOUND, REPLACE THE TURBOCHARGER, CLEAN OUT THE CAC AND INTAKE TUBES, AND RETEST. ALSO, IF THERE IS A NOISY TURBOCHARGER PRESENT. IT WILL BE NECESSARY TO INSPECT BOTH OF THE TURBOCHARGERS FOR CONCERNS. PAST REPORTS INDICATE THAT THE EXCESSIVELY NOISE TURBOCHARGER MAY ACTUALLY BE THE UNDAMAGED TURBO, OVER-BOOSTING TO COMPENSATE FOR THE DAMAGED TURBO. IF THERE IS NO TURBOCHARGER CONCERNS FOUND, AND THE OIL IS ONLY COMING FROM THE INTAKE LINE, THOROUGHLY INSPECT THE INTAKE MANIFOLD FOR EXCESSIVE OIL PRESENT. IF FOUND, RECOMMEND YOU REPLACE THE RH VALVE COVER AND OIL SEPARATOR ASSEMBLY. ALSO INSPECT THE SPARK PLUGS FOR SIGNS OF OIL FOULING AND REPLACE THEM AS NECESSARY. IF YOU HAVE ANY OTHER QUESTIONS OR CONCERNS, FEEL FREE TO UPDATE THIS FORM. 11/30/2011 09:24AM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE REMOVED BOTH CONVERTORS TO INSPECT. FOUND THE DRIVERS SIDE TO BE TOTALLY MELTED AND BROKEN DOWN TO NOTHING. INSPECTED THE FRONT OF THE PASSANGER CONVERTOR WITH A BORE SCOPE. FOUND THE FRONT OF THE CONVERTOR TO HAVE LITTLE MELTED BALLS ON TYHE FRONT OF IT, BUT NOT THOWING A CODE FOR IT YET. FOUND EXESSIVE OIL ON THE INLET TUBE TO THE DRIVERS SIDE TURBO INLET TUBE. ABOUT 1/4 QUART OR MORE CAME OUT WHEN TOOK THE TUBE OFF. FOUND ONLY RESIDUE OIL ON THE PASSANGER SIDE INLET TUBE. NO SIGN OF OIL ON EITHER EXHAUST SIDE OF EITHER TURBO. THE IMPLER SHAFT HAS VERY SLIGHT UP AND DOWN MOVEMENT ON EITHER SIDE BUT NOT HITTING THE HOUSING ON EITHER SIDE. FOUND ALL PLUGS TO HAVE SOME SIGNS OF OIL, ALSO FOUND BACK SIDE OF ALL INTAKE VALVES TO HAVE OIL RESIDUE BURNT ON THEM. FOUND THE OIL LEVEL TO BE VERY HIGH AFTER SITTING OVERNIGHT. IS POSSIBLE OVER FILLED OIL IS THE ROOT CAUSE OF ALL THE PROBLEMS? ANY WAY TO TEST SEPERATOR IN VALVE COVER? 11/30/2011 09:24AM DAVID CHATFIELD MSS - FCSD - TECH SVC HOTLINE BRYAN, WITH NO CONCERNS FOUND WITH THE TURBO CHARGERS ASSEMBLIES, IT

REPAIR

RECOMM PE13-018 001068 IS POSSIBLE THAT AN OVERFILLED CRANKCASE COULD CAUSE THIS CONCERN. RECOMMEND TO ADJUST THE OIL LEVEL TO PROPER SPECIFICATION, REPLACE THE OIL CONTAMINATED SPARK PLUGS AND START AN OIL CONSUMPTION TEST AS PER THE WARRANTY AND POLICY MANUAL VERSION 1.8 TO DETERMINE IF THERE IS A CONSUMPTION CONCERN INDEED PRESENT. ADDITIONALLY, PLEASE INSPECT THE CRANKCASE SYSTEM FOR A POSSIBLE RESTRICTION AND INSURE THERE IS NO OIL COLLECTING IN THE BAFFLE (OIL SEPARATOR) IN THE CAM COVER UNDER THE PCV VALVE. IF THERE IS OIL PRESENT IN THE BAFFLE, THEN PLEASE REPLACE THE CAM COVER, PCV AND RE EVALUATE.

From:	McDonagh, Scot (S.M.)
Sent:	Tuesday, October 11, 2011 11:05 AM
То:	Nowaczyk, Rick (R.J.)
Subject:	RE: 2011P-415 3.5L MISFIRE - Report Summary(s) from a GCQIS Query Disposition

Being sent to Maine on P415 GTDI Misfire vehicle at a minutes notice was more strain than he could bear

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

From: Nowaczyk, Rick (R.J.) Sent: Tuesday, October 11, 2011 10:45 AM To: McDonagh, Scot (S.M.) Subject: RE: 2011P-415 3.5L MISFIRE - Report Summary(s) from a GCQIS Query Disposition

Sorry to hear that...

From: McDonagh, Scot (S.M.) Sent: Tuesday, October 11, 2011 9:04 AM To: Nowaczyk, Rick (R.J.) Subject: RE: 2011P-415 3.5L MISFIRE - Report Summary(s) from a GCQIS Query Disposition

Yeah- My Buddy quit working at FMC over this one

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

From: Nowaczyk, Rick (R.J.) Sent: Tuesday, October 11, 2011 9:03 AM To: McDonagh, Scot (S.M.) Subject: RE: 2011P-415 3.5L MISFIRE - Report Summary(s) from a GCQIS Query Disposition

Yeah...this is a tough one for Powertrain Team.

From: McDonagh, Scot (S.M.) Sent: Tuesday, October 11, 2011 7:27 AM To: 'RNOWACZY' Subject: RE: 2011P-415 3.5L MISFIRE - Report Summary(s) from a GCQIS Query Disposition

Thanks- I'm still not sure where we are headed with this issue

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

From: RNOWACZY [mailto:RNOWACZY] Sent: Tuesday, October 11, 2011 3:13 AM To: SMCDONAG Subject: 2011P-415 3.5L MISFIRE - Report Summary(s) from a GCQIS Query Disposition

This email contains 4 report summary(s).

Attachments : 0

Report# : CCRG/EPRC: Vehicle: Odometer : Transmission:	2,333 M 6R80E	Reviewed Status: 150 ,SUP CRW,STYS Engine: Axle:	D ,1FTFW1ET2BF 3.5L-GTDI 3800F3.31C		10/10/2011 08/06/2011 BF613C0A YES (530) 241-
Dealer: City: Originator:	USA 00602 Crown Redding CANAAN WEAV	State: ER	California	Phone#: Country :	4321 USA
Symptom: Status: VFG: Additional Symptom: Fix: Condition Code:	5 54 2 39 DRV PE V52 DRIVEABILI P0430, LOSS OF F Causal Componen	TY POWER	R ,ACCEL,INTERMITTE	N I	
Hotliner: DR Engineering: Dlr Contact: DTCs: KOEO: KOEC:P0430 KOER:	IDOLF2 CANAAN WEAVE		241 Regn Cd hone: Phone: 530 241-4321	: W2 San Franc TAR: Ti	eisco tle Cde: T

Comments :

REPAIR 10/10/2011 11:56AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:SES, LOST ALL POWER DIAGNOSTICS: CK DTC-P0430- CAT EFFIC BANK 2- FOLLOW PPT HF PARTS REPLACED:NONE TECH QUESTION: MODE 6 DATA LOOKS NORMAL, NO MISFIRE HISTORY, THERE IS A PCM UPDATE AVAILABLE BUT OASIS DOESNT LIST ANY RELATED CONCERNS, NO IMPACT MARKS ETC, ARE THERE ANY KNOWNS?

RECOMM 10/10/2011 11:56AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE CANAAN, -PLEASE VERIFY IF THE MIL/CEL LIGHT WAS FLASHING AT THE TIME OF THIS CONCERN. THE VEHICLE MAY HAVE TO BE DRIVEN AT HIGH RPM (4000+), DURING LOADED ACCELERATION OR UPHILL IN ORDER TO REPRODUCE THIS CONCERN. IF YOU ARE ABLE TO REPRODUCE THE CONCERN PLEASE MAKE A RECORDING FEATURING THE FOLLOWING PIDS: APP(%), BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, DIST_BRKOVRD, EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), EVAPCP, FRP (PRESS), FRP_DSD, FTP_H20, GEAR, KNK_CNTR_CYL (1-6), KNK RATE LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), MFF INGEAR, MFF LOAD, MFF RPM, MFF RUN, MFF SOAK, MFF TCC LOCK, MFF THR ANG, MFF_TRIP, MFF_VSS, MP_LRN, NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TQ_CNTRL, TR, VPWR, VREF, AND VSS. UPLOAD THIS RECORDING TO THE HOTLINE USING IDS. -CHECK FOR E85 IN THE TANK. PERFORM A FUEL QUALITY TEST USING PPT HC6. DISCUSS FUELING HABITS WITH THE CUSTOMER. INQUIRE IF MULTIPLE STATIONS ARE USED OR IF THE CUSTOMER ALWAYS REFILLS AT THE SAME STATION. -REMOVE, INSPECT, CLEAN, AND RE-TORQUE (12NM + 45 DEGREES) G105, WHICH IS LOCATED ON THE BACK OF THE LEFT HAND CYLINDER HEAD. THIS GROUND MAY BE SEEN EASIER IF THE VEHICLE IS IN THE AIR ON THE HOIST. -REPLACE ALL BANK TWO IGNITION COILS AND SPARK PLUGS, SET ASIDE FOR ENGINEERING REVIEW VIA 700 TAG. -ALSO REPLACE BANK TWO CATALYST FOR THE P0430. ISM 11-06-009 3.5L ECOBOOST MISFIRE UNDER LOAD OR P0430 DTC

- **REPAIR** 10/10/2011 12:26PM RICHARD STEVENSON MSS FCSD TECH SVC HOTLINE SPOKE WITH CUSTOMER, ADVISED ONLY HAS FILLED WITH REGULAR FUEL, WAS PASSING UNDER BOOST/HIGH LOAD, LOST ALL POWER, SES WAS FLASHING, PULLED OVER AND CYCLED KEY, WAS STILL FLASHING BUT WENT SOLID AFTER DRIVING. CUSTOMER LIVES IN WA STATE IF IT HELPS. INTERESTINGLY, FUEL ECONOMY SHOWING 18.5 MPG AND HAS NO BLACK SOOTY TAILPIPE OR BLACK SMOKE ON START-UP... I WILL GO AND TRY TO GET THE RECORDING YOU ASKED FOR, THANX CJ
- RECOMM10/10/2011 12:26PM RICHARD STEVENSON MSS FCSD TECH SVC HOTLINECANAAN, THANK YOU FOR THE UPDATED INFORMATION. IF ANY FURTHER
ASSISTANCE IS NEEDED FEEL FREE TO CONTACT THE TECHNICAL HOTLINE.

 REPAIR 10/10/2011 01:44PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE ROAD TEST WITH PID LIST GIVEN, WASNT ABLE TO DUPLICATE THE LOST POWER, SEEMED TO HAVE A POSSIBLE MISFIRE. TOOK A RECORDING OF THAT EVENT.UNSURE OF HOW TO SEND THE RECORDING TO YOU?
 RECOMM 10/10/2011 01:44PM DALE BARRETT MSS - FCSD - TECH SVC HOTLINE CANAAN, RECOMMEND REPLACING BANK 2 IGNITION COILS, BANK 2 SPARK PLUGS, CLEAN GROUND G105 THEN TORQUE TO PROPER SPECS. REPLACE BANK 2 CATALYTIC CONVERTER(FOR P0430) RESET KAM THEN RETEST FOR THE CONCERN.

Attachments : 0

Report# : CCRG/EPRC: Vehicle: Odometer : Transmission: Dealer:	2011,F150 4X4 ,F 2,800 M 6R80E	Reviewed Status: F150 ,SUP CRW,ST Engine: Axle: erline Auto Center,	YSD ,1FTFW1	ET0BF 3.5L-GTDI 3.73 LOCK	Received: Date: Build Date: Calibration: A/C: Phone#:	10/10/2011 08/17/2011 BF613C0N YES (406) 293-
City: Originator: Symptom:	Libby DOUG KNIGHT	State: ERF,RUNS ROUGI		Montana ERMITTENT	Country :	4128 USA
Status: VFG: Additional Symptom: Fix:	V52 DRIVEABII MISFIRE BANK Causal Compone	2				
Condition Code: Hotliner: MN	MESSIN4	Phone: 313	3 322-5105	Re	gn Cd: W5 Se	attle
Engineering: Dlr Contact:	DOUG KNIGHT		Phone: 000 0	000-0000	TAR: Titl	e Cde: T
DTCs: KOEO: KOEC:P0306 KOER:						

Comments :

REPAIR 10/10/2011 11:05AM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CEL FLASHING WITH P0306 DIAGNOSTICS: PULL COIL, PLUG EXAMINE ALL FIND NO REASON FOR CONCERN, SWAPPED COIL SIX WITH 5 IF RETURNS PARTS REPLACED:NONE TECH QUESTION:ANY FURTHER REPORTS OF MISSFIRES IN THESE 3.5 ECOBOOST OR CONCERNS WE SHOULD LOOK AT BEFORE RETURNING VEH. ????

10/10/2011 11:05AM MATTHEW MESSINA MSS - FCSD - TECH SVC HOTLINE RECOMM DOUG, PLEASE INSPECT POWER AND GROUND CIRCUITS TO THE IGNITION COILS. PLEASE LOAD TEST THE POWERS AND GROUNDS USING A SUITABLE BULB. WITH THE CIRCUITS LOADED. PLEASE PERFORM A VOLTAGE DROP TEST. INSURE THAN NO MORE THAN 0.2V ARE BEING DROPPED. PLEASE INSPECT G105. PLEASE TORQUE TO 16 FT/LBS WITH AN ADDITIONAL 45 DEGREES OF ROTATION. PLEASE INSPECT FUEL FOR E85 CONTAMINATION. USING A CLEAR BOTTLE, FILL THE BOTTLE HALF WAY WITH WATER AND MARK THE LINE. PLEASE FILL THE BOTTLE THE REST OF THE WAY UP WITH FUEL FROM THE VEHICLE. IF THE WATER LINE RISES MORE THAN 10%, E85 CONTAMINATION IS PRESENT. PLEASE DO NOT CLEAR THE FREEZE FRAME DATA. PLEASE OBTAIN MODE 6 AND MODE 9 DATA ALONG WITH RECORDING THE FOLLOWING PID'S APP(%), BARO(PRESS), CHT(TEMP), CYL (1-6) ACCL, DIST BRKOVRD, EQ RAT11 (RATIO), EQ_RATIO21 (RATIO), EVAPCP, FRP (PRESS), FRP_DSD, FTP_H20, GEAR, KNK_CNTR_CYL (1-6), KNK_RATE_LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), MFF_INGEAR, MFF_LOAD, MFF_RPM, MFF_RUN, MFF_SOAK, MFF TCC LOCK, MFF THR ANG, MFF TRIP, MFF VSS, MP LRN, NUM MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TQ CNTRL, TR, VPWR, VREF, VSS. PLEASE UPLOAD THESE PID'S TO THE HOTLINE FOR FURTHER DIAGNOSIS USING IDS. PLEASE HOLD THE VEHICLE SESSION. PLEASE REOPEN THE VEHICLE SESSION AND ON THE RIGHT HAND SIDE OF THE IDS SCREEN IS A THREE COMPUTER ICON. PLEASE CLICK THAT ICON TO SUBMIT THE REPORT TO THE HOTLINE. PLEASE ALSO REPLACE THE BANK 2 COILS, PLUGS AND SET ASIDE FOR ENGINEERING REVIEW VIA TAG 700. ENGINEERING IS CURRENTLY LOOKING INTO THE CONCERN. ISM 11-06-009 3.5L ECOBOOST MISFIRE UNDER LOAD OR P0430 DTC

Attachments : 0

Report# : BJJBT005 NHL CCRG/EPRC:

Reviewed Status:

Received: 10/10/2011 **Date:**

2011,F150 4X2 ,F150 ,SUP CRW,STYSD ,1FTFW1CT6BFB Vehicle: **Build Date:** 04/09/2011 **Odometer : Engine:** 3.5L-GTDI **Calibration:** 3.983 M **BF613G0A** Transmission: 6R80E Axle: A/C: YES 3800F3.55L (316) 685-**Dealer:** USA 05319 Rusty Eck Ford, Inc. **Phone#:** 9211 USA City: State: Kansas **Country :** Wichita **Originator:** ERIC NIEMANN Symptom: 5 50 2 39 DRV PERF, RUNS ROUGH, ACCEL, INTERMITTENT **Status:** VFG: **V52 DRIVEABILITY** Additional LOSS OF POWER ON ACCEL Symptom: Fix: **Causal Component :** Condition Code: Hotliner: JMORFITT **Phone:** 313 317-7039 Regn Cd: C4 Kansas City **Engineering:** TAR: **Phone: Dlr Contact: ERIC NIEMANN Phone:** 000 000-0000 Title Cde: T

DTCs:
KOEO:
KOEC:P0300 P0306 P0305 P0430
KOER:

Comments

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REPAIR 10/10/2011 11:33AM JACOB MORFITT MSS - FCSD - TECH SVC HOTLINE
 WEB FORM DATA - CONCERN:CUSTOMER STATES THAT HE TRIED TO PASS SOMEONE
 ON THE HIGHWAY AND THE TRUCK LOST POWER AND THE CHECK ENGINE LIGHT
 CAME ON. DIAGNOSTICS: CHECKED FOR CODES AND CHECK PIDS. PARTS
 REPLACED:NONE YET TECH QUESTION:IM GOING TO PUT A NEW CATALYTIC
 CONVERTER ON IT, BUT I CAN NOT GET IT TO MISFIRE AT THIS TIME. THIS IS
 NOT THE FIRST TRUCK THAT I HAVE SEEN WITH THESE CODES IN IT. ANY
 IDEAS? THE LAST TRUCK I HAD IN HERE WITH THESE CODES, I WAS REQUESTED
 BY THE TECH HOTLINE TO REPLACE ALL THE SPARK PLUGS AND 3 COILS.
 RECOMM 10/10/2011 11:33AM JACOB MORFITT MSS - FCSD - TECH SVC HOTLINE
 ERIC, PLEASE CONTINUE ATTEMPTING TO DUPLICATE THE CONCERN. IT MAY BE
 NECESSARY TO DRIVE THE VEHICLE AGGRESSIVELY OR UNDER LOAD TO RECREATE

THE CONCERN. WHEN THE MISFIRE CONCERN IS PRESENT RECOMMEND TO MONITOR. APP(%), BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, DIST_BRKOVRD, EQ_RAT11 (RATIO), EQ RATIO21 (RATIO), EVAPCP, FRP (PRESS), FRP DSD, FTP H20, GEAR, KNK CNTR CYL (1-6), KNK RATE LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), MFF INGEAR, MFF LOAD, MFF RPM, MFF RUN, MFF SOAK, MFF_TCC_LOCK, MFF_THR_ANG, MFF_TRIP, MFF_VSS, MP_LRN, NUM_MISFIRE, OCTADJ_R_LRND, O2S11_CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TQ_CNTRL, TR, VPWR, VREF, VSS AND RECORD THE EVENT. PLEASE ALSO OBTAIN MODE 6 AND MODE 9 DATA. ONCE THE DATA HAS BEEN COLLECTED PLEASE UPLOAD THIS INFORMATION TO THE HOTLINE USING THE IDS TOOL. ADDITIONALLY. YOU ARE CORRECT SINCE THE P0430 DTC IS PRESENT CATALYST REPLACEMENT WILL BE NECESSARY, RECOMMEND TO INSPECT GROUND G105, VERIFY THIS GROUND IS CLEAN AND PROPERLY TORQUED TO 12NM (16LB/FT) PLUS AN ADDITIONAL 45 DEGREES. THIS GROUND SUPPLIES THE GROUND FOR BANK 2 IGNITION COILS. IF THE GROUND WERE TO HAVE AN INTERMITTENT CONNECTION THIS MAY CAUSE THE COILS NOT TO FIRE. RESULTING IN AN OVER FUELING CONCERN IN THE CATALYST. ALONG WITH REPLACEMENT OF THE CATALYST PLEASE REPLACE THE BANK 2 IGNITION COILS AND SPARK PLUGS. PLEASE ALSO VERIFY IF THE VEHICLE IS USING E85. TO DETERMINE IF THE VEHICLE IS USING E85 RECOMMEND REFERRING TO PPT HC6. ONCE THE CATALYST, SPARK PLUGS. AND IGNITION COILS HAVE BEEN REPLACED RECOMMEND TO RE EVALUATE THE CONCERN.

REPAIR10/10/2011 02:53PM JACOB MORFITT MSS - FCSD - TECH SVC HOTLINE
I STILL CAN NOT GET THIS VEHICLE TO MISFIRE, IT DOES NOT HAVE E85 IN
IT, BUT I DID FIND THAT GROUND G105 ON THE BACK OF THE ENGINE IS VERY
CORRODED. IS THERE ANYTHING I SHOULD PUT ON IT TO KEEP THIS FROM
HAPPENING AGAIN?

RECOMM 10/10/2011 02:53PM JACOB MORFITT MSS - FCSD - TECH SVC HOTLINE ERIC, THANK YOU FOR THE UPDATE ON THIS CONCERN. RECOMMEND TO CLEAN THE GROUND (BOTH SURFACES) AND REINSTALL USING THE PREVIOUSLY LISTED TORQUE SPECIFICATIONS. IT WILL NOT BE NECESSARY TO INSTALL OR APPLY ANYTHING TO THIS GROUND. IF FURTHER ASSISTANCE IS NEEDED PLEASE UPDATE THIS ONLINE REQUEST.

Attachments : 0

Report#:BJJBJ003 NHLCCRG/EPRC:

Reviewed Status:

Received: 10/10/2011 **Date:**

Vehicle:	2011,F150 4X4	,F150 ,SUP CRW	,STYSD ,1FTFW1ET	T7BF	Build Date:	08/26/2011
Odometer :	987 M	Engine:	3.	.5L-GTDI	Calibration:	BF613C0A
Transmission:	6R80E	Axle:	38	800F3.55L	A/C:	YES
Dealer:	USA 02631 Kar	l Klement Ford			Phone#:	(940) 627- 1101
City:	Decatur	State:	T	exas	Country :	USA
Originator:	HUGH SWIND	ELL				
Symptom:	5 50 2 39 DRV	PERF,RUNS ROU	UGH,ACCEL,INTERI	MITTENT		
Status:						
VFG:	V52 DRIVEAB	ILITY				
Additional Symptom:	P0306					
Fix:	Causal Compo	nent :				
Condition Code:						
Hotliner: DR	IDOLF2	Phone:	000 248-8241	Re	gn Cd: C1 Da	llas
Engineering:			Phone:		TAR:	
Dlr Contact:	HUGH SWINDE	ELL	Phone: 817 9	929-5166	Titl	e Cde: T

DTCs:	
KOEO:	
KOEC:P0306	
KOER:	

Comments

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REPAIR 10/10/2011 10:25AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE WEB FORM DATA - CONCERN:CHECK ENGINE LIGHT WENT TO FLASHING AND ENGINE RAN VERY ROUGH AND LOST POWER. DIAGNOSTICS: IDS TEST P0306, INSPECT ALL ENGINE HARNESSS AND PULLED #6 COIL AND INSPECTED FOR ANY WATER OR OIL INTRUSION. NONE FOUND, NO PROBLEMS FOUND. ROAD TEST AND MONITERED MISS FIRE MODE AND #2 CAT O2S FOR SIGNS OF IGNITION OR FUEL MISS FIRE. PARTS REPLACED:NONE TECH QUESTION:WAS UNABLE TO FINE OR DUPLICATE THE CONCERN, DO YOU HAVE ANY REPORTS OF THIS TYPE OF CONCERN OR HAVE ANY SUGGESTIONS OTHER THAN KEEP DRIVING AND MONITERING THINGS?

RECOMM 10/10/2011 10:25AM DOMINIC RIDOLFI MSS - FCSD - TECH SVC HOTLINE HUGH, HUGH, -IF YOU ARE ABLE TO DUPLICATE THIS CONCERN AT ANY TIME, PLEASE MAKE A RECORDING OF IT FEATURING APP(%), BARO(PRESS), CHT(TEMP), CYL_(1-6)_ACCL, DIST_BRKOVRD, EQ_RAT11 (RATIO), EQ_RATIO21 (RATIO), EVAPCP, FRP (PRESS), FRP DSD, FTP H20, GEAR, KNK CNTR CYL (1-6), KNK RATE LRND, LOAD, LONGFT1, LONGFT2, MAP(PRESS), MFF_INGEAR, MFF_LOAD, MFF_RPM, MFF_RUN, MFF_SOAK, MFF_TCC_LOCK, MFF_THR_ANG, MFF TRIP, MFF VSS, MP LRN, NUM MISFIRE, OCTADJ R LRND, O2S11 CUR, O2S21_CUR, RPM, RUNTM, SHRTFT1, SHRTFT2, TQ_CNTRL, TR, VPWR, VREF, AND VSS. UPLOAD THIS RECORDING TO THE HOTLINE USING IDS. NOTE THAT HIGH RPM (4000+). LOADED ACCELERATION, AND/OR UPHILL DRIVING MAY BE NEEDED TO DUPLICATE THE CONCERN. -INSPECT, CLEAN, AND RE-TORQUE G105 (12NM + 45 DEGREES). THIS GROUND IS LOCATED ON THE BACK OF THE LEFT HAND SIDE CYLINDER HEAD AND MAY BE SEEN EASIER WITH THE VEHICLE IN THE AIR ON THE HOIST. -VERIFY THAT THE VEHICLE IS NOT BEING RUN ON E85 FUEL, PERFORM PPT HC6. -RECOMMEND TO REPLACE ALL BANK TWO IGNITION COILS AND PLUGS. SET ASIDE FOR ENGINEERING REVIEW VIA 700 TAG. ISM 11-06-009 3.5L ECOBOOST MISFIRE UNDER LOAD OR P0430 DTC

- REPAIR10/10/2011 03:20PM TONY ROMANO MSS FCSD TECH SVC HOTLINEI ROAD TESTED 98 MILES AND MADE 5 RECORDINGS AND HAVE SENT THEM. LETME KNOW THAT YOU GOT THEM, THEY ARE ID BY THE LAST EIGHT OF THE VINBFC66391. I HAVE THE COILS ORDERED, OH IT DID NOT ACT UP DURING THEROAD TEST REAL BAD, I THINK I DID FEEL SOME BUCKING A FEW TIMES, IMGOING TO LOOK AT THE RECORDINGS MYSELF LATER. LET ME KNOW IF YOU GOTTHEM, THANKS. HUGH
- **RECOMM** 10/10/2011 03:20PM TONY ROMANO MSS FCSD TECH SVC HOTLINE HUGH, DUE TO SO SYSTEM CONCERNS THE UPLOADED DATA COULD NOT BE REVIEWED AT THIS MOMENT. WHEN IT DOES BECOME AVAILABLE IT WILL BE CHECKED. THANK YOU FOR THE INFORMATION. BE SURE TO CHECK GROUND G105 AND REPLACE THE PLUGS ON BANK 2 AS WELL. IF POSSIBLE AND NOT ALREADY REMOVED, USE A MARKER TO NUMBER THE COILS. THANK YOU AGAIN.
- **REPAIR** 10/10/2011 03:54PM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE I WILL, AND I ALREADY THOUGHT ABOUT MAKING ALL THE PLUG BOXS AND COIL BOXS AND I WILL TAG THEM 700 AND I WILL CHECK THE GROUND. I WILL RESPOND BACK AFTER I COMPLETE THE REPAIR AND GET FEEDBACK ON IT. WAITING ON THE COILS, THEY HAVE BEEN ORDERED. HUGH
- **RECOMM 10/10/2011 03:54PM DEREK KVENVOLD MSS FCSD TECH SVC HOTLINE** HUGH, THANK YOU FOR THE UPDATE. LET US KNOW HOW THE REPAIR GOES. IF YOU HAVE ANY OTHER QUESTIONS OR CONCERNS, FEEL FREE TO UPDATE THIS FORM.

From:	McDonagh, Scot (S.M.)
Sent:	Friday, March 01, 2013 12:07 PM
То:	Nowaczyk, Rick (R.J.)
Cc:	Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Oyafuso, Kevin (K.G.); Ronzi, Bill (W.C.)
Subject:	RE: 2011-2012 F-150 3.5L GTDI CAC Misfire TSB 069-2013-1261R1 has gone to FINAL as 13-3-3 (enUSA)

Thanks Rick- The SSM release is still on hold? When will FCSD kick off the QSF now that we have exceeded EC Threshold? I heard Fascetti and Berardi are discussing the issue.

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

-----Original Message-----From: Nowaczyk, Rick (R.J.) Sent: Friday, March 01, 2013 10:25 AM To: McDonagh, Scot (S.M.); Dixon, Mark (M.R.); Sparks, Douglas (D.S.); Oyafuso, Kevin (K.G.); Ronzi, Bill (W.C.) Cc: Dobbs, Dan (K.D.); Ricks, Kevin (K.J.); Nowaczyk, Rick (R.J.) Subject: 2011-2012 F-150 3.5L GTDI CAC Misfire TSB 069-2013-1261R1 has gone to FINAL as 13-3-3 (enUSA) Importance: High

Team, the TSB is now released to the dealers. Dealers will be able to see the TSB message tomorrow.

Under TSB article # 13-3-3

-----Original Message-----From: Siplus, G (G.) Sent: Friday, March 01, 2013 10:22 AM To: Nowaczyk, Rick (R.J.) Subject: 069-2013-1261R1 has gone to FINAL as 13-3-3 (enUSA) Importance: High

English TSB Article 13-3-3 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: <u>http://www.protechnician.com/</u>.

Concern Tracking Number: 069-2013-1261R1

TSB Article Number: 13-3-3

Description: 3.5L GTDI - Intermittent Stumble/Misfire On Acceleration From Highway Cruise In Humid Or Damp Conditions With Possible DTC.

Vehicles: F-150

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

From:
Sent:
To:
Subject:

Doss, Jacob (J.E.) Thursday, January 17, 2013 11:34 AM Nowaczyk, Rick (R.J.) RE: 2011-2012 F-150 Ecoboost

Thank you, We will work on a plan to address these issues on a case by case with the regions.

Jacob Doss

Customer Resolution Specialist Ford Motor Company Customer Relationship Center Phone 321-435-1482 Fax 888-392-8683 jdoss@ford.com

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From: Nowaczyk, Rick (R.J.) Sent: Thursday, January 17, 2013 10:50 AM To: Doss, Jacob (J.E.) Cc: Luckett Hurst, Dealie (D.); Dobbs, Dan (K.D.) Subject: RE: 2011-2012 F-150 Ecoboost

Jake,

It sounds like the Region and the FSE's need to have a decision with the dealers that are holding the vehicle for repair. Clearly not all dealers across the country are hold these vehicles for this repair. The TSB does not state the vehicle be held until all the repair(s) are completed. The dealers should have already performed verification and diagnostics prior to performing the TSB. ASO is not going to support another service message drawing more attention to this concern then is already required. Keep in mind all TSB/SSM messages go to NHTSA. We understand the frustration around parts availability, but PS&L is doing the best they can to get parts to the dealers ASAP.

From: Doss, Jacob (J.E.) Sent: Thursday, January 17, 2013 10:14 AM To: Nowaczyk, Rick (R.J.) Cc: Luckett Hurst, Dealie (D.); Dobbs, Dan (K.D.) Subject: RE: 2011-2012 F-150 Ecoboost

Rick,

I understand the concern. I appears the dealers are not understanding how the misfire occurs with the CAC moisture build up and only waiting until the CAC arrives to continue diagnosis. I think there should be some clarification broadcast message sent to make sure the dealers understand the concern. Don't leave vehicle down and undrivable until CAC are available.

Jacob Doss

Customer Resolution Specialist Ford Motor Company Customer Relationship Center Phone 321-435-1482 Fax 888-392-8683 jdoss@ford.com

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From: Nowaczyk, Rick (R.J.) Sent: Thursday, January 17, 2013 10:07 AM To: Doss, Jacob (J.E.) Cc: Luckett Hurst, Dealie (D.); Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.) Subject: RE: 2011-2012 F-150 Ecoboost Importance: High

Jake,

The CAC and the deflector shield are the key parts to address this misfire condition. The PCM reflash update does not impact preventing the misfire from occurring, it does however help prevent a Cat. failure by shorting the delay to go into FMEM mode if a misfire event did happen.

From: Doss, Jacob (J.E.) Sent: Thursday, January 17, 2013 9:45 AM To: Nowaczyk, Rick (R.J.); Dobbs, Dan (K.D.) Cc: Luckett Hurst, Dealie (D.) Subject: FW: 2011-2012 F-150 Ecoboost

Rick and Dan,

Can you assist with getting some better direction to the field for this TSB 12-10-19. We have been discussing the concerns with the dealers but they are referring back to the TSB stating this should be completed first. My issue is we are waiting for parts and having to buy back vehicles for a potentially incomplete diagnosis. Here is a list of dealers and case numbers. Is there anything we can do to improve the description of the concern?

1556553062	05254	LONG MCARTHUR, INC.	11540325
1397253042	04932	PRESTIGE FORD/FLEET	11547570
319263312	09722	KRAPOHL FORD & LINCOLN	
		CO.	
1557732402	03010	BRONDES FORD INC.	11635334
469712382	00225	LONG-LEWIS FORD	11635124
		LINCOLN	
539443542	09798	HIGHWAY FORD	11637846
414322691	12045	RAY PEARMAN LINCOLN,	11637543
		INC	

1452513552	08178	PUNDMANN MOTOR COMPANY	11640104
433143552	00341	BILLY HOWELL FORD L-M	11639965
1357573552	04910	COOK-WHITEHEAD FORD	11639820
416913542	03810	SUPREME FORD	11642451
1397133562	03810	SUPREME FORD	11642440
1275993562	04867	MIKE SHAD FORD	11642204
1680633552	08305	EVERGREEN FORD	11642647
1318473562	04664	JORDAN FORD	11644459
1296973572	01360	NEW HOLLAND FORD	11644453
425163562	00548	CASKINETTE'S LOFINK	11644517
		MOTOR CO.	
355543562	10432	WEISLEDER FORD	11646573
577083532	00469	BONDY'S FORD LINCOLN	11646550
347523632	02737	VILLAGE FORD INC	11647531
1513072922	04800	METTER FORD	11647470
673143552	08305	EVERGREEN FORD	11647937
1676553552	08305	EVERGREEN FORD	11647942
1508513662	01330	JOHN KENNEDY FORD	11648686
		POTTSTOWN	
1503133662	05224	THOROUGHBRED FORD	11650573
1650113662	08199	DAVE SINCLAIR FORD, INC.	11650587
1438013082	20389	MCSPADDEN FORD, INC.	11650761
302763572	04864	MIKE DAVIDSON FORD	11650821
1375810033	03049	MUNDAY FORD	11653243
514460033	09372	TOUSLEY FORD, INC.	11653816
510100023	06597	BULL VALLEY FORD, INC.	11653226
652320043	04462	RANDALL REED'S PLANET FORD	11656360
1597733482	02220	L F DONNELL, INC.	11655693
285540033	04790	GARY YEOMANS FORD	11655317
1464330033	07941	HERITAGE FORD	11656210
635502022	00225	LONG-LEWIS FORD LINCOLN	11656912
1636450033	02684	CARL GREGORY FORD LINCOLN OF A	11656906
588400073	06042	TOMBALL FORD, INC.	11659935
1584930073	06042	TOMBALL FORD, INC.	11659929
571510023	10006	MONTROSE FORD LINCOLN	11659979
1610530062	01857	BUSS FORD LINCOLN	11658470
538020043	07749	FUTURE FORD LINCOLN	11660097
332840033	06033	NORTH POINT FORD LINCOLN	11662968
1626610083	01362	BOB RUTH FORD, INC.	11659408
466220083	08533	UHLMANN FORD	11662759
621780073	00978	CAPITAL FORD INC	11662087
624200073	00978	CAPITAL FORD INC	11662048
425040083	08387	TRACY FORD	11662635

1505110971	07941	HERITAGE FORD	11663377
1642870083	04617	CHAMPION FORD KATY	11664834
799402231	05340	ROYAL OAK FORD	11664988
1336970083	08844	SAYBROOK FORD, INC.	11665624
627920083	00472	JIM TIDWELL FORD	11664755
593360043	04948	GARY SMITH FORD INC	11665047
1474710083	03897	LITHIA FORD LINCOLN OF	11665592
14/4/10085	03837	BOISE	11005552
367240043	04275	LANDERS-MCLARTY FORD	11668259
1512693552	07298	PACIFICO MARPLE FORD	11668371
		LINCOLN	
470380093	07059	CROSSROADS FORD OF	11668096
		INDIAN TRAI	
561860083	04875	ROUNTREE MOORE INC	11669410
599820113	04462	RANDALL REED'S PLANET FORD	11672273
604880113	04462	RANDALL REED'S PLANET	11672285
		FORD	
1612310113	04572	RUSSELL & SMITH FORD,	11672304
		INC.	
661201842	03978	BEARTOOTH FORD	11672212
509960073	00402	AKINS FORD CORP	11670866
621663552	00402	AKINS FORD CORP	11670970
1623553552	00402	AKINS FORD CORP	11670811
1624193552	00402	AKINS FORD CORP	70951
1624713552	00402	AKINS FORD CORP	11670934
1625313552	00402	AKINS FORD CORP	11670917
1180983502	08199	DAVE SINCLAIR FORD, INC.	11675160
1376170083	02204	MARSHALL FORD LINCOLN	11674661
1345470143	00025	PRESTON FORD LINCOLN	11674263
1561410143	00509	ALLAN VIGIL FORD LINCOLN, INC.	11646524
1429510143	10233	SENTRY SOUTH LINCOLN,	11675098
1425510145	10255	INC.	11075058
579840143	06902	BANKSTON FORD OF	11676612
0,0010110	00002	BURLESON	110,0012
360640312	02672	IMLAY CITY FORD, INC.	11677673
598900143	09497	PINES FORD LINCOLN	11677108
569820143	00341	BILLY HOWELL FORD L-M	11646524
		INC	
583700153	00068	BOB BELL FORD	11677915
466680083	02849	B & L FORD INC	11676541
619581942	00554	SMITH-COOPERSTOWN,	11676722
		INC.	
706600113	05516	COLE & BURD FORD-	11676587
		LINCOLN, INC.	
386440143	04994	HERITAGE FORD/FLEET	11677290
522120143	07941	HERITAGE FORD	11678063

Jacob Doss

Customer Resolution Specialist Ford Motor Company Customer Relationship Center Phone 321-435-1482 Fax 888-392-8683 jdoss@ford.com

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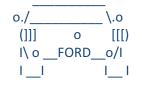
From: Mitchell, Patrick (P.J.) Sent: Thursday, January 17, 2013 9:29 AM To: Doss, Jacob (J.E.) Subject: 2011-2012 F-150 Ecoboost

Jake,

We have been having a lot of CAC requests for the 2011 and 2012 F-150 Ecoboost engines for the water buildup TSB 12-10-19. We have 84 cases currently with Parts Delays in our system. Some of the dealers are keeping vehicles down and putting people in rentals for this concern. This is pushing several vehicles towards possible buy back qualification. In many of the cases I have checked in depth with most of them do not fit the symptoms for even needing the CAC other than it happens in moist conditions. I was wondering if Engineering or anyone has looked at putting out another message or something to try and clarify this further to the dealers. They just seem the be blaming a lot of different concerns on the CAC and not doing diag to find out if there are other concerns. Just seems like we are pushing customers off in a lot of cases for no reason.

PATRICK MITCHELL

Technical SME | Ford Customer Service Division | Customer Care Team 321-435-1191 (direct) | 866.508.4457 (fax) pmitch22@ford.com



From: Sent: To: Subject: Arledge, Lynn (L.) Monday, October 22, 2012 8:59 AM Nowaczyk, Rick (R.J.) RE: 2012 F-150 - 3.5L CAC Misfire (Mr.

Hi Rick,

Mr. Morgan did contact me shortly after the repair. He stated the vehicle is performing very well. I'll keep you updated if I receive further information.

Thanks,

Privileged and Confidential

Lynn Arledge Senior Executive Representative Ford Executive Offices - CCGO Ford Motor Company (313) 845-5808 Email: larledge@ford.com

From: Nowaczyk, Rick (R.J.) Sent: Monday, October 22, 2012 8:45 AM To: Arledge, Lynn (L.) Subject: RE: 2012 F-150 - 3.5L CAC Misfire (Mr Importance: High

Lynn,

Have you heard back from the this customer after the repair?

Team,

Mr. will drop the vehicle off at Varsity Ford on Wednesday September 19, 2012 at approximately 9am. Tyler Crumb is the contact and he can be reached at (734) 332-1764. I advised Tyler the part would be delivered to the dealership on Friday 9/14 or Monday 9/17. If Tyler is not available when the part is delivered, please see Brian Maher.

Varsity Ford (02736) 3482 Jackson Rd. Ann Arbor, MI 48103

Please let me know if you need more information.

Thanks,

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Lynn Arledge Senior Executive Representative Ford Executive Offices - CCGO Ford Motor Company (313) 845-5808 Email: <u>larledge@ford.com</u>

From: Nowaczyk, Rick (R.J.) Sent: Wednesday, September 12, 2012 3:23 PM To: Arledge, Lynn (L.); McDonagh, Scot (S.M.) Cc: Sparks, Douglas (D.S.); Tyler, Jim (J.S.); Kramer, Michael (M.T.); Ricks, Kevin (K.J.); Dobbs, Dan (K.D.) Subject: RE: 2012 F-150 - 3.5L CAC Misfire (Mr.

Excellent! Thank you.

From: Arledge, Lynn (L.) Sent: Wednesday, September 12, 2012 2:29 PM To: Nowaczyk, Rick (R.J.); McDonagh, Scot (S.M.) Cc: Sparks, Douglas (D.S.); Tyler, Jim (J.S.); Kramer, Michael (M.T.) Subject: RE: 2012 F-150 - 3.5L CAC Misfire (Mr.

Rick,

I spoke with Mr and he prefers to have the vehicle repaired at Varsity Ford. Mr. Morgan will be driving the vehicle to Michigan on Sunday September 16, 2012. I've advised him I will contact Tyler Crumb at Varsity Ford and we will arrange the appointment. Once I know the appointment time and date, I will send an additional email.

Thanks,

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Lynn Arledge Senior Executive Representative Ford Executive Offices - CCGO Ford Motor Company (313) 845-5808 Email: larledge@ford.com

From: Nowaczyk, Rick (R.J.) Sent: Wednesday, September 12, 2012 2:14 PM To: Arledge, Lynn (L.); McDonagh, Scot (S.M.) Cc: Sparks, Douglas (D.S.); Nowaczyk, Rick (R.J.); Tyler, Jim (J.S.); Kramer, Michael (M.T.) Subject: RE: 2012 F-150 - 3.5L CAC Misfire (Mr.

Lynn,

Will you be scheduling the appointment for the customer with the dealer?

I just spoke to the FSE (Scott Murray) to make sure that he was in the loop. He mention that the point of contact at the dealer would be the Service Manager Taylor Crumb. I will let the FSE know when everything is setup, so he is not blindsided the next time he walks into the dealer.

Thanks...

From: Arledge, Lynn (L.) Sent: Wednesday, September 12, 2012 12:28 PM To: Tyler, Jim (J.S.); Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.) Cc: Sparks, Douglas (D.S.); McDonagh, Scot (S.M.) Subject: RE: 2012 F-150 - 3.5L CAC Misfire (Mr.

Team,

Can we get a part to Varsity Ford by September 18, 2012?

Please advise.

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Lynn Arledge Senior Executive Representative Ford Executive Offices - CCGO Ford Motor Company (313) 845-5808 Email: <u>larledge@ford.com</u>

From: Tyler, Jim (J.S.) Sent: Wednesday, September 12, 2012 12:26 PM To: Nowaczyk, Rick (R.J.); Kramer, Michael (M.T.) Cc: Sparks, Douglas (D.S.); McDonagh, Scot (S.M.); Arledge, Lynn (L.) Subject: RE: 2012 F-150 - 3.5L CAC Misfire (Mr.

Rick, the 10 service CACs BL34-9L440-AE are expected to arrive from Valeo on Friday 9/14 by around 10am. Tracking number will be FedEx 800075070912.

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

From: Nowaczyk, Rick (R.J.) Sent: Wednesday, September 12, 2012 8:50 AM To: Tyler, Jim (J.S.); Kramer, Michael (M.T.) Cc: Sparks, Douglas (D.S.); McDonagh, Scot (S.M.); Arledge, Lynn (L.) Subject: FW: 2012 F-150 - 3.5L CAC Misfire (Mr. ______ Importance: High

Engineering Team,

We have a hot request for new CAC to address a customer concern that has come down from Alan Mulally's office. (Please see notes below).

Thanks...

From: Ricks, Kevin (K.J.) Sent: Tuesday, September 11, 2012 5:01 PM To: Tansil-Marshall, Robin (R.); Arledge, Lynn (L.); Nowaczyk, Rick (R.J.) Cc: Berardi, Michael (M.A.); Dobbs, Dan (K.D.) Subject: RE: 2012 F-150 -

We will get the latest. Rick Nowaczyk is coordinating the efforts. Rick will you check the history of this vehicle and advise please.

From: Tansil-Marshall, Robin (R.) Sent: Tuesday, September 11, 2012 2:42 PM To: Arledge, Lynn (L.) Cc: Ricks, Kevin (K.J.); Tansil-Marshall, Robin (R.); Berardi, Michael (M.A.) Subject: FW: 2012 F-150 -

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Lynn,
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Work with Kevin. Thanks.

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Robin Tansil-Marshall

Team Leader Executive Liaison/Correspondence Consumer Affairs FCSD Phone: 313-845-5761 Fax: 866-670-0349 rtansil@ford.com

From: Berardi, Michael (M.A.) Sent: Tuesday, September 11, 2012 2:17 PM To: Tansil-Marshall, Robin (R.); Czubay, Kenneth (M.); Sloan, Jeffrey (J.); Scott, Douglas (D.W.) Cc: Ricks, Kevin (K.J.) Subject: Re: 2012 F-150

Let's get this customer the updated calibration if he doesn't have it already and the new tube.

Kevin, please procure the latest hardware.

From: Tansil-Marshall, Robin (R.) Sent: Tuesday, September 11, 2012 01:04 PM To: Czubay, Kenneth (M.); Sloan, Jeffrey (J.); Scott, Douglas (D.W.); Berardi, Michael (M.A.) Cc: Tansil-Marshall, Robin (R.) Subject: RE: 2012 F-150

EL will contact the customer and work with SEO as needed. Thanks.

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Robin Tansil-Marshall

Team Leader Executive Liaison/Correspondence Consumer Affairs FCSD Phone: 313-845-5761 Fax: 866-670-0349 rtansil@ford.com

From: Scrupsky, Lori (L.) On Behalf Of Czubay, Kenneth (M.) Sent: Tuesday, September 11, 2012 10:42 AM To: Tansil-Marshall, Robin (R.); Sloan, Jeffrey (J.); Scott, Douglas (D.W.); Berardi, Michael (M.A.) Subject: FW: 2012 F-150

Can one of you pls. respond to Mr. , pls.

Thank you.

Lori Scrupsky

Office of Ken Czubay V.P., U.S. Marketing, Sales & Service 313-322-1207 Iscrups1@ford.com

From: Mulally, Alan (A.R.) Sent: Tuesday, September 11, 2012 10:35 AM To: Czubay, Kenneth (M.) Subject: FW: 2012 F-150

From:

Sent: Tuesday, September 11, 2012 9:04 AM To: Mulally, Alan (A.R.) Subject: 2012 F-150

GOOD MORNING MR MULALLY, I WOULD LIKE TO MAKE YOU AWARE OF AN ISSUE WITH THE F-150 ECOBOOST ENGINE PACKAGE. APPARENTLY THERE IS A PROBLEM WITH CONDENSATION BUILD UP IN THE INTAKE TRACT OF THE ENGINE. THIS "CONCERN" HAS BEEN PRESENT IN MY 2012 F-150 SINCE 1200 MILES. STILL PRESENT AT 6000 MILES WITH NO FIX IN SIGHT. FORD CUSTOMER SERVICE IS AWARE OF THE ISSUE AND SUPPOSEDLY WORKING ON ANOTHER ATTEMPT TO FIX THE PROBLEM. MY QUESTION TO YOU IS, ARE YOU AWARE OF THIS ISSUE? I HAVE HAD THE TRUCK NEW SINCE APRIL 2012, UNABLE TO USE IT FOR THE INTENDED PURPOSE. HAVE BEEN TOLD NOTHING CAN BE DONE TILL THE NEXT ATTEMP AT A FIX IS RELEASED LATE 4TH QUARTER. THE FIRST 3 ATTEMPTS AT A FIX WERE NOT SUCCESSFUL. THERE ARE SEVERAL CUSTOMERS OUT IN THE FIELD WITH THE SAME PROBLEMS. ANY HELP WOULD BE APPRECIATED.

THAN YOU

CELL#

From: Sent: To: Cc: Subject: Cockerill, Al (C.A.) Wednesday, September 21, 2011 8:16 AM Dobbs, Dan (K.D.) Nowaczyk, Rick (R.J.) RE: 3.5 GTDI Misfire

Dan, I'm not sure why the compliance question is being asked. To my knowledge, the misfire monitor meets all regulatory requirements. I assume there is some bad information floating around.

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

-----Original Message-----From: Dobbs, Dan (K.D.) Sent: Wednesday, September 21, 2011 8:08 AM To: Cockerill, Al (C.A.) Cc: Nowaczyk, Rick (R.J.) Subject: RE: 3.5 GTDI Misfire

Al, Anything new on GTDI misfire since the VQR last Friday

-----Original Message-----From: Nowaczyk, Rick (R.J.) Sent: Wednesday, September 21, 2011 7:41 AM To: Dobbs, Dan (K.D.) Cc: Ricks, Kevin (K.J.) Subject: RE: 3.5 GTDI Misfire

Dan,

Any latest information on the misfire QSF issue with the 3.5L GTDI?

-----Original Message-----From: Dobbs, Dan (K.D.) Sent: Monday, September 19, 2011 1:18 PM To: Ricks, Kevin (K.J.) Cc: Nowaczyk, Rick (R.J.) Subject: 3.5 GTDI Misfire Kevin, I chatted with our compliance folks. They were very interested.

Contacts John Trajnowski and Marie Wilson. John advised me to contact Marie, and she actually called me today.

I passed Marie the latest 6-panel to look it over for any EPRC compliance implications.

From: Sent: To: Cc: Subject: Dobbs, Dan (K.D.) Monday, September 12, 2011 2:08 PM Cockerill, Al (C.A.) Nowaczyk, Rick (R.J.) RE: 3.5 GTDI Miss

Thanks Al.

The timing will exceed the QSF target (Oct. 25).

Can we do something to help you meet the timing.?

Regards

K.D. Dan Dobbs

FCSD Service Engineering Operations F-150 PVT Program Manager Certified 6-Sigma Master Black Belt Level II Phone:313-845-6078 kdobbs@ford.com

Politics is the art of looking for trouble, finding it everywhere, diagnosing it incorrectly, and applying the wrong remedies.

Groucho Marx

From: Cockerill, AI (C.A.) Sent: Monday, September 12, 2011 1:15 PM To: Dobbs, Dan (K.D.) Subject: RE: 3.5 GTDI Miss

<< File: PDQR Update_9Sept11_v1.ppt >>

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:Dobbs, Dan (K.D.)Sent:Monday, September 12, 2011 1:13 PMTo:Cockerill, Al (C.A.)Subject:RE: 3.5 GTDI Miss

Thanks!

From: Cockerill, AI (C.A.) Sent: Monday, September 12, 2011 12:30 PM To: Dobbs, Dan (K.D.) Subject: RE: 3.5 GTDI Miss

We are talking with Vice Presidents today. I will update you later

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From:	Dobbs, Dan (K.D.)
Sent:	Monday, September 12, 2011 12:26 PM
To:	Cockerill, AI (C.A.)
Cc:	'Steven Hamilton (S.C.) (02017814)'; Nowaczyk, Rick (R.J.)
Subject:	3.5 GTDI Miss

Morning Al, Just checking in on any new developments for the misfire.

We have an open QSF on this one, and I wanted to maintain a dialogue since Steve Hamilton and I are switching jobs.

From:	Hamilton, Steven (S.C.)
Sent:	Monday, September 12, 2011 1:35 PM
То:	Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)
Subject:	RE: 3.5 GTDI Miss
То:	Monday, September 12, 2011 1:35 PM Dobbs, Dan (K.D.); Nowaczyk, Rick (R.J.)

FYI...November 30 service closure target is over 1 month past 68 day QSF closure target (October 25). I would push for the timing to be improved.

Best regards,

Steve Hamilton

FCSD Service Engineering Operations F-150 PVT Program Manager (313)390-7750

From:	Dobbs, Dan (K.D.)
Sent:	Monday, September 12, 2011 1:29 PM
To:	Nowaczyk, Rick (R.J.)
Cc:	Hamilton, Steven (S.C.)
Subject:	FW: 3.5 GTDI Miss

FYI

From: Cockerill, AI (C.A.) Sent: Monday, September 12, 2011 1:15 PM To: Dobbs, Dan (K.D.) Subject: RE: 3.5 GTDI Miss

<< File: PDQR Update_9Sept11_v1.ppt >>

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Subject:	RE: 3.5 GTDI Miss

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