PE14-030

FORD

12/19/2014

APPENDIX I

Engineering Review

Non Conf - Eng Review

PART 2 OF 2

PART 2 OF 3

From: Estes, Eric (E.E.)
Sent: Thursday, May 21, 2009 6:28 PM
To: Estes, Eric (E.E.); 'Abe Ghaphery'; 'Andrew Williams'; 'Anthony Fleenor'; 'Costas Chrysochoidis'; 'Geoff Jacks'; 'Robert Kinnear'; 'Simon Malsbury'; 'Mark Karwowski'; 'Jim.Duehring@TRW.COM'; 'Salim.Semssar@TRW.COM'; 'Sanjay.Singh@TRW.COM'; 'Martha Abundis'; 'phil.browne@trw.com'; 'andy.ausband@trw.com'; 'Greg Bendzinski'; 'Glenn.Bailey@TRW.COM'; 'William.Olsen@TRW.COM'; 'Paul IRELAND'; 'Jason Johnson-contr'; Bouse, William (W.J.); Bahena, Miguel (Mike.); Diez, Timothy (T.P.); Christiansen, Jens (J.F.); Porter, Wesley (W.); Frey, Martin (M.F.); Hochrein, Brad (B.G.); Rossi, Roberto (R.A.)
Subject: 2010 CD3 #4 warranty return
Attachments: #4 gear warranty return data.pdf

Just got an email on another 2010 CD3 warranty return**#4**, **C1B00-62(B93) & C200D-49(motor rotational angle sensor) unsure what "B" motor position fault set**. See the attachment for the diagnosis the tech used and codes set from the other modules. This time the Interactive Online Diagnosis picked up the codes prior to the U3000-96(B69) but did not pick up the snap shot data I talked today with the diagnostic programmers on why the snapshot did not work so they are looking into that now. I will hot process this gear back for evaluation hopefully I see this gear next week, I will update everyone with tracking number.

Eric J. Estes
Warranty Analyst - TRW Automotive
6-Sigma Center 15010 S. Commerce Dr.
Dearborn, Michigan 48120
Ph.#(313) 390-3843 Fax#(888) 502-9600

Year = MY10
Model = CD334
Engine = 2.5L
VIN = 3MEHM0HA9AR[redacted]_STD
PCM = AE5A-12A650-GE
ABS = AE5C-2C219-FB
DCDC = Could not retrieve part number from mandatory module!
GEM_SJB = AG1T-14B476-CB
IC = AE5T-14C026-BH
OCS = 9E53-14C371-AD
PSCM = AE5C-14D003-AK
RCM = 9E53-14C028-AB

Current DTCs {retrieved 21 May 2009 12:41:37}

DTC	Snap Shot Data	Source
C1277	N/A	ABS
P1000:00	N/A	PCM

Historic DTCs {retrieved 21 May 2009 12:41:37}

DTC	Snap Shot Data	Source
U3000:96	00	PSCM

DTCs cleared since initial read:

DTC	Snap Shot Data	Source
B1676	N/A	ABS
U0100	N/A	ABS
B1318	N/A	GEM_SJB
U0161:00	N/A	IPC
U3003:16	N/A	IPC
C1B00:62	N/A	PSCM
C200D:49	N/A	PSCM
U0415:00	N/A	PSCM
B00A0:63	N/A	RCM
U3003:16	N/A	RCM

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)

Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.
- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3MEHM0HA9AF[redacted]

System Related CMDTCs Active {retrieved 21 May 2009 11:46:07}

DTC	Description	Source	Status
U3000:96	Control Module : Component Internal Failure	PSCM	Historic
C1B00:62	Steering Angle Sensor : Signal Compare Failure	PSCM	Historic
C200D:49	Motor Rotation Angle Sensor : Internal Electronic Failure	PSCM	Historic
U0415:00	Invalid Data Received from ABS Control Module : No Sub Type Information	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

Recent Warranty Repair History: No recent repair history on vehicle

Review the OASIS results below for any known concerns related to the current vehicle.

SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE. ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE. Effective Date: 05/06/2009	1 out of 5 303000
SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD	1 out of 5 303000

INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE: THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION. Effective Date: 05/14/2009	
Search criteria with no matching OASIS results: U3000 C1B00 C200D U0415	

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

Detected DTCs / DTC Index

EPAS

Current DTCs {retrieved 21 May 2009 11:46:07}

DTC	Description / Action	Source
N/A	No DTCs to report	

Historic DTCs {retrieved 21 May 2009 11:46:07}

DTC	Description / Action	Source
U3000:96	Control Module: Component Internal Failure **Description:** The PSCM is self monitoring and will carry out self-tests at specific intervals (initial power up, power down, during normal operation, etc.). Each self-test requires the voltage supply to the PSCM to be at or above a specific level (above 6 volts, above 9 volts, between 10 and 17 volts, etc.) for the test to take place. If one or more of the self-tests should fail, then the module will set one or more DTCs. • DTC U3000:41 (Control Module: General Checksum Failure) - If at any time during normal operation the module detects an internal software error with more than 6 volts supplied to the PSCM, then DTC U3000:41 will be set. • DTC U3000:46 (Control Module: Calibration/Parameter Memory Failure) - At any time during normal operation with more than 6 volts supplied to the PSCM the module determines that one or more calibration files are missing or that they are corrupt or that the incorrect EPAS gear is installed on the vehicle, then DTC U3000:46 will be set . • DTC U3000:49 (Control Module: Internal Electronic Failure) - If at any time during normal operation with more than 6 volts supplied to the PSCM, the module detects a software or internal hardware error then the DTC U3000:49 will be set. • DTC U3000:61 (Control Module Signal Calculation Failure) - If the PSCM detects that assist torque calculation is faulty due to a software failure in the module, then DTC U3000:61 will be set. • DTC U3000:72 (Control Module Actuator Stuck Open) - During initial power up with voltage greater than 9 volts, the PSCM will check the internal relay for voltage. If voltage is not present the module will make several attempts to close the relay. If the voltage remains undetected after this test period, then DTC U3000:72 will be set. • DTC U3000:96 (Control Module: Component Internal Failure) - This DTC will set if there is an internal failure of the PSCM due to temperature, power supply or if multiple failures have occurred over a short period of time. **Possible Causes:** • Heat shield missing. • Steering gear internal failure. • Incorrect EPAS gear installed. • Ice/frost build up on relay contacts. • Heavy loads on the EPAS gear. • Excessive ambient temperatures. **Diagnostic Aids:** For DTC U3000:41, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The module will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:46, initially the PSCM will use a default steering assist and may set DTC U2100:00. If DTC U3000:46 returns on the next ignition cycle, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:49, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs (if any) are set along with U3000:49. Diagnose all other DTCs before diagnosing U3000:49. For DTC U3000:61, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The PSCM will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:72, this DTC indicates that a specific internal relay is either stuck open or has excessive resistance. In cold climates or climates where frost is possible, the relay contacts could develop a layer of frost which may prevent a clean connection between the relay contacts. It may be necessary to allow the vehicle to remain outside overnight in a cold climate to duplicate the DTC trigger conditions. If U3000:72 sets again on subsequent ignition cycles, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:96, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs are set along with U3000:96. If steering assist is affected the PSCM will send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. **Action:** GO to Pinpoint Test C.	PSCM

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

⊞ C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure

⊟ C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD

- Make sure the EPAS gear heat shield is present and installed correctly. Refer to Section 211-02.
- **Is the heat shield present and is it installed correctly?**

Yes
Go to C2.

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

⊞ IV1: VISUAL INSPECTION

⊞ KC1: KNOWN CONCERNS

⊞ Detected DTCs / DTC Index

⊞ Menu Selection: Inspection and Verification

⊞ IV1: VISUAL INSPECTION

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

⊞ IV1: VISUAL INSPECTION

⊞ KC1: KNOWN CONCERNS

⊞ Detected DTCs / DTC Index

⊞ Menu Selection: Inspection and Verification

⊞ IV1: VISUAL INSPECTION

⊞ KC1: KNOWN CONCERNS

⊞ Detected DTCs / DTC Index

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

⊞ C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure

⊞ C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD

⊞ C2: TEST DRIVE TO CHECK FOR RETURNING DTCS.

Exit: Thu May 21 12:00:00 EDT 2009

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

⊞ **IV1: VISUAL INSPECTION**

⊞ **KC1: KNOWN CONCERNS**

⊞ **Detected DTCs / DTC Index**

⊞ **Menu Selection:** Inspection and Verification

⊞ **IV1: VISUAL INSPECTION**

⊞ **KC1: KNOWN CONCERNS**

⊞ **Detected DTCs / DTC Index**

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

⊞ **C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure**

⊞ **C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD**

Exit: Thu May 21 12:00:00 EDT 2009

Resume: Thu May 21 12:16:00 EDT 2009

⊟ **C2: TEST DRIVE TO CHECK FOR RETURNING DTCS. - Fault outcome**

-
- Cycle the ignition to OFF and then back to RUN.

NOTE: Always drive the vehicle in a safe manner according to driving conditions and obey all traffic laws.

- Test drive the vehicle in the following manner:
  —With the engine running/ready, stop the vehicle on an unsealed concrete or asphalt surface (in order to provide adequate friction for a thorough test).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.
  —Return the steering wheel to the center position and move the vehicle forward approximately 32 cm (1 ft).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.
  —Return the steering wheel to the center position and move the vehicle forward approximately 32 cm (1 ft).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.

NOTE: The next portion of the test drive will require the vehicle to be driven at highway speeds.

NOTE: The test period is a cumulative time of 10 minutes. Stopping, going slower than 72 km/h (45 mph) or faster that 96 km/h (60 mph) will not affect the test as long as a total time of 10 minutes is spent between 72-96 km/h (45-60 mph) with at least 4 lane changes during that time/speed window.

- Continue test driving the vehicle in the following manner:
  —Bring the vehicle to a minimum speed of 72 km/h (45 mph), maximum of 96 km/h (60 mph).
  —Maintain that speed for at least 10 minutes.
  —During this 10-minute time period, make a minimum of 4 lane changes or turns that achieve a steering wheel angle of at least 20 degrees.
  —The test drive is complete.
- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3MEHM0HA9AF[redacted]_STD

System Related CMDTCs Active {retrieved 21 May 2009 12:41:37}

DTC	Description	Source	Status
U3000:96	Control Module : Component Internal Failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

- **Is DTC U3000:61 and/or U3000:96 present?**

Yes
INSTALL a new EPAS gear. Refer to Section 211-02.

Exit: Thu May 21 12:42:00 EDT 2009

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

⊞ **IV1: VISUAL INSPECTION**

⊞ **KC1: KNOWN CONCERNS**

⊞ **Detected DTCs / DTC Index**

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

⊞ **C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure**

⊞ **C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD**

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

⊞ **IV1: VISUAL INSPECTION**

⊞ **KC1: KNOWN CONCERNS**

⊞ **Detected DTCs / DTC Index**

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

⊞ **C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure**

⊞ **C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD**

Start: Thu May 21 11:46:00 EDT 2009

Menu Selection: Inspection and Verification

⊞ **IV1: VISUAL INSPECTION**

⊞ **KC1: KNOWN CONCERNS**

⊞ **Detected DTCs / DTC Index**

⊞ **Menu Selection: Inspection and Verification**

⊞ **IV1: VISUAL INSPECTION**

From: Mrozek, Robert (R.M.)
Sent: Tuesday, October 27, 2009 1:05 PM
To: Quijada, Jorge (J.); Rogero, Antonio (A.); Annadi, Hari (H.)
Cc: Snider, Tim (T.O.); Mrozek, Robert (R.M.)
Subject: 2010 EPAS CD3 Claim # 40862 VIN#3FAHP0HA1AR[redacted]

Jorge/Hari -

We have the attached CD3 EPAS claim with little useful description and no contact information. The dealer is a Dollar/Thirfty Rental company and I am not sure how to make contact with them w/o any information in the claim outside of making cold calls to them.

Who is the FCSD contact for HSAP and any suggestion on how we can follow up on this claim? Thank you.

Claim Detail Report

Note: All costs are in US dollars
Model Year = 2010; Claim Key = 40862

Vehicle Information

Model Year: 2010
Market Derived: F - FORD
Body/Cab Type: C/FA - 4 DOOR SEDAN-4 LITE
Version/Series: *-[N/A]
Drive Type: C/A-2 WHL D/H FRONT DRIVE
Vehicle Line: C/DE-FUSION/MILAN/MKZ (ZEPHYR) [06-10]
Warranty Start Date: 25-JUN-2009
Production Date: 10-JUN-2009
VIN: 3FAHP0HA1AR[redacted]

Claim Information

Document Number: 90316801
Repair Date: 17-SEP-2009
Distance: 5216
TIS: 3

Dealer Information:

Dealer Name: DTAG - HOUSTON
Dealer Code: 46569 - *
Address: 8620 PANAIR
City: HOUSTON
State: TX Zip Code:77061
Country: USA Region Code: NA
Phone: (*)*-*

Expense Information

Customer Paid Amount:	.00
Deductible Amount:	.00
Dealer Paid Amount:	.00
Labor Cost:	85.00
Misc. Expense Amount:	.00
Part Markup Amount:	187.96
Material Cost:	1127.76
Total Cost Gross:	1212.76

Cust. Concern Code: H50 - STEERING GEAR/PUMP TROUBLES
Condition Code: 42 - DOES NOT OPERATE PROPERLY
Technician Comment: REPLACE RACK AND PINION
Customer Comment: NO POWER STEERING

Labor Op Code	Labor Op Description	Labor Op Cost
3504A	STEERING GEAR ASSEMBLY REMOVE AND INSTALL OR REPLACE	85.00

Causal Flag	Full Part Number PREF	BASE	SUFF	Part Description	CPSC	Part Quantity	Extended Amount
Y	AE5Z	3504	B	GEAR ASY-STEERING	110201	1	1127.76

DTC Sections: **Mil. Light On = ***

Flag	Test Type	Malfunction Cd	Malfunction Cd Description	Monitor Cd	Monitor Cd Description

Rob Mrozek

Electric Power Steering Supervisor
CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

2010 MY Ford Fusion, Mercury Milan and Hybrid (excluding 3.5L V6) - EPAS

TRW Rack Mounted System

1/3 volume of Escape/Mariner

Volume:

2010 MY: 172,586 (December)

After 3-4 faults (intermittent), the system will shut down the EPAS.

TRW only!

Model	2010 MY
3.0L V-6 Engine	38,292
I-4 Engine	112,752
Hybrid	21,542

Reports:

A – Inop/No/Lack of Assist, Intermittent, "Locked Up", Uneven/Stiff/Hard/Binding
B1 – Other Steering Complaints (Wander/Pull/etc)
B2 – Trac Light On/Other Lights – Replaced Column

Category	AWS	CQIS	VOQ	Total
A	81	62	0	143
B1	1	3	0	4
B2	13	2	0	15

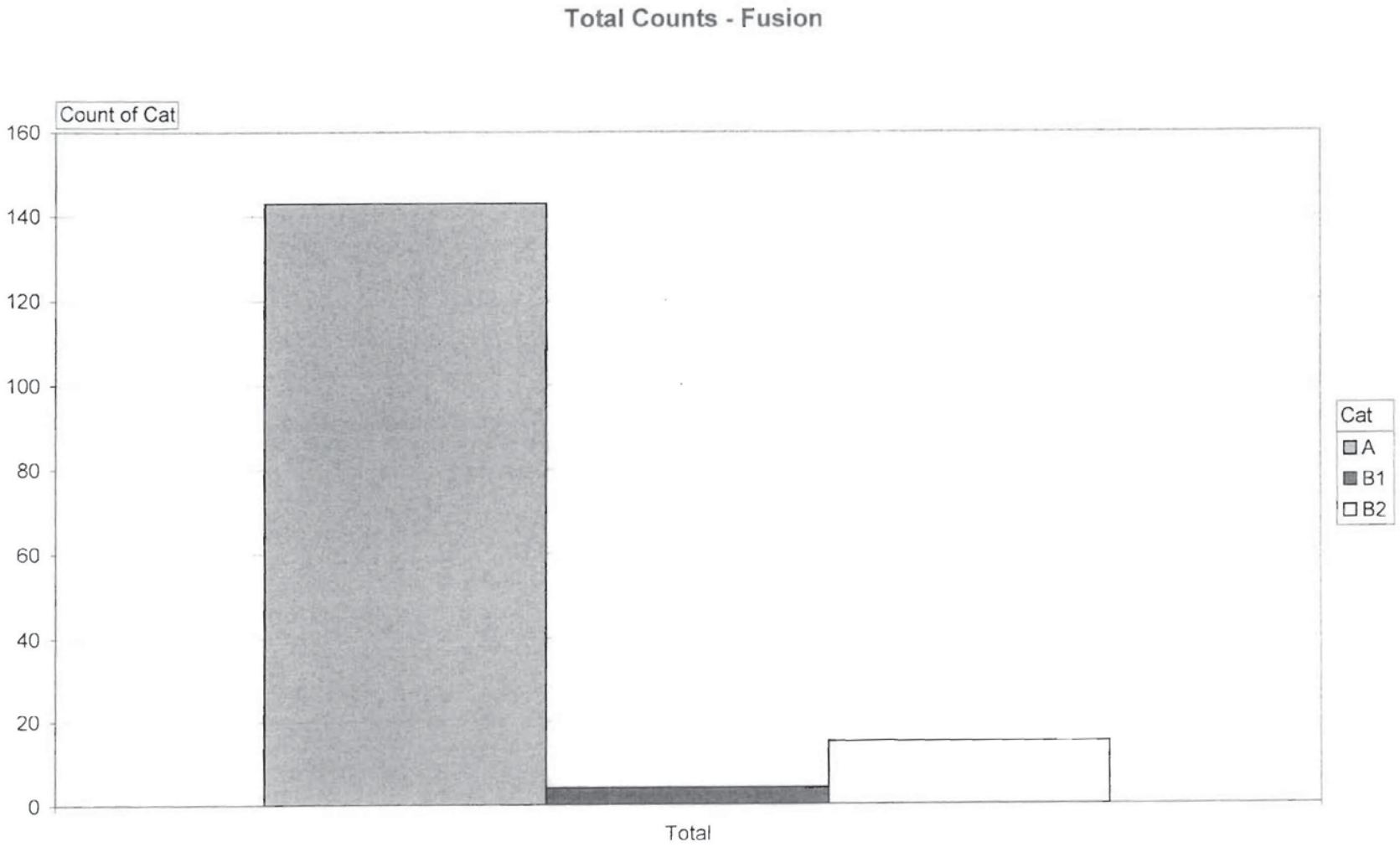
Overall Rates:

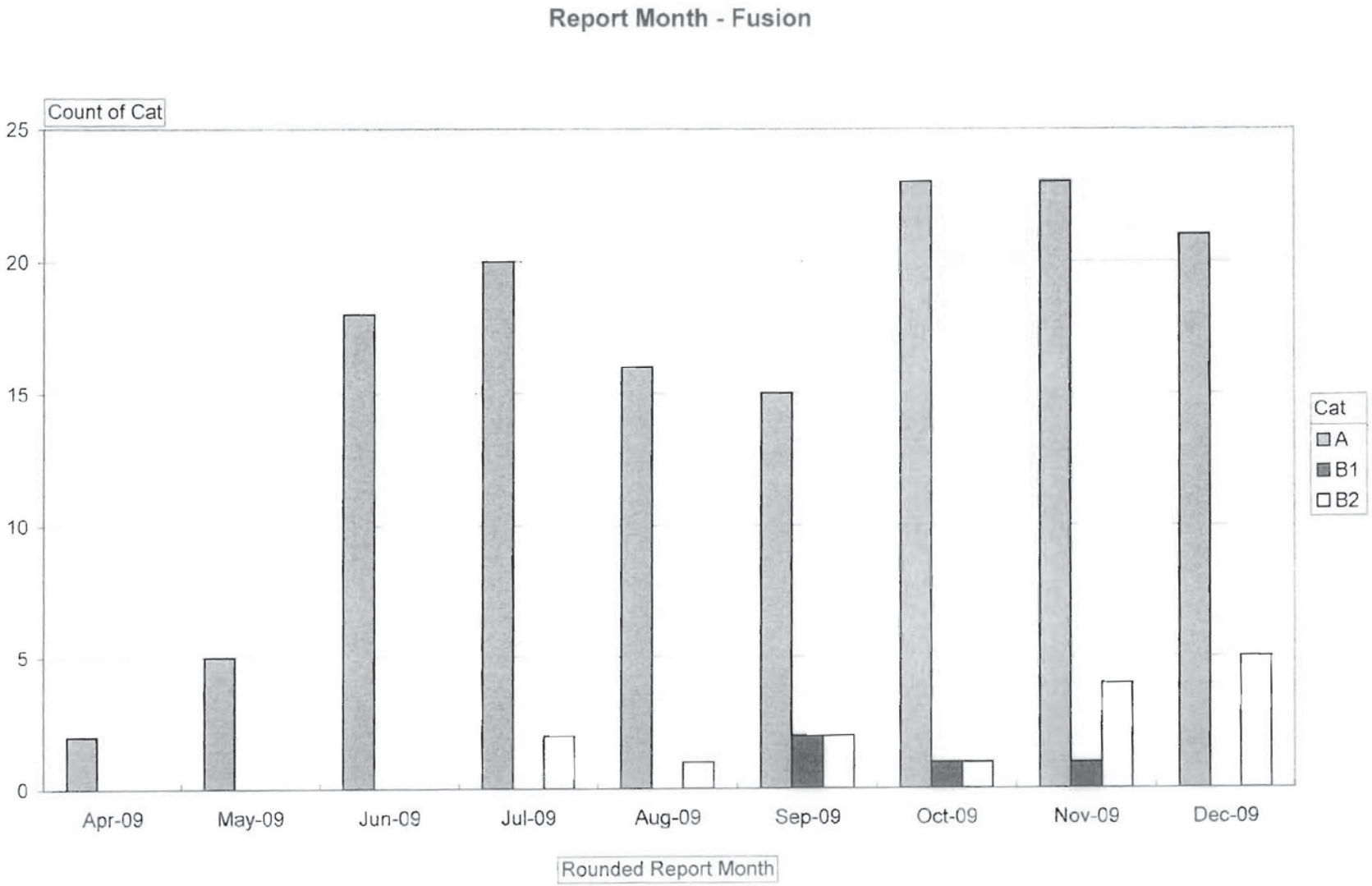
A = 0.8 R/1000
A+B1+B2 = 0.9 R/1000

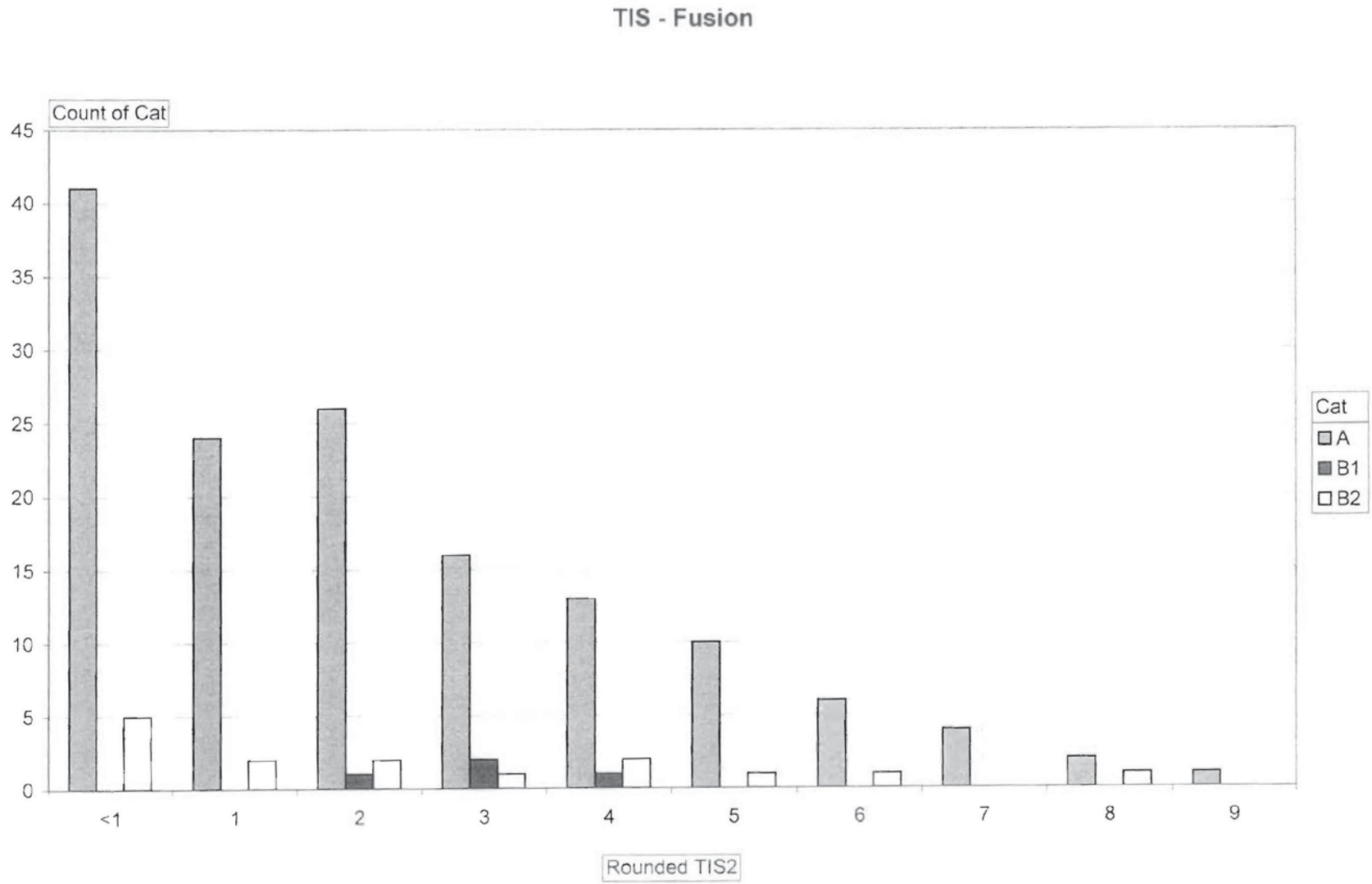
Rates by Engine Type (A's only):

V-6 = 0.7 R/1000
I-4 = 0.9 R/1000
Hybrid = 1.4 R/1000

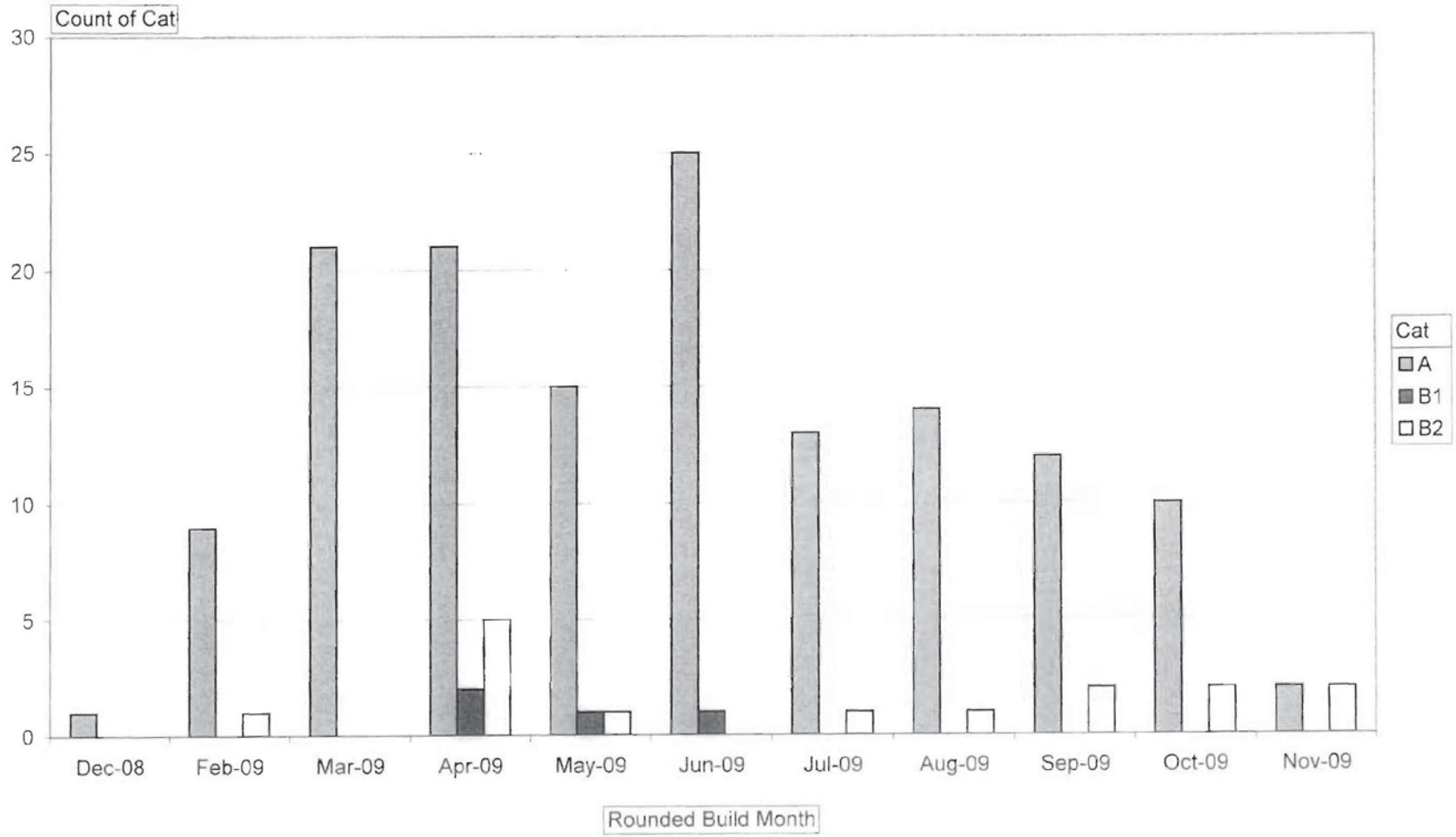
One alleged crash (Hit curb and blew tire)



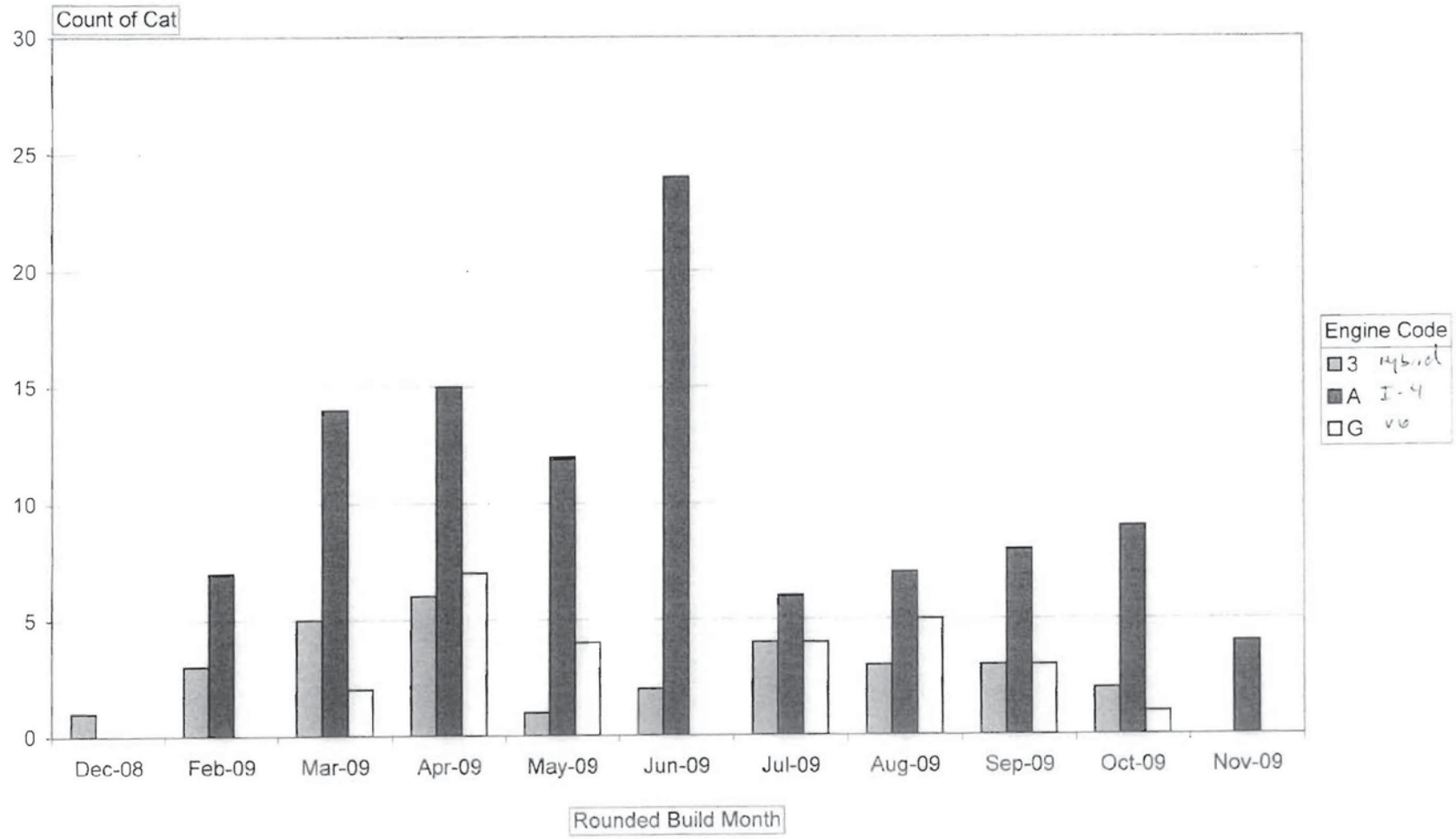




Build Month - Fusion



Build Month and Engine Code - Fusion



Engine Code - Fusion

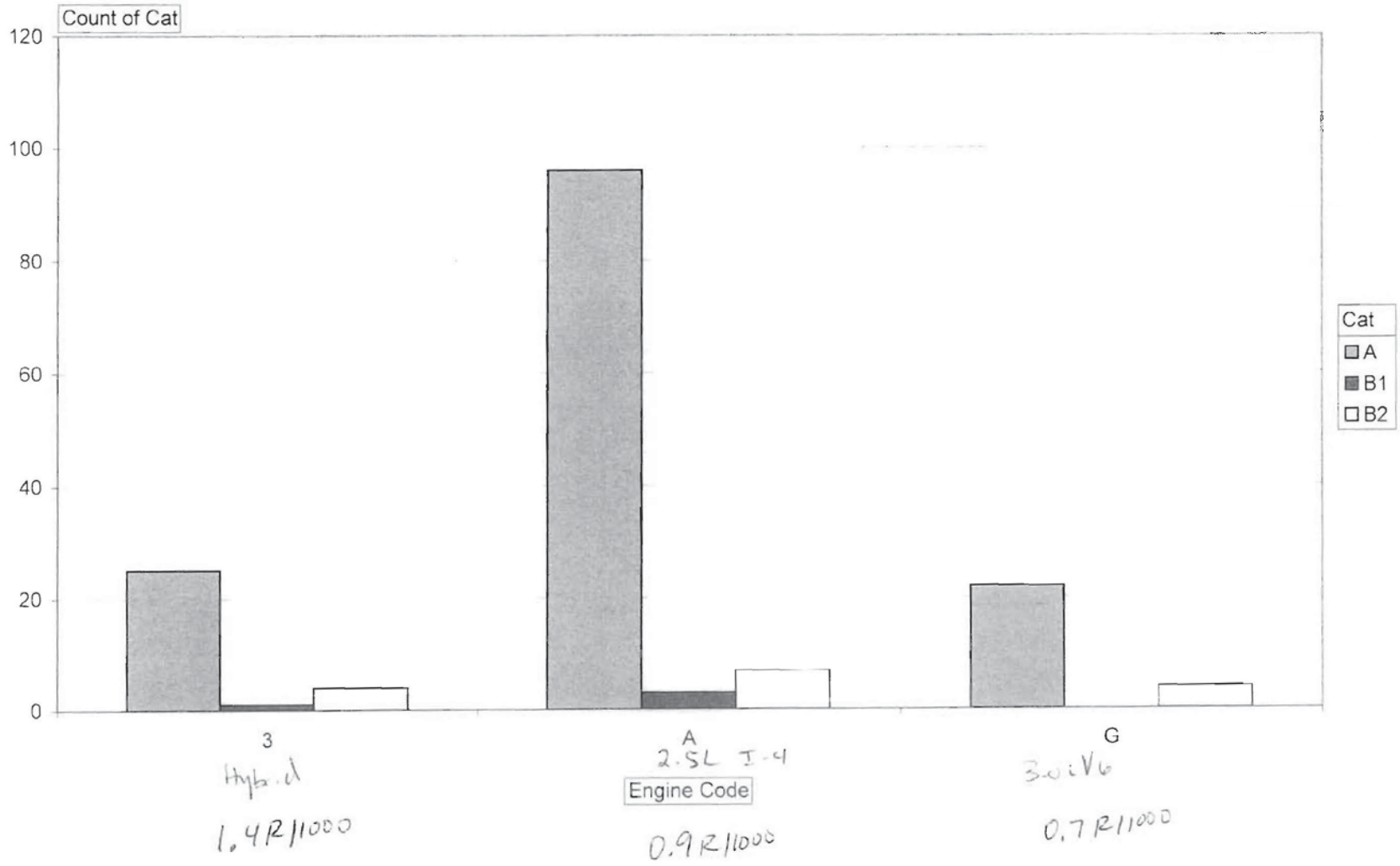


Exhibit 7

Warranty Claims

Claims for Inquiry: fusion

Inquiry: fusion

CLAIM_KEY: 55819 **RPR_DT:** 10/20/2009 **MILGE:** 642 **TXN_CD:** 2

MDL_YR: 2010 **AWS_VL_CD:** ML **VIN_CD:** 3MEHM0JA6AR[redacted]

PART_NUM_CAUS_PREF: * **PRODN_DT:** 9/16/2009

PART_NUM_CAUS_BASE: 3504 **WRTY_START_DT:** 10/2/2009

PART_NUM_CAUS_SUFF: * **TRANS_CD:** C/W6

DEALER : MAGUIRE FORD-LINCOLN-MERCURY **ENG_CD:** C/SB

CUST_CONC_CD: C50 **COND_CD:** 1 **DLR_CD:** 624 **ST_PROV_CD:** NY **CNTRY_SOLD:** USA

CUST_TXT: "C/S STERRING STOPPED WORKING, HIT CURB ADN BLEW TIRE"

TECH_TXT1: "TESTED GEAR SASSEMBLY, ROAD TESTED . CODE TEST U0415 PIN TEST MEMEORY ALL NORMAL PASSED ELECTRONIC POWER TEST ASSIST WORKING NORMAL REPLACED T WHEEL DUE TO STEERING CONCERNS ROAD TEST ALLWORK"

TECH_TXT2: ING TO SPEC

CQIS Reports for Inquiry fusion

Inquiry: fusion | Report No: 9LABZ012 | Report Date: 12/1/2009 | Source: CQIS

Model Year: 2010 | Model: FUSION | VIN 3FADP0L31AF[redacted] | PGM Type:

Symptoms: 3 03 1 50 CHASS. FUNCTION | STRG/HANDLING HIGH EFFORT

Addl. Symptom: NO STEERING ASSIST | Odometer: 97 M

Engine: 2.5 ATKINS | Transmission: CVT AUT | Build Date: 9/29/2009 | Warranty Start:

Dealer: 03170 Go Courtesy Ford | FCSD Region: | City: Littleton | State: CO

Customer First Name: | Last Name | City: | State:

Causal Component: | Photo: 0

Comment Type:	Comments:
REPAIR	WEB FORM DATA -CONCERN: NO P/S ASSIST DISPLAY READS P/S FAULTDIAGNOSTI
REPAIR	CS: INSTALLED IDS RETRIEVE CODES MULTIPLE CODES, FOUND WIRING HARNESS
REPAIR	CUT AT STEERING GEAR, SENSOR FOR TORQUE SENSOR AND ANGLE SENSOR 6 WIRE
REPAIR	S IN HARNESS SPLICED WIRES USING SOLDIER AND HEATSHRINK, CLEARED ALL C
REPAIR	ODES STILL NO P/S ASSIST ALL CODES HAVE BEEN REMOVED EXCEPT U300 STILL
REPAIR	NO ASSIST AND DISPLAY STILL READS FAULT NO OTHER FAULT FOUND, INTERAC
REPAIR	TIVE SHOWS TO REPLACE GEAR?PARTS REPLACED:: WIRING REPARTECH QUESTION:
REPAIR	SHOULD I REPLACE GEAR OR AM I MISSING SOMETHING?WERE YOU ABLE TO VERI
REPAIR	FY THE CONCERN? YESIS THERE AN APPROPRIATE PINPOINT TEST IN THE WSM FO
REPAIR	R THIS CONCERN? YESWAS THE PINPOINT TEST FOLLOWED? YES
RECOMM	GARY, THE LOG FOR THE GUIDED DIAGNOSTIC IS SHOWING THAT THIS VEHICLEHA
RECOMM	S ONLY HAD A VISUAL INSPECTION AND IS NOT SHOWING ANY DTC, HOWEVER ISE
RECOMM	E THAT THE DIAGNOSTICS WERE PERFORMED ON VIN 3FADP0L38AR[redacted] JUST LA
RECOMM	ST WEEK. COULD YOU PLEASE VERIFY THE VIN ON THE VEHICLE OF CONCERN AND
RECOMM	IF IT IS THE 3FADP0L38AR[redacted] SUBMIT A REQUEST ON THAT VIN.IF IT IS
RECOMM	THIS VEHICLE, PLEASE COMPLETE THE GUIDED DIAGNOSTIC AND IF YOU NEED F
RECOMM	URTHER ASSISTANCE, UPDATE THIS FORM WITH YOUR FINDINGS.
REPAIR	TECHNICIAN REPLY: WE HAVE 2 DIFFERENT VEHICLES WITH THE SAME CUT WIRS
REPAIR	FROM FACTORY IDENTICLE CUTS FROM SOME SORT OF INSTALL
RECOMM	GARY, I HAVE MADE AN INQUIRY INTO THE CUT WIRES THAT YOU ARE DESCRIBIN
RECOMM	G AND WILL FOLLOW UP WHEN MORE INFORMATION IS AVAILABLE. IN THE MEAN T
RECOMM	IME, PLEASE COMPLETE THE GUIDED DIAGNOSTICS FOR THE DTC THAT IS SETTIN
RECOMM	G. ALSO, YOU ENTERED DTC U3000. I AM ASSUMING THIS TO BE U3000. THERE
RECOMM	SHOULD ALSO BE SUB-TYPE INFORMATION FOR THIS DTC. I.E U3000:??. PLEASE
RECOMM	PROVIDE THE ENTIRE DTC SO WE CAN BETTER ASSIST YOU.
REPAIR	THE FSE CONTACTED THE HOTLINE TO DISCUSS THE CODE U3000 SET IN THE PSC
REPAIR	M. THE TECH HAS GONE THROUGH THE INTERACTIVE VEHICLE DIAGNOSTICS AND I
REPAIR	T STATED TO REPLACE THE ASSEMBLY. THE FSE IS WANTING TO KNOW IF THERE
REPAIR	ARE ANY OTHER REPAIRS THAT CAN FIX THE CODE U3000. SUGGESTED TO VERIFY
REPAIR	THE INTERACTIVE DIAGNOSTICS WAS FOLLOWED AND TO VERIFY THE CIRCUIT RE
REPAIR	PAIRS. IF THE INTERACTIVE DIAGNOSTICS LEADS TO MODULE REPLACEMENT THEN
REPAIR	REPLACE THE MODULE AS NECESSARY.

CQIS Reports for Inquiry fusion

Inquiry: fusion Report No: 9KSBM008 Report Date: 11/19/2009 Source: CQIS

Model Year: 2010 Model: FUSION VIN 3FAHP0JA2AR[redacted] PGM Type:

Symptoms: 3 03 1 50 CHASS. FUNCTION STRG/HANDLING HIGH EFFORT

Addl. Symptom: LACK ASSIST ON LONG SWEEP TURN Odometer: 3725 M

Engine: 2.5L DOHC Transmission: 6SP 6F MI Build Date: 3/27/2009 Warranty Start: 6/4/2009

Dealer: 02771 Jack Demmer Ford, Inc. FCSD Region: City: Wayne State: MI

Customer First Name: Last Name City: State:

Causal Component: Photo: 0

Comment Type: Comments:

REPAIR WEB FORM DATA -CONCERN: LOST POWER STEERING TWICE ON SWEEPING LEFT TUR
REPAIR N TURNED OFF VEHICLE FOR SEVEN SECONDS AND VEHICLE WAS OK.DIAGNOSTICS:
REPAIR ROADTEST SEVERAL MILES TURNING RT AND SEVERAL SWEEPING LT TURNSPARTS
REPAIR REPLACED:: NONETECH QUESTION: ANY KNOWNCONCERNS OF THIS TIMEWERE YOU A
REPAIR BLE TO VERIFY THE CONCERN? NOIS THERE AN APPROPRIATE PINPOINT TEST IN
REPAIR THE WSM FOR THIS CONCERN? NOWAS THE PINPOINT TEST FOLLOWED?
RECOMM ANTHONY, AFTER A SEARCH OF THE HOTLINE DATABASE I DID NOT FIND ANY COM
RECOMM MON TRENDS FOR THE POWER STEERING SYSTEM LOSING ASSIST WHEN TURNINGON
RECOMM A 2010 FUSION. SINCE WE NEED TO CHECK FOR ANY CODES THAT MIGHT BE STOR
RECOMM ED FOR THIS CONDITION, I SUGGEST YOU USE <A HREF='HTTP://WWW.VREP.FORD
RECOMM TECHSERVICE.DEALERCONNECTION.COM/VDIRS/SSM/SSM.ASP?SSM=20831' TARGET='
RECOMM _BLANK'>SSM 20831</A> TO ADDRESS THIS CONDITION.SSM 20831 THE 2010 FUS
RECOMM ION/MILAN WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH
REPAIR TECHNICIAN REPLY: U3000.49 IN POWER STEERING
RECOMM ANTHONY, WE ARE NOT SEEING A COMMON TREND RELATED TO THE U3000:49. PLE
RECOMM ASE CONTINUE WITH THE INTERACTIVE DIAGNOSTIC, WHEN THE DIAGNOSTIC HAS
RECOMM YOU PERFORM THE PARKING LOT TESTS TRY TO PERFORM ON A UNPAINTED/UNSEAL
RECOMM ED SURFACE (ROUGH CONCRETE IS BEST). THE FRICTION BETWEEN THE TIRES AN
RECOMM D CONCRETE WILL LOAD THE RACK AND GIVE A BETTER TEST RESULT.ONCE THIS
RECOMM TEST IS COMPLETE, UPDATE THIS FORM AND WE CAN REVIEW THE LOG FROM THE
RECOMM TESTS (THIS UPLOADS INTO OUR SYSTEM AUTOMATICALLY).
REPAIR TECHNICIAN REPLY: AFTER PERFORMED INTERACTIVE TEST,SYSTEM COMES BACK A
REPAIR S A PASS AND STATES TO RETURN TO CUSTOMER WITH NO CODES.
RECOMM ANTHONY,SINCE THE CODE HAS NOT RETURNED AT THIS TIME, BUT THE VEHICLE
RECOMM PREVIOUSLY HAD AN INTERNAL COMPONENT FAILURE CODE STORED, I ADVISE TO
RECOMM PERFORM A VOLT DROP OF ALL POWERS AND GROUNDS TO THE RACK (ENSURE YOU
RECOMM USE A VOLT DROP SINCE A LOAD TEST WILL NOT BE SUFFICIENT SINCE THE RAC
RECOMM K DRAW SO MUCH AMPERAGE).ALSO ENSURE ALL PINFITS AND CONNECTIONS AT TH
RECOMM E RACK ARE GOOD.IF THIS ALL CHECKS OUT, I ADVISE TO REPLACE THE EPAS R
RECOMM ACK BECAUSE OF THE CODE PREVIOUSLY STORED AND THESYMPTOM WHICH OCCURRE
RECOMM D.

CQIS Reports for Inquiry fusion

Inquiry: fusion **Report No:** 9JTBA020 **Report Date:** 10/20/2009 **Source:** CQIS

Model Year: 2010 **Model:** FUSION **VIN** 3FAHP0HAXAR[redacted] **PGM Type:**

Symptoms: 3 03 1 99 CHASS. FUNCTION STRG/HANDLING NOT LISTED

Addl. Symptom: U2011 EPAS CONCERN **Odometer:** 5223 M

Engine: 2.5L DOHC **Transmission:** 6SP 6F MI **Build Date:** 2/17/2009 **Warranty Start:** 6/2/2009

Dealer: 01170 Discovery Ford Lincoln M **FCSD Region:** **City:** Moses Lake **State:** WA

Customer First Name: **Last Name** **City:** **State:**

Causal Component: **Photo:** 0

Comment Type: **Comments:**

REPAIR WEB FORM DATA -CONCERN: WHEN TURNING SHARP, LEFT OR RIGHT, FORWARD FOR
REPAIR BACKWARD, STEERING WHEEL WILL VIOLENTLY KICK BACK AND "STEERING FAUL
REPAIR T" APPEARED ON MESSAGE CENTER. PULLED VEHICLE OVER AND CYCLED KEYON A
REPAIR ND OFF AND STEERING RETURNED TO NORMAL. MESSAGE CENTER BLANK UNTILCOND
REPAIR ITION OCCURS AGAIN.DIAGNOSTICS: PULLED CODES-U2011 PRESENT. DESCRIPTIO
REPAIR N-U2011-MOTOR. FAILURE TYPE-49-INTERNAL ELECTRONIC FAILURE. STATUS-08
REPAIR (NOT CURRENT DTC)-FAULT PREVIOUSLY DETECTED, NOT CURRENTLY PRESENT. PA
REPAIR RTS REPLACED:: NONE AT THIS TIMETECH QUESTION: CAN YOU GIVE US A PATH
REPAIR TO FOLLOW?WERE YOU ABLE TO VERIFY THE CONCERN? YESIS THERE AN APPROPRI
REPAIR ATE PINPOINT TEST IN THE WSM FOR THIS CONCERN? WAS THE PINPOINT TEST F
REPAIR OLLOWED?
RECOMM HELLO DAVID, IT IS CRITICAL TO FOLLOW THE EPAS INTERACTIVE DIAGNOSIS U
RECOMM SING THE IDS AND VCM TO INSURE THE FREEZE FRAME DATA AND READINGS AREU
RECOMM PLOADED. PLEASE FOLLOW THE 211-00A SECTION OF THE WSM.
TECH/C TECH COMMENTS: FOUND CONNECTION NOT PROPERLY SEATED

CQIS Reports for Inquiry fusion

Inquiry: fusion | Report No: 9IPCE010 | Report Date: 9/16/2009 | Source: CQIS

Model Year: 2010 | Model: FUSION | VIN 3FAHP0JG1AR[redacted] | PGM Type:

Symptoms: 3 03 1 99 CHASS. FUNCTION | STRG/HANDLING NOT LISTED

Addl. Symptom: EPAS HARNESS MELTED ON EXHAUST | Odometer: 2147 M

Engine: 3.0L 4V | Transmission: 6SP 6F MI | Build Date: 7/13/2009 | Warranty Start: 7/31/2009

Dealer: 02749 Ken Boggs Ford | FCSD Region: | City: Opelika | State: AL

Customer First Name: | Last Name | City: | State:

Causal Component: | Photo: 0

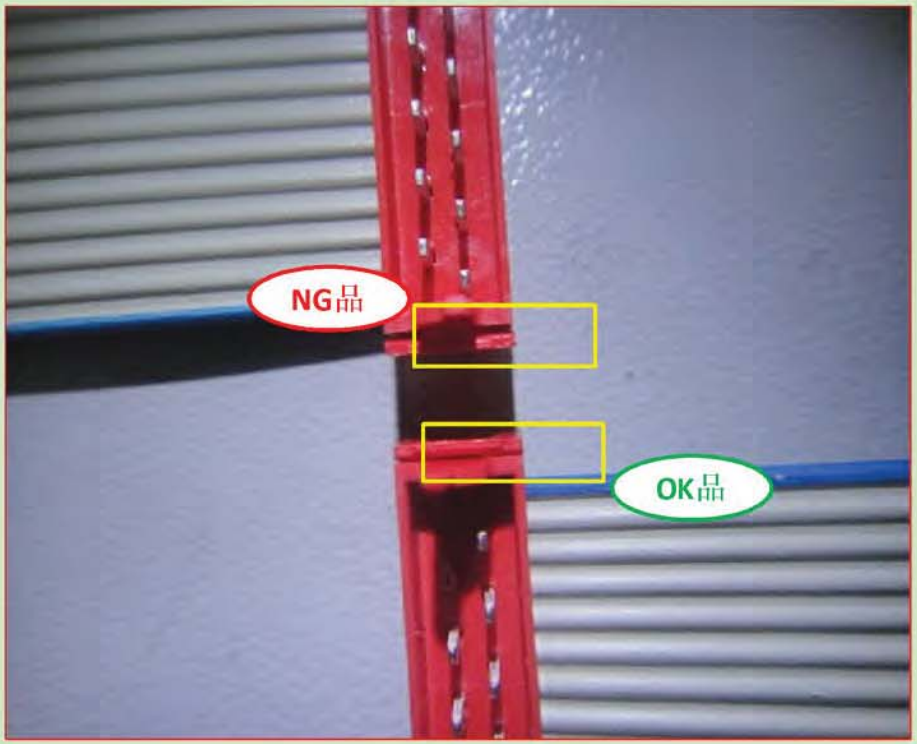
Comment Type:	Comments:
RECOMM	DAVID,WE HAVE NO SIMILAR REPORTS. PLEASE FORWARD PICTURES SHOWING THE
RECOMM	HARNESS DAMAGE TO PMCEACH1@FORD.COM. PLEASE REPAIR THE WIRING PER WSM
RECOMM	MANUAL PROCEDURES AND VERIFY THE REPAIR. PLEASE ADVISE WHETHER A HARNE
RECOMM	SS RETAINER WAS MISSING, NOT ATTACHED, OR WHETHER THE DAMAGE WAS RESUL
RECOMM	TANT OF ROAD DEBRIS OR SOME OTHER USE ISSUE?
REPAIR	WEB FORM DATA -CONCERN: NO POWER STEERING, ABS, T.C., LIGHTS ARE ON.DI
REPAIR	AGNOSTICS: CHECK CODES. INSPECT WIRING HARNESS. FOUND HARNESSBURNED ON
REPAIR	EXHAUST NEARP.S. RACK.PARTS REPLACED:: NONETECH QUESTION: KNOWN CONCE
REPAIR	RNS? ANY PREVIOUS WIRING ISSUES WITH HARNESS HITTING EXHAUST?WERE YOU
REPAIR	ABLE TO VERIFY THE CONCERN? YESIS THERE AN APPROPRIATE PINPOINT TEST I
REPAIR	N THE WSM FOR THIS CONCERN? NOWAS THE PINPOINT TEST FOLLOWED? NO
REPAIR	TECHNICIAN REPLY: I HAVE ALREADY REPAIRED THE HARNESS, THE CUSTOMER IS
REPAIR	COMING TO PICK UP THE VEHICLE NOW. CANNOT TAKE PICTURES. I REMOVED THE
REPAIR	HARNESS, REPAIRED THE GREEN WIRE CKT # CBP42. WIRE WAS SHORTED TO GROU
REPAIR	ND ON EXHAUST PIPE JUST BELOW CAT. CONV. WHERE HARNESS LEAVES SUBFRAME
REPAIR	HARNESS RETAINER. INSUTLATION WAS MELTED, NETWORK WIRES WERE ALSO MEL
REPAIR	TED TOGETHER. NO RETAINERS WERE MISSING OR BROKEN. DISCONNECTED WIRE H
REPAIR	ARNESS FROM P.S. MODULE AND REPAIRED WIRE, ALSO WRAPPED HARNESS WITH E
REPAIR	XHAUST INSULATIVE FABRIC AND METAL TAPE. REROUTED HARNESS AROUND HEAT
REPAIR	SHIELD AND PLUGGED IN. REPLACE FUSE F42 IN SMART JUNCTION BOX. RETEST,
REPAIR	PASS.
RECOMM	DAVID,THANK YOU FOR THE UPDATE TO THE FORM. THE FIX INFORMATION WILL B
RECOMM	E FORWARDED FOR REVIEW. PLEASE CONTACT THE TECHNICAL HOTLINE AGAIN IF
RECOMM	FURTHER DIAGNOSTIC ASSISTANCE IS REQUIRED.
ADD-ON	FORWARDING TO SME

CQIS Reports for Inquiry fusion

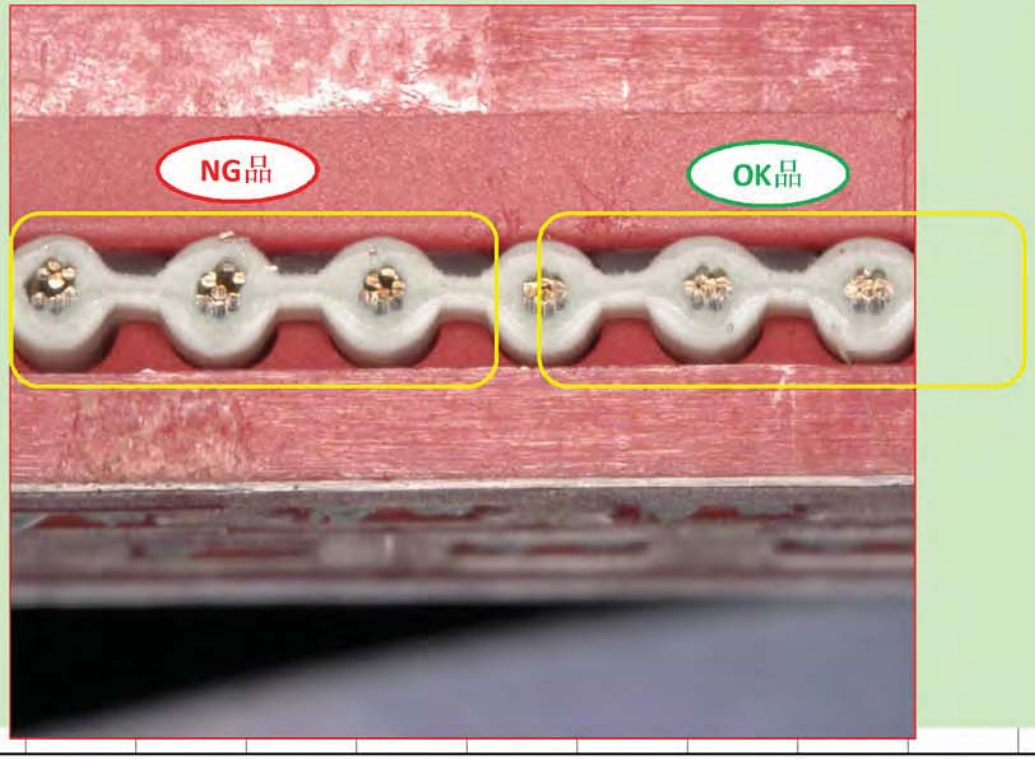
Inquiry: fusion	**Report No:** 9HTAK256	**Report Date:** 8/20/2009	**Source:** CQIS	
Model Year: 2010	**Model:** FUSION	**VIN** 3FAHP0HG0AR[redacted]	**PGM Type:**	
Symptoms: 3 03 1 50	CHASS. FUNCTION	STRG/HANDLING HIGH EFFORT		
Addl. Symptom: INTERM NO ASSIST		**Odometer:** 8548 M		
Engine: 3.0L 4V	**Transmission:** 6SP 6F MI	**Build Date:** 4/15/2009	**Warranty Start:** 4/30/2009	
Dealer: 05224 Thoroughbred Ford	**FCSD Region:**	**City:** Kansas City	**State:** MO	
Customer First Name:	**Last Name**	**City:**	**State:**	
Causal Component:			**Photo:** 0	

Comment Type:	Comments:
REPAIR	WEB FORM DATA -CONCERN: POWER STEERING HAS LOST ASSIST A COUPLE OF TIM
REPAIR	ES INTERMITITLY. DIAGNOSTICS: TEST DROVE 41 MILES. DID NOT HAVEA PROBL
REPAIR	EM. CHECKED FOR CODES AND HAD A C200D. WENT TO THE INTERACTIVE DIAG AN
REPAIR	D WENT TO PINPOINT TEST B. CHECKED ALL CONNECTORS ON GEAR. FOUND NO PR
REPAIR	OBLEMS. DID B2 DRIVE CYCLE TEST. DID NOT DISPLAY ANY CODES.TEST DROVE
REPAIR	WHILE WATCHING PIDS ANS ALL ARE REACTING TO STEERING WHEEL MOVEMENT AN
REPAIR	D OR SPEED. PARTS REPLACED:: NONETECH QUESTION: NEED SOME ASSISTANCE W
REPAIR	ITH ANY IDEAS. WERE YOU ABLE TO VERIFY THECONCERN? NOIS THERE AN APPRO
REPAIR	PRIATE PINPOINT TEST IN THE WSM FOR THIS CONCERN? YESWAS THE PINPOINT
REPAIR	TEST FOLLOWED? YES
RECOMM	TIM,REMOVE THE BELLOWS BOOT ON THE RACK AND IF RUSTY REPLACE THE RACK.
RECOMM	WE HAVE ALSO SEEN WATER INTRUSION INTO THE MODULE ON THE RACK CAUSE E
RECOMM	RRATIC OPERATION.

导线端子卡销间隙大



线束单品铜线端分散



From: Quis, Rudolf (R.)
Sent: Friday, May 13, 2011 12:30 PM
To: Bahena, Miguel (Mike.); Mattern, Don (D.); Surella, Matthew (M.M.); Bouse, William (Bill.); Diez, Timothy (T.P.); Birkenbeil, Thomas (T.); Hahn, Stephan (S.); Napoli, Laura (L.)
Cc: Schusteritz, Klaus (K.); Hilprecht, Ulrike (U.)
Subject: AW: B3A Woodpecker

Do you have also information on the established countermeasures.

You mentioned for example the diagnostic.
This is also something Tyco told me.
They are selling this relay also to other OEM, but this failures are occurring on TRW only.
So their assumption is that the TRW fault diagnostic is to sensible.

Best regards / Mit freundlichen Gruessen

Rudolf Quis

Lead System Engineer C1MCA EPAS
Chassis Steering
Ford Werke GmbH
D-MC/1-C2
Spessartstrasse
50725 Cologne-Merkenich
Germany

Tel. +49/221/9033868
Fax. +49/221/9033183
Ford internal: 87033868
e-Mail: rquis@ford.com

Von: Bahena, Miguel (Mike.)
Gesendet: Freitag, 13. Mai 2011 14:21
An: Quis, Rudolf (R.); Mattern, Don (D.); Surella, Matthew (M.M.); Bouse, William (Bill.); Diez, Timothy (T.P.); Birkenbeil, Thomas (T.); Hahn, Stephan (S.)
Cc: Schusteritz, Klaus (K.); Hilprecht, Ulrike (U.)
Betreff: RE: B3A Woodpecker

Rudi,

Since the start of CD3/ rfr production we have seen B3A/B43 faults due to multiple root causes (at least 7 or 8 that I can think of). In general the numbers of failures has been dramatically reduced but not 100 % eliminated.

Attached is a file that summarizes all TRW Rack EPAS B3a and relay failures showing all the different root causes, and failure run charts.

Yes for CD3/ rfr U502 we employ Hot Puma at QAO and Marion but there are investigations to move this testing to Anting.

Unfortunately the B3a diagnostic is highly sensitive and I do think the start point relay is robust enough to the sensitivity of the diagnostic. Because of this I think we need to move to a solid state electronic PIR function to move the needle further. Thanks.

Sincerely,

Mike Bahena
D3/D4 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com

< Datei: Tyco SPR relay returns 27-04-11.xls >>

From: Quis, Rudolf (R.)
Sent: Friday, May 13, 2011 7:42 AM
To: Bahena, Miguel (Mike.); Mattern, Don (D.); Surella, Matthew (M.M.); Bouse, William (Bill.); Diez, Timothy (T.P.); Birkenbeil, Thomas (T.); Hahn, Stephan (S.)
Cc: Schusteritz, Klaus (K.); Hilprecht, Ulrike (U.)
Subject: B3A Woodpecker

There has been activities in the past (CD3 and rfr to reduce Tyco relay failures, like woodpeckering, Puma tester and fault diagnostic changes.

Currently C1 is facing B3A failures as well.

Is someone able to pull together all this thing and give us an overview?

Are CD3 / rfr not seeing this issues?

Best regards / Mit freundlichen Gruessen

Rudolf Quis

Lead System Engineer C1MCA EPAS
Chassis Steering
Ford Werke GmbH
D-MC/1-C2
Spessartstrasse
50725 Cologne-Merkenich
Germany

Tel. +49/221/9033868
Fax. +49/221/9033183
Ford internal: 87033868
e-Mail: rquis@ford.com

From: Rossi, Roberto (R.A.)
Sent: Monday, February 23, 2009 11:22 PM
To: 'Mark Karwowski'; Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Diez, Timothy (T.P.); Bouse, Bill (W.J.); Christian Helming; Craig Zeki; Geoff Jacks; Martha Abundis; Mike Davies; Paul IRELAND; Simon Malsbury
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Phil Browne; Robert Kostadina; Ron Caldwell; Nicastri, Paul (P.R.); Brackett, Tom (T.P.); Liu, Ron (D.R.)
Subject: B3A Fault from Hermosillo (3FADP0L36AR[redacted] Optical Analysis

The following are files from the optical analysis of the motor relay contacts.

Thanks,

Roberto Rossi
Chassis Electronics Supervisor
313-805-4157

Lord Jesus Christ, Son of the Father, send now Your Spirit over the earth. Let the Holy Spirit live in the hearts of all nations that they may be preserved from degeneration, disaster and war. May The Lady of All Nations be our advocate. Amen.

From: Nicastri, Paul (P.R.)
Sent: Monday, February 23, 2009 5:25 PM
To: Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Mince, Robert (R.W.); Brackett, Tom (T.P.); Mrozek, Robert (R.M.)
Subject: TRW EPAS Relay Pictures

I've attached the optical microscope picture of the contacts from the suspect relay.


Overall Stationary.jpg


Contact A Movable.jpg


Contact A Stationary.jpg

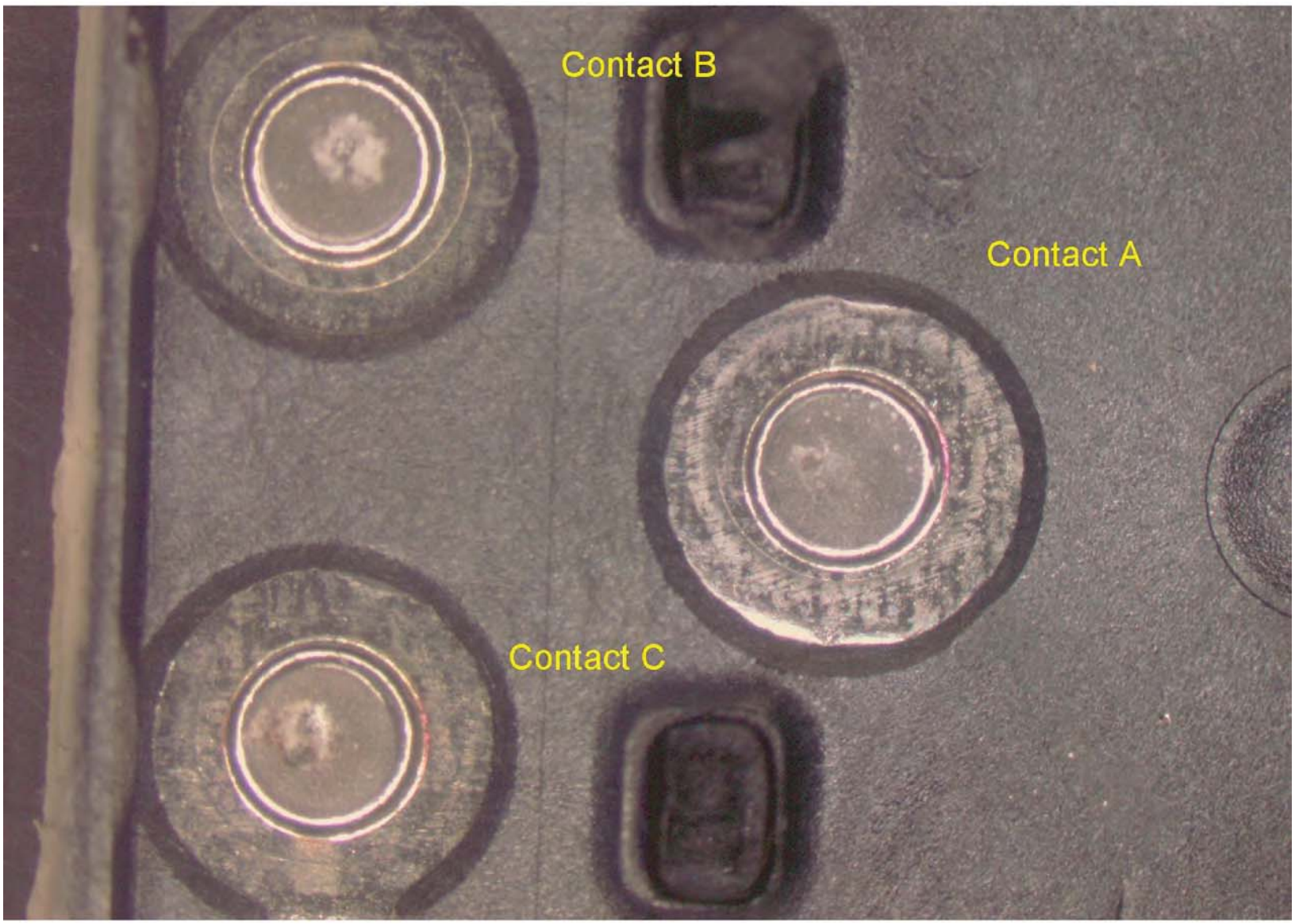

Contact B Movable.jpg

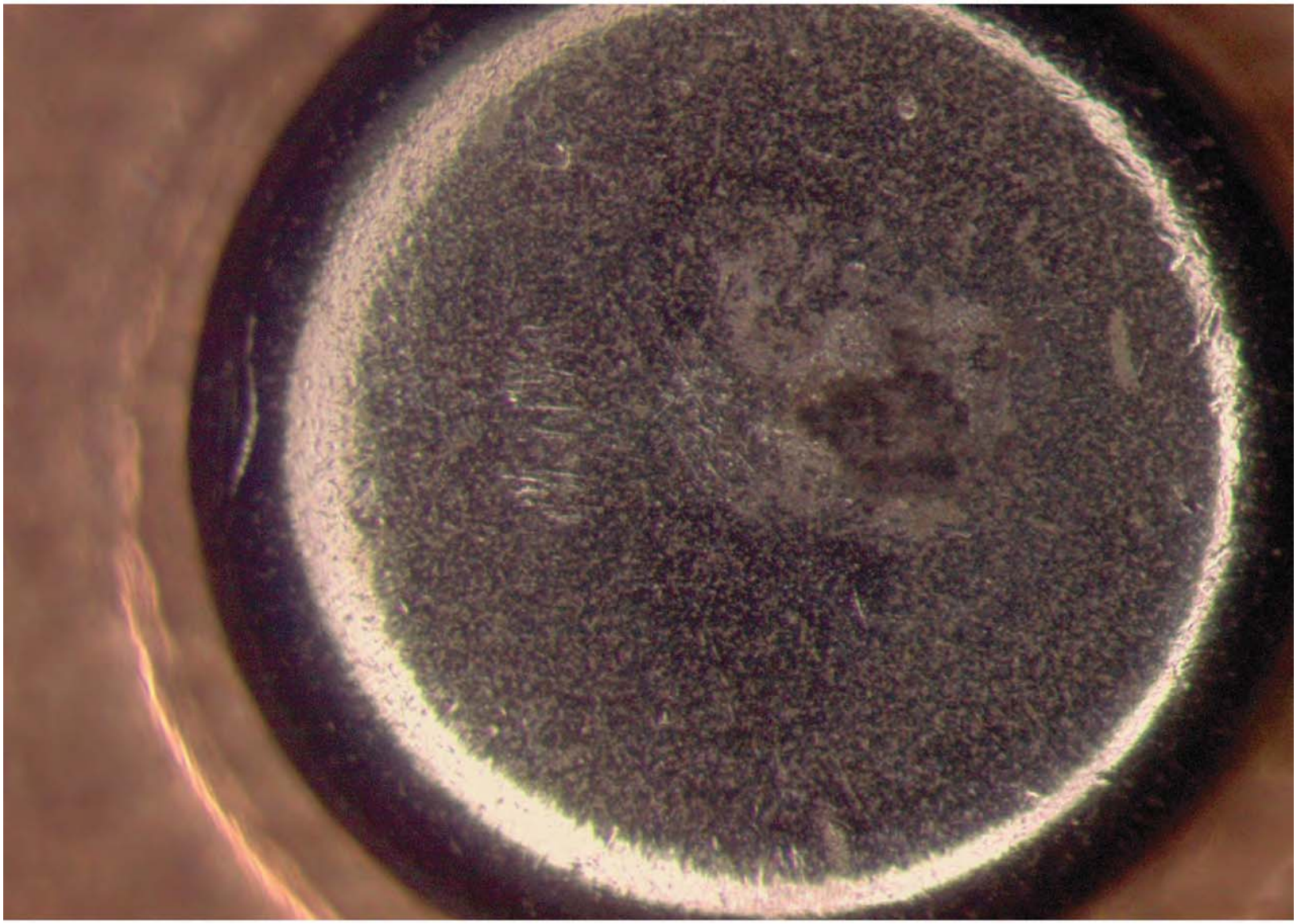

Contact B Stationary.jpg

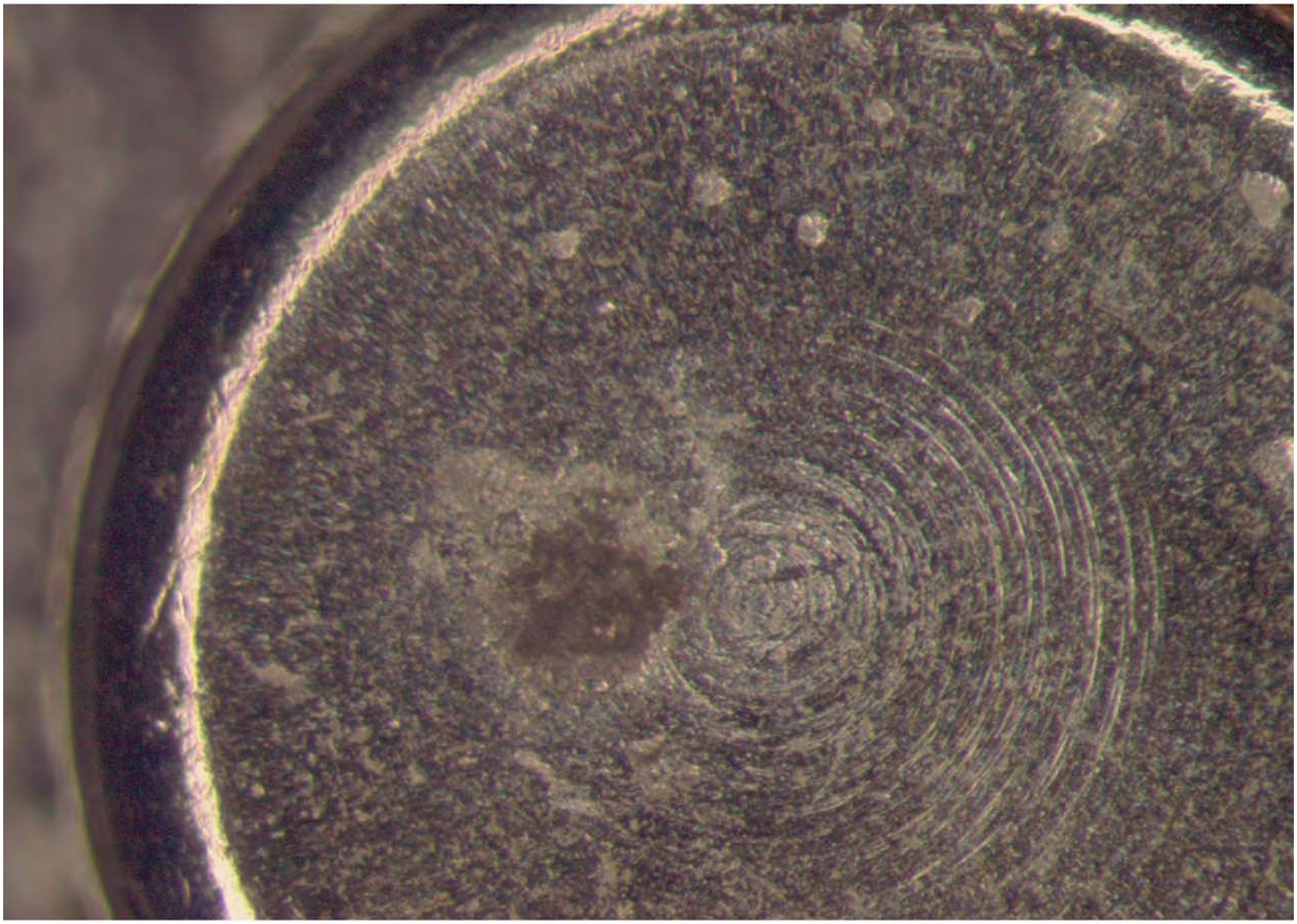

Contact C Movable.jpg

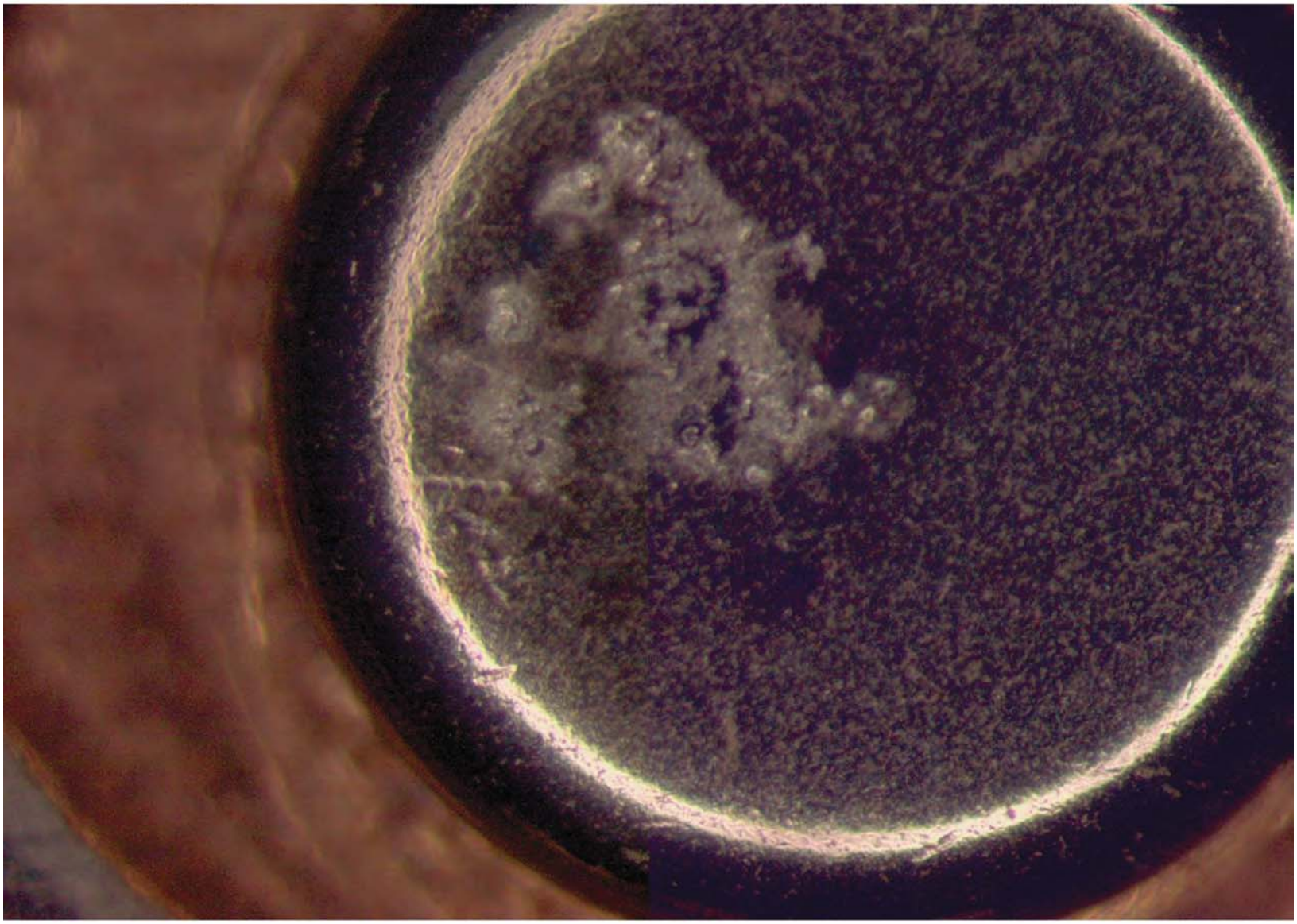

Contact C Stationary.jpg

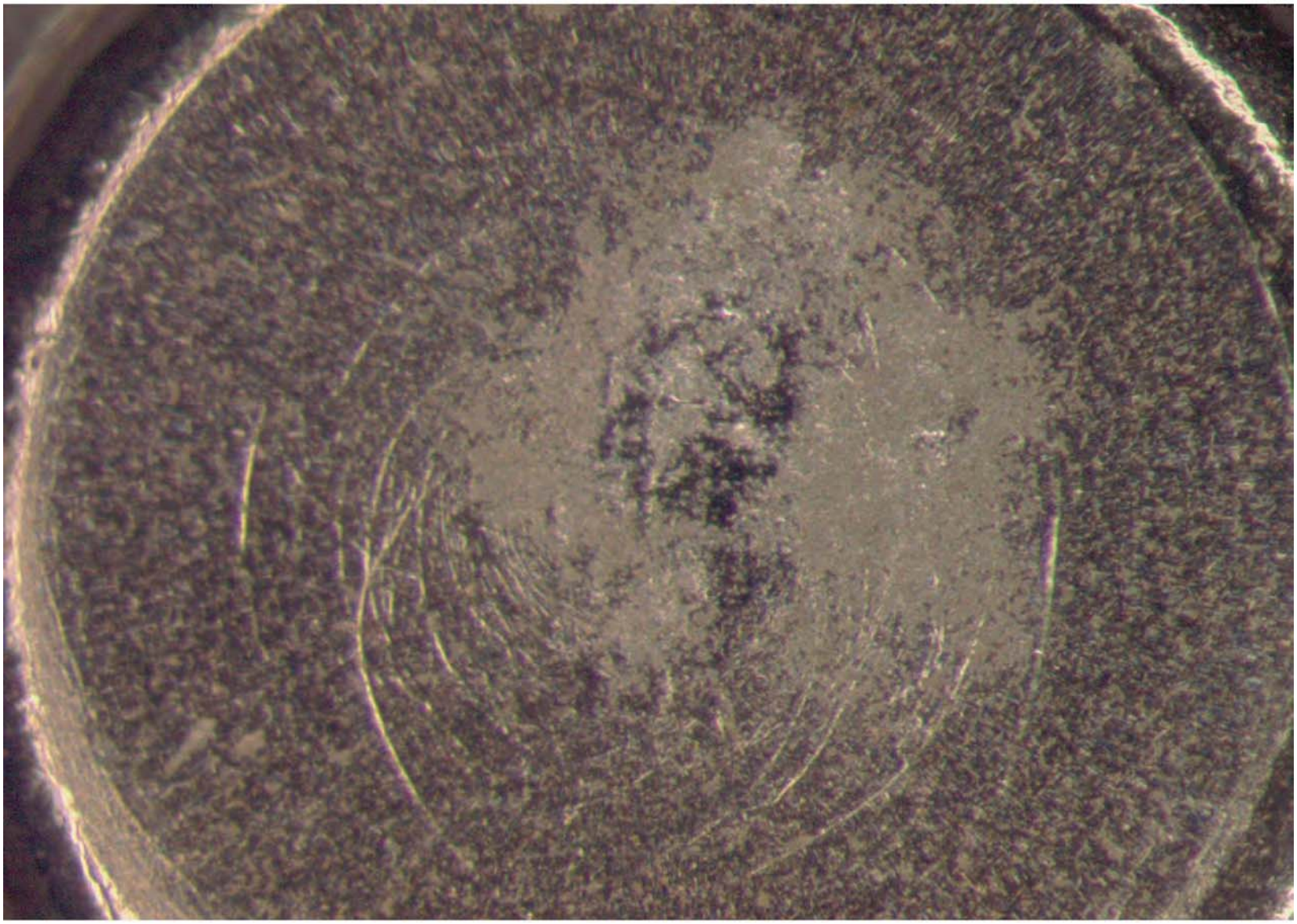

Overall Movable.jpg

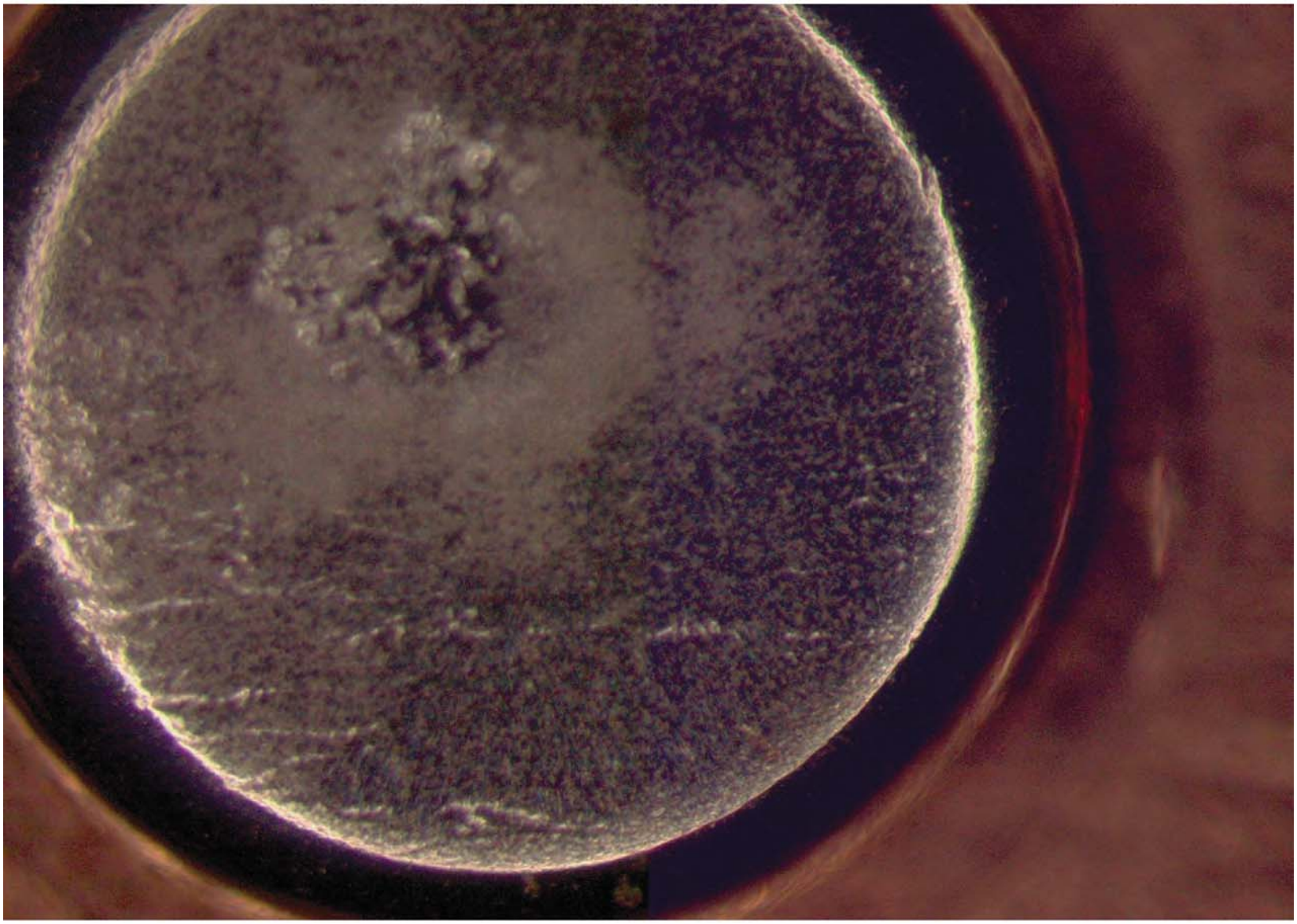

Contact B
Contact A
Contact C

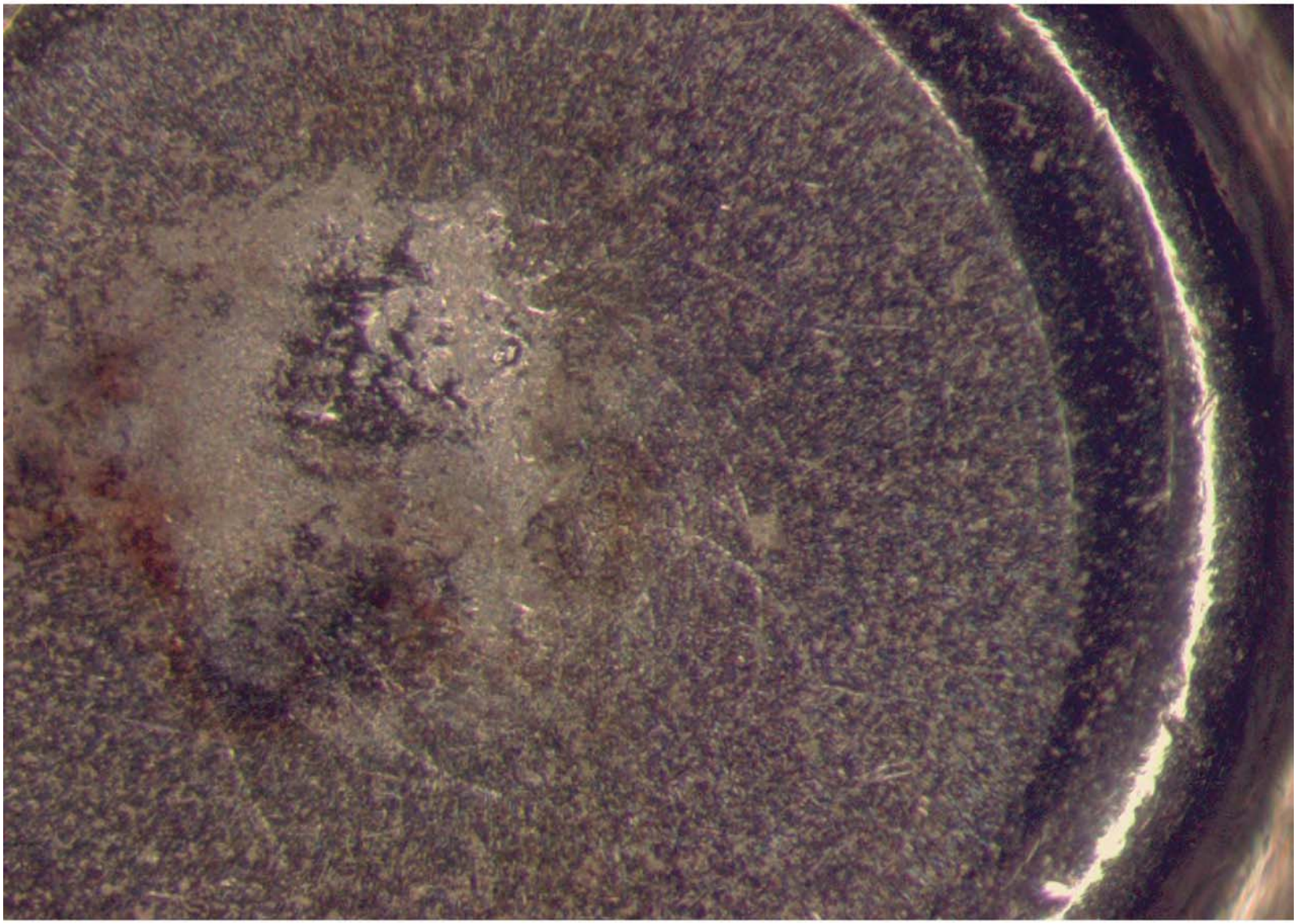


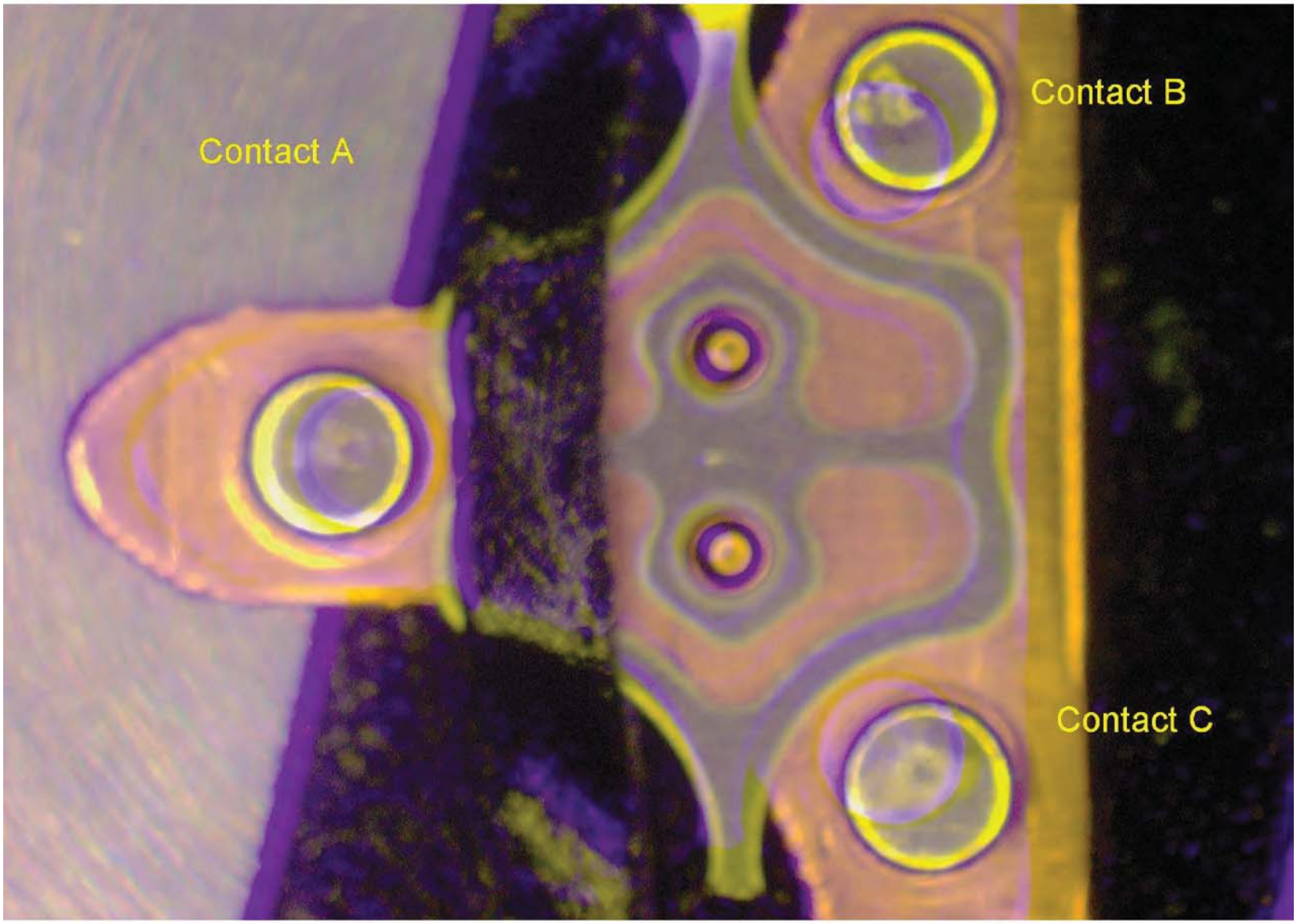











Contact A
Contact B
Contact C

From: Bahena, Miguel (Mike.)
Sent: Saturday, February 21, 2009 2:27 PM
To: Mince, Robert (R.W.); Frey, Martin (M.F.); Hochrein, Brad (B.G.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Mrozek, Robert (R.M.)
Subject: B3a is not very high on the radar at HSAP

Per 2 sources the B3a is not on the radar of the HSAP Plant or Launch Management team.

There is not awarenes that this is a repeat quality issue. HSAP incoming quality is concerned with containment and is working with the local TRW support.

Obviously we will not tell TRW, but I wanted you to be aware.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@messaging.sprintpcs.com>>>>>

From: Diez, Timothy (T.P.)
Sent: Wednesday, November 10, 2010 4:12 PM
To: Rossi, Roberto (R.A.)
Subject: B9a on C346 DEMS Fleet Issue

Rob,

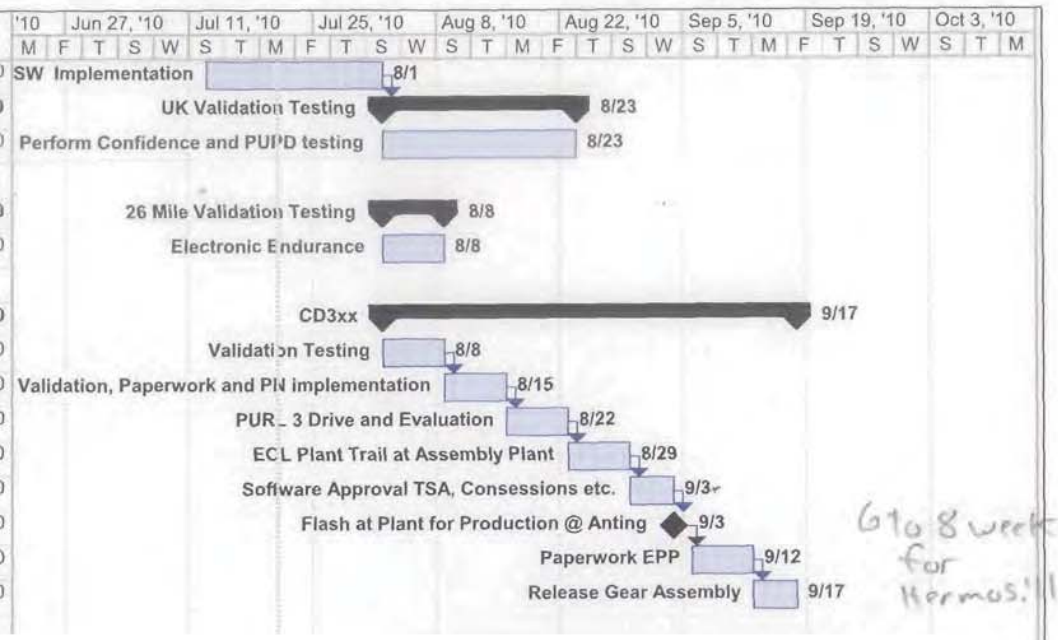
Last week, I reported to you a B9a issue on a C346 Dems fleet vehicle. TRW removed the gear and analyzed. The root cause was already known. The root cause was an interaction issue between the power regulator and the CPU. It was also identified during CD3 warranty analysis. For CD3 warranty, TRW fixed the issue with a software change. The same software fix was implemented for C346.

Please let me know if you require more information on this issue.

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

B9A Software Fix for Regulator Double Startup

ID	Task Name	Duration	Start	Finish
1	SW Implementation	14 days	Tue 7/13/10	Sun 8/1/10
2	**UK Validation Testing**	**16 days**	**Mon 8/2/10**	**Mon 8/23/10**
3	Perform Confidence and PUPD	16 days	Mon 8/2/10	Mon 8/23/10
4				
5	**26 Mile Validation Testing**	**5 days**	**Mon 8/2/10**	**Sun 8/8/10**
6	Electronic Endurance	5 days	Mon 8/2/10	Sun 8/8/10
7				
8	**CD3xx** , performance PUPD Polyspace	**35 days**	**Mon 8/2/10**	**Fri 9/17/10**
9	Validation Testing	5 days	Mon 8/2/10	Sun 8/8/10
10	SW Validation, Paperwork and F	5 days	Mon 8/9/10	Sun 8/15/10
11	PURL 3 Drive and Evaluation	5 days	Mon 8/16/10	Sun 8/22/10
12	EOL Plant Trail at Assembly Pla	5 days	Mon 8/23/10	Sun 8/29/10
13	Software Approval TSA, Conses	5 days	Mon 8/30/10	Fri 9/3/10
14	Flash at Plant for Production @	0 days	Fri 9/3/10	Fri 9/3/10
15	Paperwork EPP	5 days	Mon 9/6/10	Sun 9/12/10
16	Release Gear Assembly	5 days	Mon 9/13/10	Fri 9/17/10
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29	**U502 2011**	**36 days**	**Mon 8/16/10**	**Sun 10/3/10**
30	Validation Testing	5 days	Mon 8/16/10	Sun 8/22/10
31	SW Validation, Paperwork and F	5 days	Mon 8/23/10	Sun 8/29/10
32	PURL 3 Drive and Evaluation	5 days	Mon 8/30/10	Sun 9/5/10
33	EOL Plant Trail at Assembly Pla	5 days	Mon 9/6/10	Sun 9/12/10
34	Software Approval TSA, Conses	5 days	Mon 9/13/10	Fri 9/17/10
35	Flash at Plant for Production @	0 days	Fri 9/17/10	Fri 9/17/10
36	Paperwork EPP	5 days	Mon 9/20/10	Sun 9/26/10
37	Release Gear Assembly	5 days	Tue 9/28/10	Sun 10/3/10



6 to 8 weeks for Hermosillo

Redacted for Relevance

Change Strategy 140003
PSCM Assembly 3F964

From: Bahena, Miguel (Mike.)
Sent: Wednesday, July 21, 2010 5:01 PM
To: 'Robert.Kostadina@TRW.COM'; 'Hemang Mehta'; Mohammed Yasin; 'Douglas Sherman'
Cc: Napoli, Laura (L.); Snider, Tim (T.O.); 'Angel Andres'; Mrozek, Robert (R.M.); 'JuanCarlos cano'
Subject: B9A SW fix Timing for CD3 rfr /U502 Current Production

Mohammed, Rob, Doug, Hemang,

Can you please send us the timing for PURL3 SW available with the B9a fix for current production:

CD3
rfr
U502(I'm not sure when Laura is working this in)

We need to start the WERS concern process and get QAO prepared to start re-flashing. Thanks.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com

→ RUA 2805

FR - 0075 = RUA 2961

Concern Tracking Number	SAQ20091103824										
Concern Title	CD3 EPAS Glass Fiber Contamination										
Concern Description	Glass Fiber Contamination										
Concern Open Date	8-Sep-09										
Concern Days Open	73										
Active/Inactive Flag	Active										
On Track to Key Dates	No										
On Track to Selected Dates	No										
Implementation Flag	Yellow										
Function	CHASSIS										
Lead Organization	VRT										
P-D-SF-SO	SUPPLIER-PROCESS										
Primary Indicator	WARRANTY										
Severity Rating											
Concern Create Date	6-Nov-09										
Concern Status	TEAM WORKING ON										
Concern Type	CHRONIC										
Roadmap View	VEHICLE LINE										
Quarterback	STEERING										
Resolution Scheme	JUST DO IT										
Key Supplier	TRW										
Failure Rate											
Potential Population											
Freeze Flag	N										
Date Roadmap Math Frozen											
Roadmap Workstream	Workstream Description										
	FIND AND FIX										
WCC(s)	WCC	WCC Description									
Service Part Number(s) and Description	Part Number	Part Description									
CBGs (primary first)	Short Description										
	GLOBAL										
Assembly Plant(s)	Plant Code	Plant Description									
	A3	HERMOSILLO PLANT									
Stamping Plant(s)	Plant Code	Plant Description									
PTO Plant(s)	Plant Code	Plant Description									
Engine(s)	Engine Code	Engine Description									
Transmission(s)	Transmission Code	Transmission Description									
CCC & Description/VFG/VRT/Function(s)	CCC Code	CCC Description	VFG Code	VFG Description	VRT Code	VRT Description	Function Code	Function Description			
	H22	STEERING REQUIRES EXTRA OR UNEVEN EFFORT	V87	STEERING	F02	CHASSIS	F2	CHASSIS			
	H50	STEERING GEAR/PUMP TROUBLES	V87	STEERING	F02	CHASSIS	F2	CHASSIS			
	N58	STEERING NOISY	V87	STEERING	F02	CHASSIS	F2	CHASSIS			
Symptom Population	Vehicle Code	Vehicle Description	Market	Start MY	End MY						
	DE	FUSION (NA-HSAP)	GLOBAL	2010	2010						
	DH	FUSION HYBRID (NA-HSAP)	GLOBAL	2010	2010						
	ML	MILAN (NA-HSAP)	GLOBAL	2010	2010						
	MO	MILAN HYBRID (NA-HSAP)	GLOBAL	2010	2010						
Team	CDS ID	Name	Role	Telephone	Access	E-mail	Blackbelt				
	AROGERO	Rogero, Antonio	Concern Author	52-662- 2 508317	W	N	N				
	FULLOA	Ulloa, Fernando	Team Lead	52-62-598162	W	N	N				
	GIZAGUIR	Izaguirre, Gildardo	Team Member	52-6622-568767	R	N	N				
	HANNADI	Annadi, Han	Function Leader	1-313-8054748	W	N	N				
	JQUIJADA	Quijada, Jorge	Concern Champion	52-662-2596314	R	N	N				
Work Plan	Action	Comment	Author	Comment Date	Start Date	Original Planned Date	Planned Finish Date	Actual Finish Date	Days Open	Responsible Person	Delegate To
	Determine First Occurrence				8-Sep-09			8-Sep-09	0		
	Define/Identify Issue										
	Assign to Team Leader				8-Sep-09			5-Nov-09	59		
	Containment Service										
	Containment Production	At EPP level: activation test at ambient temperature + hot activation test	AROGERO	6-Nov-09	9-Sep-09	11-Sep-09	11-Sep-09	14-Sep-09	6		
	Parts/Vehicle Obtained From Field										
	Root Cause Analyzed and Understood	Glass fiber contamination	AROGERO	9-Nov-09	8-Sep-09		11-Sep-09	12-Sep-09	4		
	Service Fix Identified										
	Design/Process Fix Developed and Engineered										
	Process/Testing Verification Evidence Reviewed and Documented				8-Sep-09				73		
	DASIS-SSM										
	TSB Approval Process										
	Calibration Release Process										
	Permanent Corrective Action Implementation at PTO or Supplier Plant										
	Service Part Available to the Field/TSB Issued				8-Sep-09				73		

	Permanent Corrective Action Implementation at Lead Assembly Plant (PCAI)	TYCO Portugal Sep 30th 2009 1)Close back of riveting machine and buffers before and after base cleanning 2)Covering completely - feeding coil body module - assembling core insertion machine - MacGregor machine - bridge feeding position Nov 27th 2009 3)Molding Department/Particle Reduction -Coil Body Implement new Ionization Bar (deionizer air knife) -Base Plate Implement new Ionization Bar (deionizer air knife) -Cover Implement new Ionization Bar (deionizer air knife) Dec 11th 2009 4)TYCO production line-implement deionizer air knife for the cover 5)Improvement of the cleaning station (vacuum & blowing) in the Coil Body Estimated date for HSAP Jan 25th 2010.	ARGGERO	9-Nov-09	8-Sep-09	14-Jan-10	25-Jan-10		73	
	Unexpended Warranty Actions Implemented									
	Mfg Control Plan Updated/Implemented	STA	ARGGERO	11-Nov-09	8-Sep-09	25-Jan-10	25-Jan-10		73	
	SDS/Corporate Memory Updated	STA	ARGGERO	11-Nov-09	8-Sep-09	25-Jan-10	25-Jan-10		73	
	Make Good Assessment Team Defined				8-Sep-09		25-Jan-10		73	
	Migration Plan									
Tasks	Action	Task	Responsible Person	Start Date	Planned Finish Date	Actual Finish Date	Days Open			
	Determine First Occurrence									
	Define/Identify Issue									
	Assign to Team Leader									
	Containment Service									
	Containment Production									
	Parts/Vehicle Obtained From Field									
	Root Cause Analyzed and Understood									
	Service Fix Identified									
	Design/Process Fix Developed and Engineered									
	Process/Testing Verification Evidence Reviewed and Documented									
	OASIS-SSM									
	TSB-Approval Process									
	Calibration Release Process									
	Permanent Corrective Action Implementation at PTO or Supplier Plant									
	Service Part Available to the Field/TSB Issued									
	Permanent Corrective Action Implementation at Lead Assembly Plant (PCAI)									
	Unexpended Warranty Actions Implemented									
	Mfg Control Plan Updated/Implemented									
	SDS/Corporate Memory Updated									
	Make Good Assessment Team Defined									
	Migration Plan									
Fix Implementation Dates	Vehicle/Eng/Trans/GCC	Fix Start MY	Fix End MY	Fix Implement Start Month/Yr	Fix Implement End Month/Yr	Option Take Rate %	Vehicle Vin			
	DE_M01	2010	2013	201001	201307	100				
	DH_M01	2010	2013	201001	201307	100				
	ML_M01	2010	2013	201001	201307	100				
Unexpended Warranty Fix Implementation Dates	Vehicle/Eng/Trans/Market	Fix Implement Start Month/Yr	Fix Implement End Month/Yr							
Containment %	0									
Investment Cost	0									
Variable Cost Change	0									
GLOBAL Roadmap Data	Veh Line/CCC(Engine/Trans as appropriate)	HTIS User/System Entered	3MIS R/1000	3MIS CPU	3MIS TGW	3MIS Cost Sat	1YIS R/1000	1YIS CPU	1MIS R/1000	1MIS CPU
	DE_H22	User/System Entered								
Option Data										
BSAQ Data			0.31	0.31	3.11	0.05	0.36	0.05		
%Addressed			3	2	0					
Vehicle Projected Improvement			0.009	0.006	0				0.004	0.003
Option Projected Improvement										
	DE_H50	User/System Entered								
Option Data										
BSAQ Data			0	0		0	0.06	0.03		
%Addressed			0	0	0					
Vehicle Projected Improvement			0	0					0	0
Option Projected Improvement										
	DE_N58	User/System Entered								
Option Data										
BSAQ Data			0.17	0.06		0	1.58	0.36		
%Addressed			2	0	0					
Vehicle Projected Improvement			0.003	0					0.001	0
Option Projected Improvement										
	DH_H22	User/System Entered								
Option Data										
BSAQ Data			0.3	0.53		0				
%Addressed			0	0	0					

Vehicle Projected Improvement			0	0					0	0								
Option Projected Improvement																		
	DH_N58	User/System Entered																
Option Data																		
BSAQ Data			0.15	0.14		0												
%Addressed			2	2	0													
Vehicle Projected Improvement			0.003	0.003					0.001	0.001								
Option Projected Improvement																		
	ML_H22	User/System Entered																
Option Data																		
BSAQ Data						0												
%Addressed			0	0	0													
Vehicle Projected Improvement																		
Option Projected Improvement																		
	ML_H50	User/System Entered																
Option Data																		
BSAQ Data						0												
%Addressed			0	0	0													
Vehicle Projected Improvement																		
Option Projected Improvement																		
	ML_N58	User/System Entered																
Option Data																		
BSAQ Data			0.32	0.02		0	0.86	0.09										
%Addressed			2	0	0													
Vehicle Projected Improvement			0.006	0					0.006	0								
Option Projected Improvement																		
	DH_H50	User/System Entered																
Option Data																		
BSAQ Data						0												
%Addressed			0	0	0													
Vehicle Projected Improvement																		
Option Projected Improvement																		
GLOBAL Unexpended Warranty Savings	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY												
Reduced Part Cost																		
Monthly Repair Volume																		
Part Price Reduction																		
Part Savings Per Month																		
Labor Reduction																		
Monthly Repair Volume																		
Labor Time Savings Per Repair																		
Labor Savings Per Month																		
Other Savings Per Month																		
Monthly Savings																		
Unexpended Warranty Allocation by VL/CCC/Market (Engine/Trans as appropriate)	Vehicle/Market/CCC	PERCENTAGE																
GLOBAL Calendar Month Projection(in thousands of dollars)	Vehicle/Market/CCC	J	F	M	A	M	J	J	A	S	O	N	D					
GLOBAL Calendar Year Total Warranty Spend(in thousands of dollars)	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY												
GLOBAL Main to Sub/Sub to Main Improvement Projection	Veh Line/CCC(Engine/Trans as appropriate)	HTIS User/System Entered	3MIS R/1000	3MIS CPU	3MIS TGW	3MIS Cust Sat	1YIS R/1000	1YIS CPU	1MIS R/1000	1MIS CPU								
GLOBAL Main to Sub/Sub to Main Calendar Month Projection(in thousands of dollars)	Vehicle/Market/CCC	J	F	M	A	M	J	J	A	S	O	N	D					
GLOBAL Main to Sub/Sub to Main Calendar Year Total Warranty Spend(in thousands of dollars)	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY												
GLOBAL VL/PT Toggle Improvement Projection	Veh Line/CCC(Engine/Trans as appropriate)	HTIS User/System Entered	3MIS R/1000	3MIS CPU	3MIS TGW	3MIS Cust Sat	1YIS R/1000	1YIS CPU	1MIS R/1000	1MIS CPU								
GLOBAL VL/PT Toggle Calendar Month Projection(in thousands of dollars)	Vehicle/Market/CCC	J	F	M	A	M	J	J	A	S	O	N	D					
GLOBAL VL/PT Toggle Calendarized Roadmap Savings (in thousands of dollars)- 5 Years Projection	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY												
Top Concern	Concern Group Code	Concern Group Description	Date Opened as Top Concern	Days as Top Concern	Concern Status													
VRT Replicated Internal Indicators	Tasks	Critical X	Before	After	Responsible Person	Start Date	Planned Finish Date	Actual Finish Date	Days Open									
VRT Actual Improvements	Vehicle	Market	1MIS R/1000	1MIS CPU	3MIS R/1000	3MIS CPU	3MIS TGW											
VRT Comments	Data	Comments	Author															
Bin Information	Repair Diagnosis	Plant	Origination Source	Origination Total	Validation Source	2008 12	2009 01	2009-02	2009-03	2009-04	2009-05	2009-06	2009-07	2009-08	2009-09	2009-10	2009-11	RYG PCA
	SteeringRack Replaced	A3	ECB	62	ECB	0	0	0	3	12	9	20	7	7	2	2	0	Y
Global 8D	Number																	
Six-Sigma	Number																	
WERS Alert Number	Number																	
WERS Number	Number																	
AIM Issue #	Number																	
Concern Forums	Forum Name	Forum Date																

Attachments	Title	File Name	File Type	Date Attached
Comments General	Date	Comments	Author	
Comments Why Red	Date	Comments	Author	
Comments Why Made Inactive	Date	Comments	Author	
Concern History	Date	Field	Transaction	Transaction Author
	11-Nov-09	Action Open	(Z) was opened	AROGERO
	11-Nov-09	Action Open	(Z) was opened	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for N58-ML-3MIS.	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for H50-ML-3MIS	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for H22-ML-3MIS.	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for N58-DH-3MIS	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for H50-DH-3MIS.	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for H22-DH-3MIS	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for N58-DE-3MIS	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for H50-DE-3MIS	AROGERO
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage was changed for H22-DE-3MIS	AROGERO
	10-Nov-09	ECB Link Added	An ECB link has been added Vehicle Line:DE,DH, ML Assembly Plant:A3 CCC:H22,H50 Model Year:2010.	AROGERO
	10-Nov-09	ECB Link Added	An ECB link has been added Vehicle Line:DE,DH, ML Assembly Plant:A3 CCC:H22,H50 Model Year:2010	FULLOA

9-Nov-09	Action Actual Finish Date Changed	(2) Actual Finish Date was changed from 14-Sep-2009 to 12-Sep-2009	AROGERO
8-Nov-09	Action Planned Finish Date Changed	(2) Planned Finish Date was changed from 14-Jan-2010 to 25-Jan-2010.	AROGERO
6-Nov-09	Containment Production Actual Finish Date entered	Containment Production Actual Finish Date was entered.	AROGERO
6-Nov-09	BSAQ - Assessment R-Y-G Change	BSAQ-Assessment R-Y-G changed from NO ASSESSMENT to YELLOW.	SYSTEM
6-Nov-09	BSAQ-Concern Status Change	BSAQ-Concern Status Changed from UIV to TWO	SYSTEM
6-Nov-09	BSAQ-PCAI Planned Finish Date entered	BSAQ-Permanent Corrective Action Implementation at Lead Assembly Plant (PCAI) Planned Finish Date was entered	AROGERO
6-Nov-09	Root Cause Understood Actual Finish Date entered	Root Cause Understood Actual Finish Date was entered.	AROGERO
6-Nov-09	Concern Champion Assigned	Concern Champion Assigned JQUIJADA	AROGERO
6-Nov-09	Team Leader Assigned	Team Leader Assigned FULLOA	AROGERO
6-Nov-09	CCC Change	Latest CCC codes are H22,H50,NS6	AROGERO
6-Nov-09	Vehicle Line Change	Latest Vehicle Line-Market codes are DE-US,DH-US,ML-US,MO-US	AROGERO
6-Nov-09	Concern Open Date Changed	Concern Open Date is now 08-SEP-09	AROGERO
6-Nov-09	Concern Creation	Concern was created	AROGERO
6-Nov-09	Lead Organization Changed	Lead Organization is now VRT	AROGERO

Concern Tracking Number:	SAQ2009103823										
Concern Title:	CD3 EPAS Link Relay Armature Weld failure										
Concern Description:	EPAS Link Relay Armature Weld failure.										
Concern Open Date:	23-Sep-09										
Concern Days Open:	56										
Active/Inactive Flag:	Active										
On Track to Key Dates:	No										
On Track to Selected Dates:	No										
Implementation Flag:	Yellow										
Function:	CHASSIS										
Lead Organization:	VRT										
P-D-SF-SO:	SUPPLIER-PROCESS										
Primary Indicator:	WARRANTY										
Severity Rating:											
Concern Create Date:	6-Nov-09										
Concern Status:	TEAM WORKING ON										
Concern Type:	CHRONIC										
Roadmap View:	VEHICLE LINE										
Quarterback:	STEERING										
Resolution Scheme:	JUST DO IT										
Key Supplier:	TRW										
Failure Rate:											
Potential Population:											
Freeze Flag:	N										
Date Roadmap Math Frozen:											
Roadmap Workstream:	Workstream Description										
	FIND AND FIX										
WCC(s):	WCC	WCC Description									
Service Part Number(s) and Description:	Part Number	Part Description									
CBGs (primary first)	Short Description										
	GLOBAL										
Assembly Plant(s):	Plant Code	Plant Description									
	A3	HERMOSILLO PLANT									
Stamping Plant(s):	Plant Code	Plant Description									
PTO Plant(s):	Plant Code	Plant Description									
Engine(s):	Engine Code	Engine Description									
Transmission(s):	Transmission Code	Transmission Description									
CCC & Description/VFG/VRT/Function(s):	CCC Code	CCC Description	VFG Code	VFG Description	VRT Code	VRT Description	Function Code	Function Description			
	H22	STEERING REQUIRES EXTRA OR UNEVEN EFFORT	V87	STEERING	F02	CHASSIS	F2	CHASSIS			
	H50	STEERING GEAR/PUMP TROUBLES	V87	STEERING	F02	CHASSIS	F2	CHASSIS			
	N58	STEERING NOISY	V87	STEERING	F02	CHASSIS	F2	CHASSIS			
Symptom Population	Vehicle Code	Vehicle Description	Market	Start MY	End MY						
	DE	FUSION (NA-HSAP)	GLOBAL	2010	2010						
	DH	FUSION HYBRID (NA-HSAP)	GLOBAL	2010	2010						
	ML	MILAN (NA-HSAP)	GLOBAL	2010	2010						
	MO	MILAN HYBRID (NA-HSAP)	GLOBAL	2010	2010						
Team	CDS ID	Name	Role	Telephone	Access	E-mail	Blackbelt				
	AROGERO	Rogero, Antonio	Concern	52-662- 2	W	N	N				
	FULLOA	Ulloa, Fernando	Team Lead	52-62-	W	N	N				
	GIZAGUIR	Izaguirre, Gildardo	Team	52-6622-	R	N	N				
	HANNADI	Annadi, Hari	Function	1-313-	W	N	N				
	JQUIJADA	Quijada, Jorge	Concern	52-662-	R	N	N				
Work Plan	Action	Comment	Author	Comment Date	Start Date	Original Planned Date	Planned Finish Date	Actual Finish Date	Days Open	Responsible Person	Delegate To
	Determine First Occurrence				23-Sep-09			23-Sep-09	0		
	Define/Identify Issue										
	Assign to Team Leader				23-Sep-09			6-Nov-09	44		
	Containment Service										
	Containment Production	Segregate/separate suspected material. Laser Sampling/ Lens Cleaning Oct 9th 2009 at TYCO Portugal. Steering Gears received at Plant: Nov 9th 2009.	AROGERO	11-Nov-09	23-Sep-09	28-Sep-09	6-Nov-09	9-Nov-09	47		
	Parts/Vehicle Obtained From Field										
	Root Cause Analyzed and Understood	Laser Sampling/ Lens poor application.	AROGERO	9-Nov-09	23-Sep-09		28-Sep-09	30-Sep-09	7		
	Service Fix Identified										
	Design/Process Fix Developed and Engineered										
	Process/Testing Verification Evidence Reviewed and Documented				23-Sep-09				58		
	OASIS-SSM										
	TSB-Approval Process										
	Calibration Release Process										

Cold weld or offset bridge

martha 011 - 52 - 442 - 1560 - 154 cell

	Permanent Corrective Action Implementation at PTO or Supplier Plant				23-Sep-09				58
	Service Part Available to the Field/TSB Issued				23-Sep-09				58
	Permanent Corrective Action Implementation at Lead Assembly Plant (PCAI)	Laser Sampling/ Lens Cleaning welding station Preventive Maintenance 2 times per week instead of 1 time per 2 weeks: Oct 22nd at TYCO Portugal. Steering Gears at Plant: Dec 12th, 2009	AROGERO	9-Nov-09	23-Sep-09	20-Oct-09	12-Dec-09		58
	Unexpended Warranty Actions Implemented								
	Mfg Control Plan Updated/Implemented	no	AROGERO	6-Nov-09	23-Sep-09	22-Oct-09	22-Oct-09		58
	SDS/Corporate Memory Updated	no	AROGERO	6-Nov-09	23-Sep-09	22-Oct-09	22-Oct-09		58
	Make Good Assessment Team Defined				23-Sep-09		23-Oct-09		58
	Migration Plan								
Tasks	Action	Task	Responsible Person	Start Date	Planned Finish Date	Actual Finish Date	Days Open		
	Determine First Occurrence								
	Define/Identify Issue								
	Assign to Team Leader								
	Containment Service								
	Containment Production								
	Parts/Vehicle Obtained From Field								
	Root Cause Analyzed and Understood								
	Service Fix Identified								
	Design/Process Fix Developed and Engineered								
	Process/Testing Verification Evidence Reviewed and Documented								
	OASIS-SSM								
	TSB-Approval Process								
	Calibration Release Process								
	Permanent Corrective Action Implementation at PTO or Supplier Plant								
	Service Part Available to the Field/TSB Issued								
	Permanent Corrective Action Implementation at Lead Assembly Plant (PCAI)								
	Unexpended Warranty Actions Implemented								
	Mfg Control Plan Updated/Implemented								
	SDS/Corporate Memory Updated								
	Make Good Assessment Team Defined								
	Migration Plan								
Fix Implementation Dates:	Vehicle/Eng/Trans/CCC	Fix Start MY	Fix End MY	Fix Implement Start Month/Yr	Fix Implement End Month/Yr	Option Take Rate %	Vehicle Vin		
	DE M01	2010	2013	200912	201307	100			
	DH M01	2010	2013	200912	201307	100			
	ML M01	2010	2013	200912	201307	100			
Unexpended Warranty Fix Implementation Dates	Vehcle/Eng/Trans/Market	Fix Implement Start Month/Yr	Fix Implement End						
Containment %:	0								
Investment Cost	0								
Variable Cost Change	0								
GLOBAL Roadmap Data:	Veh.Line/CCC(Engine/Trans as appropriate)	HTIS User/System Entered	3MIS R/1000	3MIS CPU	3MIS TGW	3MIS Cust Sat	1YIS R/1000	1YIS CPU	1MIS R/1000	1MIS CPU
	DE H22	User/System Entered								
Option Data										
BSAQ Data			0.31	0.31	3.11	0.05	0.36	0.05		
%Addressed			2	2	2					
Vehicle Projected Improvement			0.006	0.006	0.062				0.003	0.003
Option Projected Improvement										
	DE H50	User/System Entered								
Option Data										
BSAQ Data			0	0		0	0.06	0.03		
%Addressed			0	0	0					
Vehicle Projected Improvement			0	0					0	0
Option Projected Improvement										
	DE N58	User/System Entered								
Option Data										
BSAQ Data			0.17	0.06		0	1.58	0.36		
%Addressed			2	0	0					
Vehicle Projected Improvement			0.003	0					0.001	0
Option Projected Improvement										
	DH H22	User/System Entered								

Option Data													
BSAQ Data			0.3	0.53		0							
%Addressed			2	2	0								
Vehicle Projected Improvement			0.006	0.011					0.003	0.005			
Option Projected Improvement													
	DH N58	User/System Entered											
Option Data													
BSAQ Data			0.15	0.14		0							
%Addressed			2	2	0								
Vehicle Projected Improvement			0.003	0.003					0.001	0.001			
Option Projected Improvement													
	ML H22	User/System Entered											
Option Data													
BSAQ Data						0							
%Addressed			0	0	0								
Vehicle Projected Improvement													
Option Projected Improvement													
	ML H50	User/System Entered											
Option Data													
BSAQ Data						0							
%Addressed			0	0	0								
Vehicle Projected Improvement													
Option Projected Improvement													
	ML N58	User/System Entered											
Option Data													
BSAQ Data			0.32	0.02		0	0.86	0.09					
%Addressed			2	0	0								
Vehicle Projected Improvement			0.006	0					0.006	0			
Option Projected Improvement													
	DH H50	User/System Entered											
Option Data													
BSAQ Data						0							
%Addressed			0	0	0								
Vehicle Projected Improvement													
Option Projected Improvement													
GLOBAL Unexpended Warranty Savings: Reduced Part Cost Monthly Repair Volume Part Price Reduction Part Savings Per Month Labor Reduction Monthly Repair Volume Labor Time Savings Per Repair Labor Savings Per Month Other Savings Per Month	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY							
Monthly Savings Unexpended Warranty Allocation by VL/CCC/Market (Engine/Trans as appropriate):	Vehicle/Market/CCC	PERCENTAGE											
GLOBAL Calendar Month Projection(in thousands of dollars)	Vehicle/Market/CCC	J	F	M	A	M	J	J	A	S	O	N	D
GLOBAL Calendar Year Total Warranty Spend(in thousands of dollars)	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY							
GLOBAL Main to Sub/Sub to Main Improvement Projection	Veh Line/CCC(Engine/Trans as appropriate)	HTIS User/System Entered	3MIS R/1000	3MIS CPU	3MIS TGW	3MIS Cust Sat	1YIS R/1000	1YIS CPU	1MIS R/1000	1MIS CPU			
GLOBAL Main to Sub/Sub to Main Calendar Month Projection(in thousands of dollars)	Vehicle/Market/CCC	J	F	M	A	M	J	J	A	S	O	N	D

GLOBAL Main to Sub/Sub to Main Calendar Year Total Warranty Spend(in thousands of dollars)	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY												
GLOBAL VL/PT Toggle Improvement Projection	Veh.Line/CCC(Engine/Trans as appropriate)	HTIS User/System Entered	3MIS R/1000	3MIS CPU	3MIS TGW	3MIS Cust Sat	1YIS R/1000	1YIS CPU	1MIS R/1000	1MIS CPU								
GLOBAL VL/PT Toggle Calendar Month Projection(in thousands of dollars)	Vehicle/Market/CCC	J	F	M	A	M	J	J	A	S	O	N	D					
GLOBAL VL/PT Toggle Calendarized Roadmap Savings (in thousands of dollars)- 5 Years Projection:	Vehicle Line/Market	2009 CY	2010 CY	2011 CY	2012 CY	2013 CY												
Top Concern	Concern Group Code	Concern Group Description	Date Opened as Before	Days as Top Concern After	Concern Status													
VRT Replicated Internal Indicators	Tasks	Critical X			Responsible Person	Start Date	Planned Finish Date	Actual Finish Date	Days Open									
VRT Actual Improvements	Vehicle	Market	1MIS R/1000	1MIS CPU	3MIS R/1000	3MIS CPU	3MIS TGW											
VRT Comments	Date	Comments	Author															
Bin Information	Repair Diagnosis	Plant	Origination Source	Origination Total	Validation Source	2008-12	2009-01	2009-02	2009-03	2009-04	2009-05	2009-06	2009-07	2009-08	2009-09	2009-10	2009-11	RYG PCAI
	SteeringRack Replaced	A3	ECB	62	ECB	0	0	0	3	12	9	20	7	7	2	2	0	Y
Global 8D	Number																	
Six-Sigma	Number																	
WERS Alert Number	Number																	
WERS Number	Number																	
AIM Issue #	Number																	
Concern Forums:	Forum Name	Forum Date																
Attachments:	Title	File Name	File Type	Date														
Comments: General	Date	Comments	Author															
Comments: Why Red	Date	Comments	Author															
Comments: Why Made Inactive	Date	Comments	Author															
Concern History:	Date	Field	Transaction	Transaction														
	11-Nov-09	Containment Production Actual Finish Date entered	Containment Production Actual Finish	AROGERO														
	11-Nov-09	Action Planned Finish Date Changed	(2) Planned Finish Date was	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	11-Nov-09	Roadmap Percentage Changed	Roadmap Percentage	AROGERO														
	10-Nov-09	ECB Link Added	An ECB link has been added : Vehicle Line:DE,DH,	FULLOA														
	9-Nov-09	Action Actual Finish Date Cleared	(2) Actual Finish Date	AROGERO														
	9-Nov-09	Action Planned Finish Date Changed	(2) Planned Finish Date was	AROGERO														
	9-Nov-09	Action Planned Finish Date Changed	(2) Planned Finish Date was	AROGERO														
	6-Nov-09	Action Actual Finish Date Cleared	(2) Actual Finish Date	AROGERO														
	6-Nov-09	Action Actual Finish Date Cleared	(2) Actual Finish Date	AROGERO														
	6-Nov-09	BSAQ-Concern Status Change	BSAQ-Concern	SYSTEM														

6-Nov-09	Action Actual Finish Date Cleared	{2} Actual Finish Date	AROGERO
6-Nov-09	Action Planned Finish Date Changed	{2} Planned Finish Date was	AROGERO
6-Nov-09	BSAQ - Assessment R-Y-G Change	BSAQ-Assessment R-Y-G	SYSTEM
6-Nov-09	Action Actual Finish Date Cleared	{2} Actual Finish Date	AROGERO
6-Nov-09	BSAQ - Assessment R-Y-G Change	BSAQ-Assessment R-Y-G	SYSTEM
6-Nov-09	Action Open	{2} was	AROGERO
6-Nov-09	Action Open	{2} was	AROGERO
6-Nov-09	BSAQ-Concern Status Change	BSAQ-Concern	SYSTEM
6-Nov-09	BSAQ - Assessment R-Y-G Change	BSAQ-Assessment R-Y-G	SYSTEM
6-Nov-09	BSAQ-Concern Status Change	BSAQ-Concern	SYSTEM
6-Nov-09	PCAI Actual Finish Date entered	Permanent Corrective Action Implementation at Lead	AROGERO
6-Nov-09	Containment Production Actual Finish Date entered	Containment Production Actual Finish	AROGERO
6-Nov-09	BSAQ-PCAI Planned Finish Date entered	BSAQ-Permanent Corrective Action Implementati	AROGERO
6-Nov-09	Root Cause Understood Actual Finish Date entered	Root Cause Understood Actual Finish	AROGERO
6-Nov-09	Team Leader Assigned	Team Leader	AROGERO
6-Nov-09	Concern Champion Assigned	Concern Champion	AROGERO
6-Nov-09	Team Leader Assigned	Team Leader	AROGERO
6-Nov-09	CCC Change	Latest CCC codes are	AROGERO
6-Nov-09	Vehicle Line Change	Latest Vehicle Line-Market	AROGERO
6-Nov-09	Concern Creation	Concern was	AROGERO
6-Nov-09	Lead Organization Changed	Lead Organization	AROGERO
6-Nov-09	Concern Open Date Changed	Concern Open Date is	AROGERO

Scenario A
END OF DATA

CHANGE PROGRESS FORM	VEHICLE LINE				FNA	FOE	VOL	TRW		
CPF	CD3xx	C1MCA	D3 (GTDI)							
NO.: TRW EPAS	X			ORIGINATOR	WB					
				ADDRESSEE						
PAGE 1 OF 1 PAGES				COPY SENT	Y					
				ATTACHMENT	N					
				FOR INFO	MB,	RQ				
				RESPONSE	Y					
				ACTION REQ.						
				FOR FILE						

ORIGINATOR:
Bill Bouse
DATE:
August 25, 2009

EPAS MODEL:
2011 Tune update to CD3

DATE OF IMPLEMENTATION:
FORD:
2011 MY CD3

DESCRIPTION OF CHANGE:

Implement a new tuning for the 2011 MY CD3 program. To be timed as part of the AE5C 3200 CC gear delivered to Ford for all prototypes and production per program timing already provided.

BACKGROUND/COMMENTS:

Vehicle dynamics has requested an update to the tuning for the CD3 program.

Vehicle tuning file (.par) will be delivered to TRW systems engineering on or before September 11, 2009.

INITIAL AND DATE:
WB 25 August 2009 ENGINEERING Cost Estimating

COST VARIANCE/UNIT:

INVESTMENT:

Chassis Engineering	FNA APPROVED ☐ FNA CANCELLED ☐ FOE APPROVED ☐ FOE CANCELLED ☐	SIGNATURE: _____ SIGNATURE: _____
EESE Engineering	FNA APPROVED ☐ FNA CANCELLED ☐ FOE APPROVED ☐ FOE CANCELLED ☐	SIGNATURE: _____ SIGNATURE: _____
TRW	TRW NA APPROVED ☐ TRW NA CANCELLED ☐ TRW EU APPROVED ☐ TRW EU CANCELLED ☐	SIGNATURE: _____ SIGNATURE: _____
CPE	APPROVED ☐ CANCELLED ☐	SIGNATURE: _____

Signatures only on demand

From: Martha Abundis <Martha.Abundis@TRW.COM>
Sent: Thursday, September 24, 2009 6:03 PM
To: Hochrein, Brad (B.G.); Harris, Jonathan (J.E.); Quijada, Jorge (J.); McIntyre, Kathryn (K.L.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Hernandez, Victor (V.M.); Bouse, William (Bill.); Aaron Blancas; Alexander Kleist; BaoYuan Tian; Douglas Sherman; Frank Fan; Geoff Collins; Geoff Jacks; Greg Collier; Jacky Shi; Jeff Jiang; Jim Rau-nonTRW; Keith Dusina; Mark Karwowski; Martha Abundis; Mike Davies; Pavel Vetz; Phil Browne; Philip Warren-Green; Robert Kostadina; Romance Zhu; Rudy Shuryan; Salim Semssar; Sanjay Singh; Simon Malsbury; Filipe.Matos@tycoelectronics.com; hugo.gomes@tycoelectronics.com
Subject: EPAS loss of assistance
Attachments: QAO EPP Timing.pdf

All -

Attached the QAO EPP timing showed yesterday by Greg Collier.

Martha

Week of 9/13
Week of 9/20
Week of 9/27
Week of 10/4
Week of 10/11
Hot Puma Testing
CD3
Start QAO
@ HSAP
okay
Redacted for relevance
Mainstream Plan X ray Testing
CD3
Start QAO
@ HSAP
Redacted for relevance
Back-up Plan Fly EPPs
CD3
Start QAO
@ HSAP
Redacted for relevance

From: Dukkipati, Srini (S.)
Sent: Tuesday, January 29, 2013 6:25 PM
To: Surella, Matthew (M.M.); Hefner, Rachel (R.)
Cc: Brezee, Shane (S.B.)
Subject: EPAS RACK DATA

Matt & Rachel,

Please see the attachment, I pulled rfr too for HPAS reference.

EPASRACKDATA....

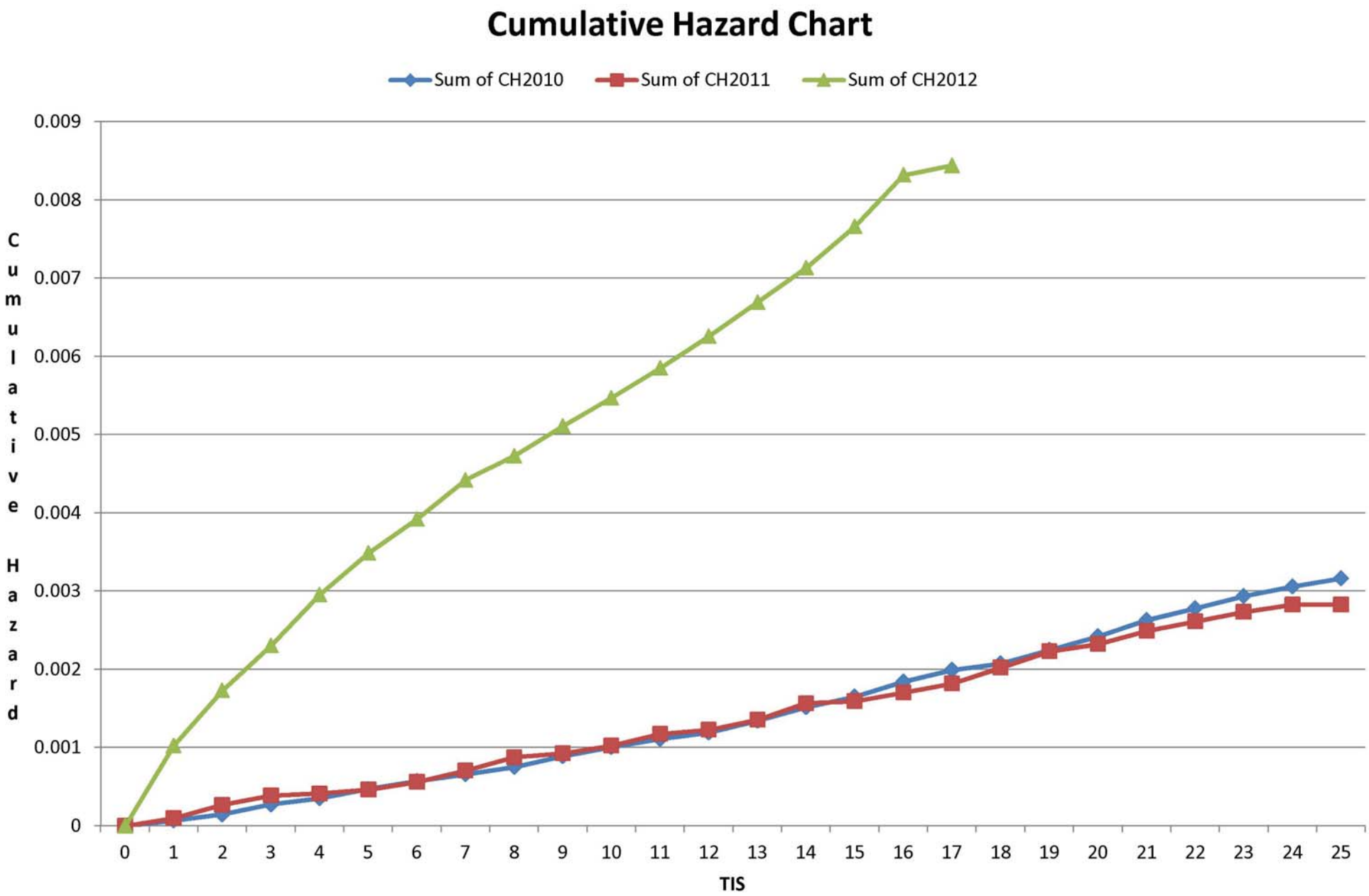
EPASGERA_HTIS...

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1																			
2			3504-GEAR ASY-STEERING																
3																			
4																			
5		EXPLORER (NA-CAP)										FOCUS (NA-MP)							
6																			
7	R/1000	2011	2012	2013		CPU	2011	2012	2013		R/1000	2012	2013		CPU	2012	2013		R/1000
8	0 MIS	0.13	0.16	0.05		0 MIS	0.13	0.24	0.07		0 MIS	0.18	0.05		0 MIS	0.17	0.07		0 MIS
9	1 MIS	0.45	0.55	0.28		1 MIS	0.54	0.83	0.45		1 MIS	1.24	0.38		1 MIS	0.96	0.49		1 MIS
10	2 MIS	0.72	0.81	0.46		2 MIS	0.90	1.31	0.68		2 MIS	1.96	0.62		2 MIS	1.46	0.82		2 MIS
11	3 MIS	1.14	1.15	0.61		3 MIS	1.45	1.82	0.87		3 MIS	2.53	1.00		3 MIS	1.89	1.36		3 MIS
12	4 MIS	1.71	1.49	0.77		4 MIS	2.31	2.29	1.03		4 MIS	3.12	1.00		4 MIS	2.39	1.36		4 MIS
13	5 MIS	2.34	1.97	0.87		5 MIS	3.19	2.96	1.18		5 MIS	3.61	/0		5 MIS	2.86	/0		5 MIS
14	6 MIS	2.88	2.48	1.06		6 MIS	3.91	3.63	1.46		6 MIS	4.05	/0		6 MIS	3.36	/0		6 MIS
15	7 MIS	3.19	3.28	1.22		7 MIS	4.35	4.72	1.66		7 MIS	4.51	/0		7 MIS	3.89	/0		7 MIS
16	8 MIS	3.62	4.27	1.28		8 MIS	4.89	6.04	1.75		8 MIS	4.81	/0		8 MIS	4.26	/0		8 MIS
17	9 MIS	3.99	5.51	1.56		9 MIS	5.44	7.70	2.16		9 MIS	5.17	/0		9 MIS	4.69	/0		9 MIS
18	10 MIS	4.54	6.55	/0		10 MIS	6.11	9.14	/0		10 MIS	5.48	/0		10 MIS	5.07	/0		10 MIS
19	11 MIS	5.52	8.33	/0		11 MIS	7.48	11.53	/0		11 MIS	5.90	/0		11 MIS	5.57	/0		11 MIS
20	12 MIS	7.01	9.79	/0		12 MIS	9.48	13.54	/0		12 MIS	6.30	/0		12 MIS	6.09	/0		12 MIS
21	13 MIS	8.85	10.97	/0		13 MIS	11.93	15.13	/0		13 MIS	6.69	/0		13 MIS	6.55	/0		13 MIS
22	14 MIS	10.92	12.63	/0		14 MIS	14.73	17.41	/0		14 MIS	7.19	/0		14 MIS	7.11	/0		14 MIS
23	15 MIS	13.16	13.26	/0		15 MIS	17.82	18.29	/0		15 MIS	7.62	/0		15 MIS	7.55	/0		15 MIS
24	16 MIS	15.29	13.56	/0		16 MIS	20.73	18.68	/0		16 MIS	8.02	/0		16 MIS	8.02	/0		16 MIS
25	17 MIS	17.47	13.56	/0		17 MIS	23.72	18.68	/0		17 MIS	8.30	/0		17 MIS	8.36	/0		17 MIS
26	18 MIS	18.94	/0	/0		18 MIS	25.77	/0	/0		18 MIS	8.55	/0		18 MIS	8.69	/0		18 MIS
27	19 MIS	19.96	/0	/0		19 MIS	27.15	/0	/0		19 MIS	8.87	/0		19 MIS	9.06	/0		19 MIS
28	20 MIS	20.81	/0	/0		20 MIS	28.36	/0	/0		20 MIS	9.15	/0		20 MIS	9.25	/0		20 MIS
29	21 MIS	21.52	/0	/0		21 MIS	29.38	/0	/0		21 MIS	9.15	/0		21 MIS	9.25	/0		21 MIS
30	22 MIS	22.06	/0	/0		22 MIS	30.08	/0	/0		22 MIS	9.15	/0		22 MIS	9.25	/0		22 MIS
31	23 MIS	22.33	/0	/0		23 MIS	30.42	/0	/0		23 MIS	/0	/0		23 MIS	/0	/0		23 MIS
32	24 MIS	22.33	/0	/0		24 MIS	30.42	/0	/0		24 MIS	/0	/0		24 MIS	/0	/0		24 MIS
33	25 MIS	22.33	/0	/0		25 MIS	30.42	/0	/0		25 MIS	/0	/0		25 MIS	/0	/0		25 MIS
34	26 MIS	22.33	/0	/0		26 MIS	30.42	/0	/0		26 MIS	/0	/0		26 MIS	/0	/0		26 MIS
35	27 MIS	22.33	/0	/0		27 MIS	30.42	/0	/0		27 MIS	/0	/0		27 MIS	/0	/0		27 MIS
36	28 MIS	/0	/0	/0		28 MIS	/0	/0	/0		28 MIS	/0	/0		28 MIS	/0	/0		28 MIS
37	29 MIS	/0	/0	/0		29 MIS	/0	/0	/0		29 MIS	/0	/0		29 MIS	/0	/0		29 MIS
38	30 MIS	/0	/0	/0		30 MIS	/0	/0	/0		30 MIS	/0	/0		30 MIS	/0	/0		30 MIS
39	31 MIS	/0	/0	/0		31 MIS	/0	/0	/0		31 MIS	/0	/0		31 MIS	/0	/0		31 MIS
40	32 MIS	/0	/0	/0		32 MIS	/0	/0	/0		32 MIS	/0	/0		32 MIS	/0	/0		32 MIS
41	33 MIS	/0	/0	/0		33 MIS	/0	/0	/0		33 MIS	/0	/0		33 MIS	/0	/0		33 MIS
42	34 MIS	/0	/0	/0		34 MIS	/0	/0	/0		34 MIS	/0	/0		34 MIS	/0	/0		34 MIS
43	35 MIS	/0	/0	/0		35 MIS	/0	/0	/0		35 MIS	/0	/0		35 MIS	/0	/0		35 MIS
44	36 MIS	/0	/0	/0		36 MIS	/0	/0	/0		36 MIS	/0	/0		36 MIS	/0	/0		36 MIS

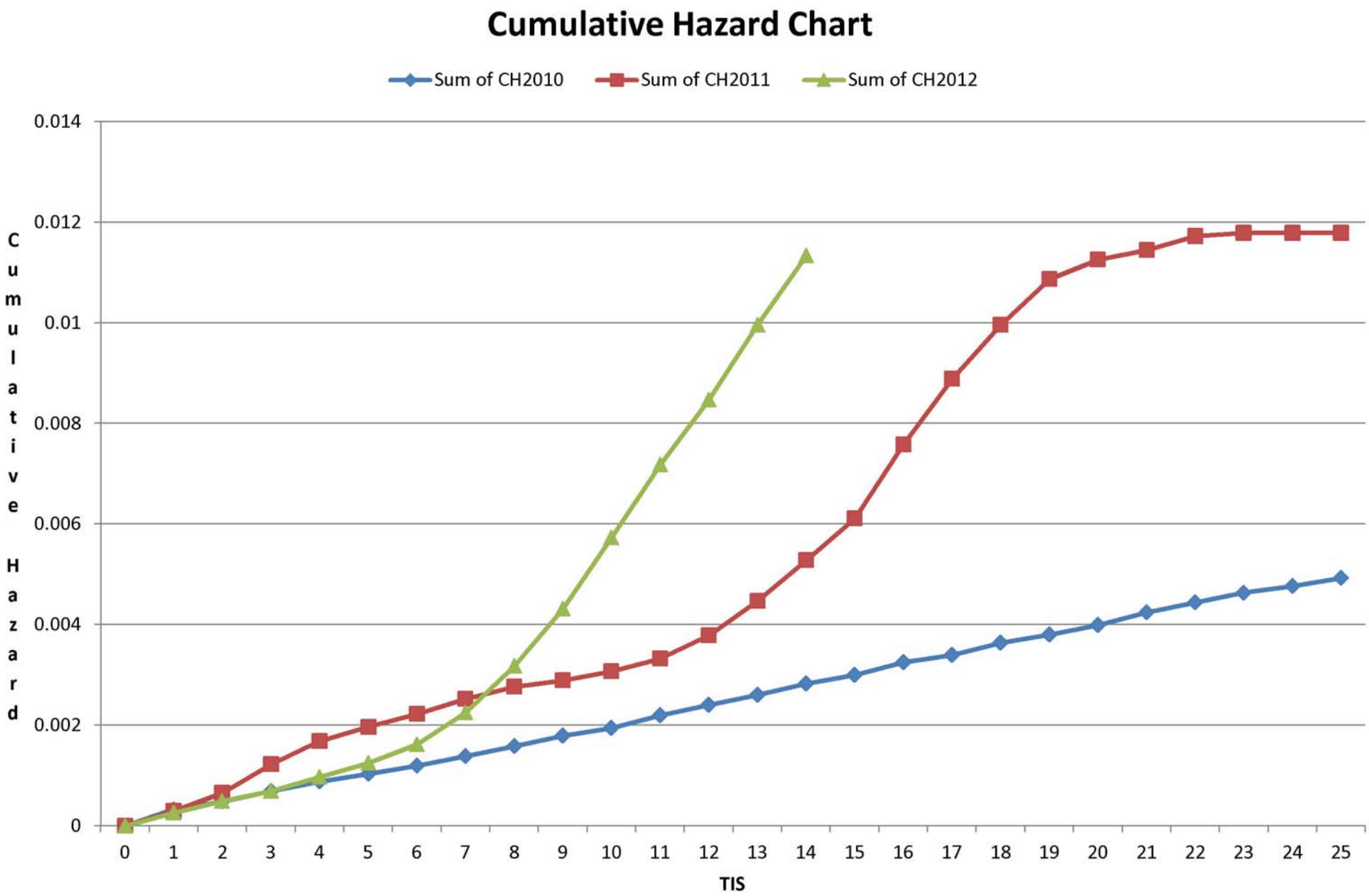
Redacted for Relevance

Redacted for Relevance

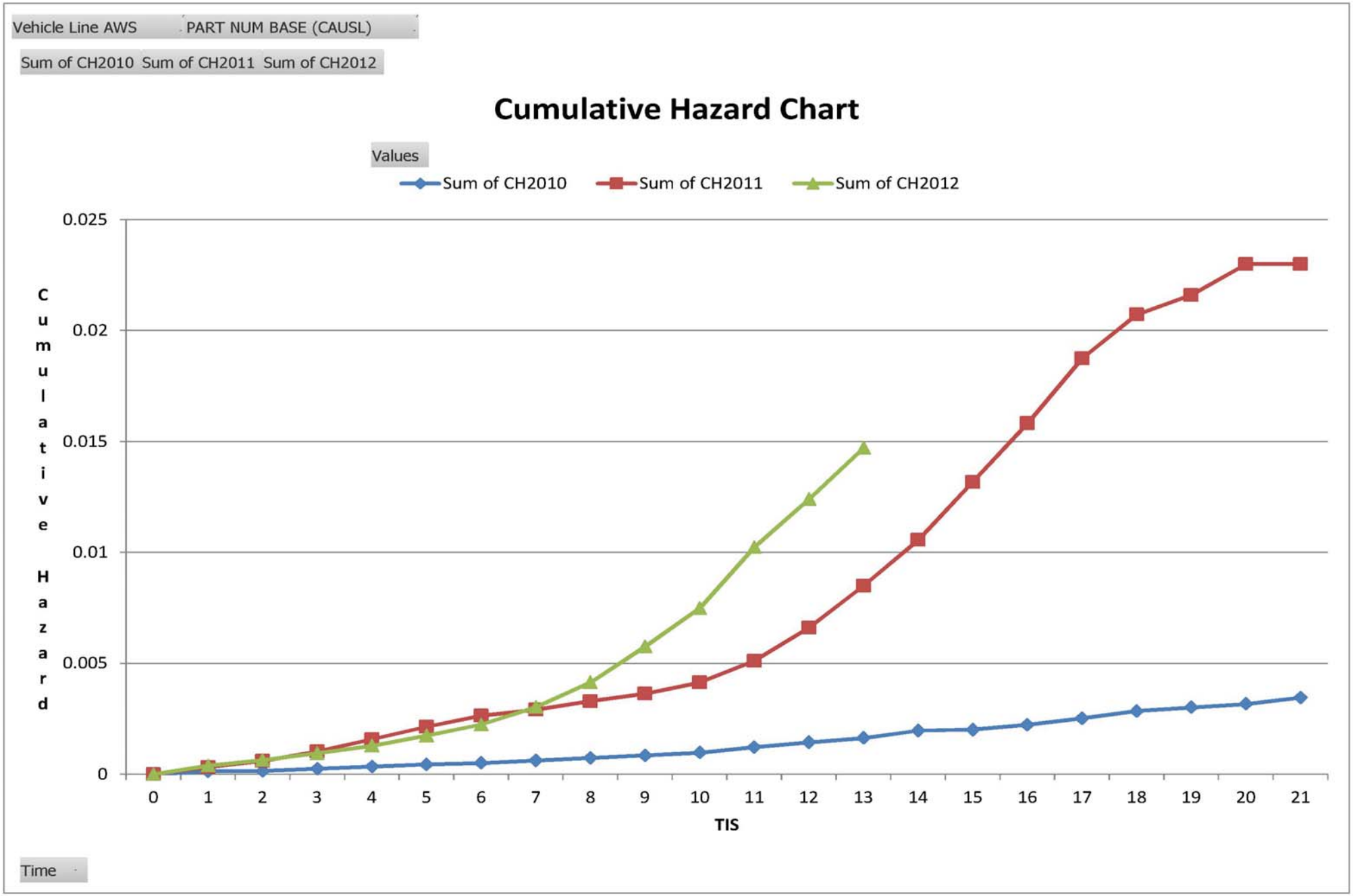
FOCUS- STEERING GEAR



FUSION- STEERING GEAR



EXPLORER- STEERING GEAR



Redacted for Relevance

From: Biyashev, Russ (.)
Sent: Friday, July 23, 2010 6:59 PM
To: Snider, Tim (T.O.); Estes, Eric (E.E.)
Subject: EPAS Replacement

Eric & Tim

Could you please take a look at the attached claim. I have not talked to the technician - but looks like an EPAS rack replacement… Would be interesting to get this part back?

Claim 741848 EPAS Replaced.pdf…

Thank you,

Russ Biyashev
Ford Motor Company
Chassis Brake Controls
Phone: 313.805.**4793**
Text: 3138054793@vtext.com
Email: **rbiyashe**@ford.com

Server: **AWS Prod**
Claims loaded through: **22-JUL-2010**

Claim Detail Report

Note: All costs are in US dollars
Model Year = 2010; **Claim Key** = 741848

Vehicle Information

Model Year: 2010
Market Derived: F - FORD
Body/Cab Type: C/FA - 4 DOOR SEDAN-4 LITE
Version/Series: *-[N/A]
Drive Type: C/A-2 WHL L/H FRONT DRIVE
Vehicle Line: C/DE-FUSION/MILAN/MKZ (ZEPHYR) [06-11]
Warranty Start Date: 21-APR-10
Production Date: 17-MAR-10
VIN: 3FAHP0HA9AR[redacted]

Claim Information

Document Number: 03047601
Repair Date: 25-MAY-10
Distance: 862
TIS: 2

Dealer Information:

Dealer Name: HARWOOD FORD SALES LTD
Dealer Code: B6229 - *
Address: 1303 SUTHERLAND DRIVEP.O.BOX 2200
City: BROOKS
State: AB Zip Code:T1R1C8
Country: CAN Region Code: NA
Phone: (403)362-6900

Expense Information

Customer Paid Amount:	.00
Deductible Amount:	.00
Dealer Paid Amount:	.00
Labor Cost:	249.62
Misc. Expense Amount:	100.35
Part Markup Amount:	476.74
Material Cost:	1757.27
Total Cost Gross:	2006.89

Cust. Concern Code: H39 - TRACTION CONTROL/ADV TRAC WARNING LIGHT TROUBLES
Condition Code: 42 - DOES NOT OPERATE PROPERLY
Technician Comment: VERIFIED CONCERN FOUND CODES C1277,U0131,U0121,U0415. FOUND SSM 21243 AND COMPLETED WIGGLE TEST. FOUND NOTHING WENT OR HAPPENED ACCORDING TO SSM. TEST DROVE VARIOUS TIMES AND FINALLY GOT SYSTEM TO ACT UP FINDING THAT SAS WOULD READ LEFT AT 49,590 DEGREES AND WOULD STICK AT THAT POINT TILL CAR WAS TURNED OFF AND ON. FOLLOWED PINPOINT TEST FOR C1277 AND FOUND NO RESULTS. CHECKED FOR COMMUNICATION BE
Customer Comment: PLEASE INSPECT FOR TRACTION CONTROL LIGHT ON

Labor Op Code	Labor Op Description	Labor Op Cost
3504E47		25.62
3504E45		25.62
3504A	STEERING GEAR ASSEMBLY REMOVE AND INSTALL OR REPLACE	145.17
OSL	OUTSIDE LABOR	53.21

Causal Flag	Full Part Number PREF	BASE	SUFF	Part Description	CPSC	Part Quantity	Extended Amount

Y	STE	10	*	110201	1	1668.58

DTC Sections: **Mil. Light On =** Y

Flag	Test Type	Malfunction Cd	Malfunction Cd Description	Monitor Cd	Monitor Cd Description
	KOEC	U0131			
N	KOEO	C1227	SPEED WHEEL SENSOR LR INPUT SHORT CIRCUIT TO BATTERY	24	CCM VEHICLE
Y	KOER	U0121	LOST COMMUNICATION WITH ANTI-LOCK BRAKE SYSTEM (ABS) CONTROL MODULE	47	NETWORK COMM
Y	KOER	U0415	INVALID DATA RECEIVED FROM ANTI-LOCK BRAKE SYSTEM (ABS) CONTROL MODULE	47	NETWORK COMM

Any comments? You can contact

webmaster

75125

From: Markus.Nowak@hella.com
Sent: Thursday, July 29, 2010 1:22 PM
To: Estes, Eric (E.E.)
Cc: Angie Caudill; Anthony Fleenor; Engelbert Lu; Jim Loria; Michael Fontana; Diez, Timothy (T.P.); Snider, Tim (T.O.); Thomas.Surmann@hella.com
Subject: FR 210 interrim findings

Hello Eric,

like discussed on the phone some minutes ago:
FR 210 was analyzed today and we were able to reproduce a open circuit on the segment PCB side of the CS.
The resistance could be reproduced from a single digit Ohm range to a Mega Ohm range.
This is the good news.

The bad news is that there is a slight stress mark on the CS cable that might indicate overturning. Since Hella did not open the CS we can not tell for sure what the RC for the open is.
For further analysis the CS will be sent to Tyco since the next analysis step on the CS would be destructive and we should better not do that on Hella side and push it to Tyco.

Tomorrow you will receive some nice pics that we took today.

I hope we can have some more results available by next week in case the part arrives quick enough at Tyco.

Thats it so far.

Mit freundlichen Grüssen / Best regards

****
i.A. Dipl.-Ing. (FH) Markus Nowak
Hella KGaA Hueck & Co.
Quality Manager Internal Factory
Actuators & Sensors
Berghäuser Str. 30
D - 45663 Recklinghausen / Germany

Tel.: + 49 / (0)2361 / 307 - 35249
Mobil.: +49 / (0)172 / 5601465
Fax.: + 49 / (0)2361 / 307 - 47 35249
mailto:Markus.Nowak@hella.de
http://www.hella.de
****

From: Bouse, William (Bill.)
Sent: Monday, July 20, 2009 6:44 PM
To: 'Martha Abundis'; Estes, Eric (E.E.); Bahena, Miguel (Mike.); Anthony Fleenor; Costas Chrysochoidis; Greg Bendzinski; Geoff Jacks; Jason Johnson-contr; Paul IRELAND; Simon Malsbury
Cc: Hochrein, Brad (B.G.); Chacon, Jose (A.); Christiansen, Jens (J.F.); Frey, Martin (M.F.); Puleri, Michael (M.J.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Porter, Wesley (W.); Abe Ghaphery; Andrew Williams; Dean Flower; Mark Karwowski; Phil Browne; Robert Kinnear; Salim Semssar; Sergio Alvarez; Thiha Than; William Olsen
Subject: FR-0004 Ribbon Cable Issue

TRW Team, on FR-0004 we are relying on a manual process to make sure that the connector is put into the EPP without damaging the terminals on the ribbon cable. Updating the job instructions is really not a fix, good to have but for sure does not mean it will never happen again. So the current timing that I have been able to gather is to look at the concern 5 weeks from now. Not acceptable for such a fix, unless I am missing something this is being added to the existing tooling to add a guidance feature. Need to get this into production as quickly as possible. It ahs been 2 months since we removed this gear from the car and we are over a month from a concept review, not acceptable.

-----Original Message-----
From: Martha Abundis [mailto:Martha.Abundis@TRW.COM]
Sent: Monday, June 15, 2009 5:10 PM
To: Estes, Eric (E.E.); Bahena, Miguel (Mike.); Bouse, William (W.J.); Anthony Fleenor; Costas Chrysochoidis; Greg Bendzinski; Geoff Jacks; Jason Johnson-contr; Paul IRELAND; Simon Malsbury
Cc: Hochrein, Brad (B.G.); Chacon, Jose (A.); Christiansen, Jens (J.F.); Frey, Martin (M.F.); Puleri, Michael (M.J.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Porter, Wesley (W.); Abe Ghaphery; Andrew Williams; Dean Flower; Mark Karwowski; Phil Browne; Robert Kinnear; Salim Semssar; Sergio Alvarez; Thiha Than; William Olsen
Subject: Re: Updated: Ford/TRW EPAS Warranty Meeting

Mike,

Attached Bully data for the B9A ECU.

>>> "Estes, Eric (E.E.)" <eestes@ford.com> 6/1/2009 12:35 PM >>>
When: Occurs every Monday effective 6/8/2009 until 12/7/2009 from 11:00 AM to 12:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Teleconference 866-228-1482 code 3753904

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

At this time we have moved the warranty meeting to every Monday starting at 11am for one hour to cover the five warranty returns. See chart attachment for updated information on all 5 warranty returns. (see below for the webmeeting call-in numbers)

Any questions on the returns email back, next Mondays meeting will explain more detailed information of the three gears in analysis.

<<2010 CD3 EPAS Warranty Return Chart.xls>>

This is a Bi-weekly meeting that meets on Mondays and I scheduled this meeting for 11:30am to 12:00pm at this time due to TRW/Ford scheduling conflicts. We can agree on a permanent time for all to attend we just need to remember that the UK will need to report at times and they are 5 hours ahead of us.

At this meeting we will go over the current status of warranty returns and in-process returns.

Updates on any warranty process or EPAS gear activity:

* EPAS Diagnosis at dealers
* Gears in process to WPAC
* WPAC Gear Reviews
* Received Gears
* Status of Current Returns (Fred Beans Ford return).

Let me know of schedule conflicts and if I need to invite additional people to this meeting. Thanks

Eric Estes invites you to this warranty meeting, call-in numbers below and if needed webmeeting for web conference.

Teleconference Access Information

USA Toll-Free: 866-228-1482

USA Caller Paid/International Toll: 816-423-4291

Participant Code: 3753904

Web Meeting Address: https://www.webmeeting.att.com

Meeting number(s): 8662281482 or 8164234291

Participant Code: 3753904

From: Estes, Eric (E.E.)
Sent: Friday, October 02, 2009 6:17 PM
To: Bouse, William (Bill.); Snider, Tim (T.O.)
Cc: Simon Malsbury; 'Robert Kostadina'
Subject: FR0051(No Com)

Bill/Tim FR0051 (No Com) returned and analyzed at 26-mile for an over-voltage to the main micro(badly burned). We have pics but nobody sent them to me yet but I feel this is a external voltage spike issue because the vehicle came in for a no start & abs lamp on for the same no communication issue and the tech replaced the PCM & ABS module to fix vehicle(see attached AWS history report) the abs module was denied by the RTDA group so that module does not show-up in AWS.

Simon/Rob could you send the pictures of the micro to Tim & Bill thanks

We can call the dealer to see if they can remember what happened.

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

FAHP0HA1AR[redacted] DE C/DE F C/FA * C/A A3 C/W6 C/SB 09-05-09 121153 USA -1 5O01 AE5Z 3504 B F02 S10 V87 H50 42 **AWS Claim Key:** 22803 **Doc #:** 03133904 **Trx Code:** 2 **Labor Hrs:** 3.3 **Labor Cost:** 245.5 **Material Cost:** 1315.72 **Total Cost:** 1561.22 **Dlr Cd-Sub Cd:** 00475-* **Name:** BURNS FORD-MERCURY, INC. **Ph:** 803-2864414 **St:** SC **Ctry Cd:** USA **Reg Cd:** NA **Repr Date:**25-JUN-2009 **DIST(Mile):**386 **Cust Comments:** CUSTOMER STATE VEHICLE IS HARD TO TURN **Tech Comments:** NO POWER STG WENT TO SELF TEST PSCM NO COMMUNICATION CK POWE R SUPPLY AND GROUNDS FINE REMOVED WHEELS REMOVED OUTER TIE ROD ENDS REMOVED SUB FRAME REPLACED RACK AND PINION REINSTALLED PERFORMED ALIGNMENT SET TOE ON REAR SET TOE ON FRONT TEST DROVE FINE

3FAHP0HA1AR[redacted]DE C/DE F C/FA * C/A A3 C/W6 C/SB 09-05-09 121153 USA -1 3A04 9L8Z 7Z490 A F04 S11 V48 P66 42 **AWS Claim Key:** 22802 **Doc #:** 03133901 **Trx Code:** 2 **Labor Hrs:** 12.5 **Labor Cost:** 929.88 **Material Cost:** 216.06 **Total Cost:** 1145.94 **Dlr Cd-Sub Cd:** 00475-* **Name:** BURNS FORD-MERCURY, INC. **Ph:** 803-2864414 **St:** SC **Ctry Cd:** USA **Reg Cd:** NA **Repr Date:**25-JUN-2009 **DIST(Mile):**386 **Cust Comments:** CUSTOMER STATES DURING UP SHIFT TRANSMISSION FLARES OUT AND BACK IN GEAR **Tech Comments:** CHK FLUID LEVEL SELF TEST NO DTCS TEST DRIVE 3 4 SHIFT FLARE CHK LINE PRESSURES CONTACT HOTLINE CONFIRM SOLENOID BODY ID & STRATEGY MATCHED CHK FLUID FOR DEBRIS REMOVED SIDE COVER CHK VALVE BODY FOR BOLT TORQUE TEST DROVE STILL HAS PROBLEM RE CONTACT HOTLINE REMOVE MAIN CONTROL VALVE BODY DISSASSEMBLE & INSPECT RECONDITION INSTALL VALVE BODY FILL WITH FLUID CLEAR KAM PERFORM SOLENOID

3FAHP0HA1AR[redacted]DE C/DE F C/FA * C/A A3 C/W6 C/SB 09-05-09 121153 USA -1 2G01 AE5Z 12A650 GE F04 S11 V52 D02 42 **AWS Claim Key:** 24488 **Doc #:** 03133902 **Trx Code:** S07 **Labor Hrs:** 3 **Labor Cost:** 223.17 **Material Cost:** 537.92 **Total Cost:** 761.09 **Dlr Cd-Sub Cd:** 00475-* **Name:** BURNS FORD-MERCURY, INC. **Ph:** 803-2864414 **St:** SC **Ctry Cd:** USA **Reg Cd:** NA **Repr Date:**25-JUN-2009 **DIST(Mile):**386 **Cust Comments:** CUSTOMER STATES THEFT LIGHT IS FLASHING AND VEHICLE WILL NOT CRANK **Tech Comments:** PERFORM SELF TEST UNABLE TO COMMUNICATE WITH PCM CHECK FOR BLANK PCM CK FOR POWER AND GROUND FOLLOW PIN POINT TEST QA PERFORM NETWORK TEST NETWORK FAILS ALL MODULES PINPOINT TEST A NO MODULES COMMUNICATE PINPOINT TEST AD CK HSCAN NETWORK RESISTANCE 2.9 OHMS HSCAN NETWORK SHORTED WIRING IN MODULE

Report# :	9IVA6002 RTDAHL			Received:	09/22/2009
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2010,FUSION,SE ,SEDAN ,3FAHP0HA1AR[redacted]			Build Date:	05/09/2009
Odometer :	386 M	Engine:	2.5L DOHC	Calibration:	ADE1F40A
Transmission:	6SP 6F MID	Axle:		A/C:	YES
Dealer:	USA 00475 Burns Ford-Mercury, Inc.			Phone#:	(803) 286-4414
City:	Lancaster	State:	South Caroli	Country :	USA
Originator:	CHARLES ERDY				
Symptom:	3 01 A 04 CHASS.,SERVICE BRAKE ,INDICATOR,T/C LIGHT				
Status:					
VFG:	V21 BRAKING				
Additional Symptom:	DENIED				
Fix:	Causal Component :		MODULE-BRK ANTI/LK -- RPL		
Condition Code:					

Region Code: S2 Region Name: Charlotte

KOEO:

KOEC:

KOER:

REPAIR 09/22/2009 08:57AM DOUG KREMER MSS - TSO - DIGITAL IMAGE RTDA

COMPLAINT OF LIGHTS ON ALL THE TIME TECHNICIAN FOUND NO COMMUNICATION

WITH ABS MODULE WIRING INSPECTED FOR CHAFFING TERMINAL FIT GOOD RESET

STILL NO COMM WITH ABS CALLING FOR APPROVAL

RECOM
M 09/22/2009 08:57AM DOUG KREMER MSS - TSO - DIGITAL IMAGE RTDA

ADVISED CLAIM ALREADY SUBMITTED INTO ACESIIG THEREFORE RTDA IS UNABLE

TO GET CODE FOR THIS REPAIR

From: Estes, Eric (E.E.)
Sent: Wednesday, October 28, 2009 9:50 PM
To: Bahena, Miguel (Mike.); Snider, Tim (T.O.); Mrozek, Robert (R.M.); Costas Chrysochoidis
Cc: Beattie, Mike (M.A.); Dorony, Kenneth (K.R.)
Subject: FR0070- Friction code P07AE-09 (NTF on return gear)

I found out through the Interactive diagnosis that this tech did not hit the clear button at the beginning of step"F4", before the road test. I talked to the tech at the dealer and he told me he everytime he started and drove the vehicle had no assist, but not 100% sure he cleared the codes, he told me he did but this was worked on over one month ago. The clear code button is not on the diagnostic page that we can see, but should state "complete" when done on the technician's online diagnosis page.
So I asked Mike Beattie if there is a way to make the tech clear the codes before going forward on the road test in the diagnostics that way there is no confusion with the status of the code for current or historic and there is no confusion on the last step before EPAS rack replacement.

#70 gear warranty return data....

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

Year = MY10
Model = CD338
Engine = 2.5L
VIN = 3FAHP0HA4AF[redacted]
IDS Version = Not Available
PCM = AE5A-12A650-GE
ABS = AE5C-2C219-FB
ACM = 9E5T-19C158-AC
FCIM = 9E5T-18A802-AC
FDIM = 9E5T-19C116-AE
GEM_SJB = AG1T-14B476-CA
HVAC = 9E5H-14C178-AK
IC = AE5T-14C026-BH
OCS = 9E53-14C371-AD
PSCM = AE5C-14D003-AK
RCM = 9E53-14C028-AB

Current DTCs {retrieved 24 September 2009 12:05:05}

DTC	Snap Shot Data	Source
P1000:00	N/A	PCM

Historic DTCs {retrieved 24 September 2009 12:05:05}

DTC	Snap Shot Data	Source
P07AE:09	00	PSCM

DTCs cleared since initial read:

DTC	Snap Shot Data	Source
C1277	N/A	ABS
U0131:00	N/A	IPC

Start: Thu Sep 24 11:01:34 EDT 2009

Menu Selection: Inspection and Verification

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.
  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

PE14-030 000074

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.

NOTE: If present, diagnose DTC U3000:96 before diagnosing any other DTCs.

- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3FAHP0HA4AR[redacted]

System Related CMDTCs Active {retrieved 24 September 2009 11:00:25

DTC	Description	Source	Status
Pass	System pass	PSCM	

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

PE14-030 000075

Recent Warranty Repair History: No recent repair history on vehicle

Review the OASIS results below for any known concerns related to the current vehicle.

SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE. ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE. Effective Date: 05/06/2009	1 out of 1 303000
SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE: THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION. Effective Date: 05/14/2009	1 out of 1 303000
SSM: 20831 2010 FUSION/MILAN ELECTRONIC POWER ASSIST SYSTEM (EPAS) - INTERACTIVE DIAGNOSIS THE 2010 FUSION/MILAN WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH INTERACTIVE DIAGNOSTICS. THIS SECTION PROVIDES NEW INFORMATION ABOUT DIAGNOSTIC TOOLS FOR THE ELECTRONIC POWER ASSIST STEERING (EPAS) AND THE POWER STEERING CONTROL MODULE (PSCM). THIS NEXT GENERATION OF VEHICLE DIAGNOSTIC SOFTWARE IS DESIGNED TO AID TECHNICIANS IN IDENTIFYING VEHICLE CONCERNS BY ALLOWING PINPOINT TEST DIAGNOSTICS TO DIRECTLY ACCESS THE VEHICLE THROUGH A VEHICLE COMMUNICATIONS MODULE (VCM), DISPLAY TEST MEASUREMENTS IN REAL TIME AND PROVIDE LOGICAL DIAGNOSTIC PROGRESSION BASED ON TECHNICIAN INPUT. NOTE: IF DIAGNOSTIC TROUBLE CODES ARE PRESENT, DO NOT CLEAR THE CODES UNTIL USING INTERACTIVE DIAGNOSIS, THIS WILL HELP CAPTURE 'FREEZE FRAME' DATA DURING THE DIAGNOSTICS OF ANY DTC. Effective Date: 06/06/2009	1 out of 1 303000
SSM: 20903 2010 FUSION/MILAN/MKZ, FUSION/MILAN HYBRID - REMOVAL AND INSTALLATION OFINSTRUMENT PANEL REINFORCEMENT PLATE. - SERVICE TIP 2010 FUSION/MILAN/MKZ AND FUSION/MILAN HYBRID, BUILT PRIOR TO 06/25/2009 WHERE REMOVAL AND REINSTALLATION OF INSTRUMENT PANEL REINFORCEMENT PLATE (BASE PART NUMBER 54017A28) IS NECESSARY, MAKE SURE TO USE HAND TOOLS TO REMOVE ANY FASTENERS AND FOLLOW WORKSHOP MANUAL SECTION 211-04. WHEN REINSTALLING THE FASTENERS, MAKE SURE TO ONLY APPLY 47 LB-IN (5.4NM) OF MAXIMUM TORQUE. FAILURE TO USE HAND TOOLS AND FOLLOW WSM SECTION 211-04 MAY DAMAGE THE INSTRUMENT PANEL RETAINER CLIPS AND/OR INSTRUMENT PANEL SURFACES. IF DAMAGE TO THESE COMPONENTS IS PRESENT, PROCEED WITH NORMAL SERVICE REPAIRS AND REFER TO FORD CATALOG FOR THE LATEST AND GREATEST SERVICE PART AVAILABILITY. Effective Date: 07/23/2009	1 out of 1 303000

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

⊟ Detected DTCs / DTC Index

PE14-030 000076

- **DTCs retrieved are listed below. If the DTCs are related to the concern, proceed as directed.**
- **If there are no DTCs relevant to the customer concern then proceed to Symptom Chart.**

Current DTCs {retrieved 24 September 2009 11:00:25}

DTC	Description / Action	Source
Pass	System pass	PSCM

Historic DTCs {retrieved 24 September 2009 11:00:25}

DTC	Description / Action	Source
Pass	System pass	PSCM

DTCs cleared since initial read:

Exit: Thu Sep 24 11:05:18 EDT 2009

Start: Thu Sep 24 11:37:36 EDT 2009

Menu Selection: Inspection and Verification

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.
  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

PE14-030 000077

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.

NOTE: If present, diagnose DTC U3000:96 before diagnosing any other DTCs.

- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3FAHP0HA4AR[redacted]

System Related CMDTCs Active {retrieved 24 September 2009 11:36:24

DTC	Description	Source	Status
P07AE:09	Transmission Friction Element G Performance/Stuck Off : Component failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

4s
0s 20s

Review the OASIS results below for any known concerns related to the current vehicle.

SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE. ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE. Effective Date: 05/06/2009	1 out of 2 303000
SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE: THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION. Effective Date: 05/14/2009	1 out of 2 303000

SSM: 20831 2010 FUSION/MILAN ELECTRONIC POWER ASSIST SYSTEM (EPAS) - INTERACTIVE DIAGNOSIS THE 2010 FUSION/MILAN WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH INTERACTIVE DIAGNOSTICS. THIS SECTION PROVIDES NEW INFORMATION ABOUT DIAGNOSTIC TOOLS FOR THE ELECTRONIC POWER ASSIST STEERING (EPAS) AND THE POWER STEERING CONTROL MODULE (PSCM). THIS NEXT GENERATION OF VEHICLE DIAGNOSTIC SOFTWARE IS DESIGNED TO AID TECHNICIANS IN IDENTIFYING VEHICLE CONCERNS BY ALLOWING PINPOINT TEST DIAGNOSTICS TO DIRECTLY ACCESS THE VEHICLE THROUGH A VEHICLE COMMUNICATIONS MODULE (VCM), DISPLAY TEST MEASUREMENTS IN REAL TIME AND PROVIDE LOGICAL DIAGNOSTIC PROGRESSION BASED ON TECHNICIAN INPUT. NOTE; IF DIAGNOSTIC TROUBLE CODES ARE PRESENT, DO NOT CLEAR THE CODES UNTIL USING INTERACTIVE DIAGNOSIS, THIS WILL HELP CAPTURE 'FREEZE FRAME' DATA DURING THE DIAGNOSTICS OF ANY DTC. Effective Date: 06/06/2009	1 out of 2 303000
SSM: 20903 2010 FUSION/MILAN/MKZ, FUSION/MILAN HYBRID - REMOVAL AND INSTALLATION OFINSTRUMENT PANEL REINFORCEMENT PLATE. - SERVICE TIP 2010 FUSION/MILAN/MKZ AND FUSION/MILAN HYBRID, BUILT PRIOR TO 06/25/2009 WHERE REMOVAL AND REINSTALLATION OF INSTRUMENT PANEL REINFORCEMENT PLATE (BASE PART NUMBER 54017A28) IS NECESSARY, MAKE SURE TO USE HAND TOOLS TO REMOVE ANY FASTENERS AND FOLLOW WORKSHOP MANUAL SECTION 211-04. WHEN REINSTALLING THE FASTENERS, MAKE SURE TO ONLY APPLY 47 LB-IN (5.4NM) OF MAXIMUM TORQUE. FAILURE TO USE HAND TOOLS AND FOLLOW WSM SECTION 211-04 MAY DAMAGE THE INSTRUMENT PANEL RETAINER CLIPS AND/OR INSTRUMENT PANEL SURFACES. IF DAMAGE TO THESE COMPONENTS IS PRESENT, PROCEED WITH NORMAL SERVICE REPAIRS AND REFER TO FORD CATALOG FOR THE LATEST AND GREATEST SERVICE PART AVAILABILITY. Effective Date: 07/23/2009	1 out of 2 303000
Search criteria with no matching OASIS results: P07AE	

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

Exit: Thu Sep 24 11:48:25 EDT 2009

Start: Thu Sep 24 12:06:18 EDT 2009

Menu Selection: Inspection and Verification

⊟ IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.
  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned	Battery junction box (BJB) fuses 1

steering column.	(50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.

NOTE: If present, diagnose DTC U3000:96 before diagnosing any other DTCs.

- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3FAHP0HA4AR[redacted]

System Related CMDTCs Active {retrieved 24 September 2009 12:05:05

DTC	Description	Source	Status
P07AE:09	Transmission Friction Element G Performance/Stuck Off : Component failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

Recent Warranty Repair History: No recent repair history on vehicle

Review the OASIS results below for any known concerns related to the current vehicle.

SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE. ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE. Effective Date: 05/06/2009	1 out of 2 303000
SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE: THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION. Effective Date: 05/14/2009	1 out of 2 303000
SSM: 20831 2010 FUSION/MILAN ELECTRONIC POWER ASSIST SYSTEM (EPAS) - INTERACTIVE DIAGNOSIS THE 2010 FUSION/MILAN WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH INTERACTIVE DIAGNOSTICS. THIS SECTION PROVIDES NEW INFORMATION ABOUT DIAGNOSTIC TOOLS FOR THE ELECTRONIC POWER ASSIST STEERING (EPAS) AND THE POWER STEERING CONTROL MODULE (PSCM). THIS NEXT GENERATION OF VEHICLE DIAGNOSTIC SOFTWARE IS DESIGNED TO AID TECHNICIANS IN IDENTIFYING VEHICLE CONCERNS BY ALLOWING PINPOINT TEST DIAGNOSTICS TO DIRECTLY ACCESS THE VEHICLE THROUGH A VEHICLE COMMUNICATIONS MODULE (VCM), DISPLAY TEST MEASUREMENTS IN REAL TIME AND PROVIDE LOGICAL DIAGNOSTIC PROGRESSION BASED ON TECHNICIAN INPUT. NOTE: IF DIAGNOSTIC TROUBLE CODES ARE PRESENT, DO NOT CLEAR THE CODES UNTIL USING INTERACTIVE DIAGNOSIS, THIS WILL HELP CAPTURE 'FREEZE FRAME' DATA DURING THE DIAGNOSTICS OF ANY DTC. Effective Date: 06/06/2009	1 out of 2 303000
SSM: 20903 2010 FUSION/MILAN/MKZ, FUSION/MILAN HYBRID - REMOVAL AND INSTALLATION OFINSTRUMENT PANEL REINFORCEMENT PLATE. - SERVICE TIP 2010 FUSION/MILAN/MKZ AND FUSION/MILAN HYBRID, BUILT PRIOR TO 06/25/2009 WHERE REMOVAL AND REINSTALLATION OF INSTRUMENT PANEL REINFORCEMENT PLATE (BASE PART NUMBER 54017A28) IS NECESSARY, MAKE SURE TO USE HAND TOOLS TO REMOVE ANY FASTENERS AND FOLLOW WORKSHOP MANUAL SECTION 211-04. WHEN REINSTALLING THE FASTENERS, MAKE SURE TO ONLY APPLY 47 LB-IN (5.4NM) OF MAXIMUM TORQUE. FAILURE TO USE HAND TOOLS AND FOLLOW WSM SECTION 211-04 MAY DAMAGE THE INSTRUMENT PANEL RETAINER CLIPS AND/OR INSTRUMENT PANEL SURFACES. IF DAMAGE TO THESE COMPONENTS IS PRESENT, PROCEED WITH NORMAL SERVICE REPAIRS AND REFER TO FORD CATALOG FOR THE LATEST AND GREATEST SERVICE PART AVAILABILITY. Effective Date: 07/23/2009	1 out of 2 303000
Search criteria with no matching OASIS results: P07AE	

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

Detected DTCs / DTC Index

PE14-030 000081

- **DTCs retrieved are listed below. If the DTCs are related to the concern, proceed as directed.**
- **If there are no DTCs relevant to the customer concern then proceed to Symptom Chart.**

Current DTCs {retrieved 24 September 2009 12:05:05}

DTC	Description / Action	Source
N/A	No DTCs to report	

Historic DTCs {retrieved 24 September 2009 12:05:05}

DTC	Description / Action	Source
P07AE:09	Transmission Friction Element G Performance/Stuck Off: Component failure **Description:** The PSCM will monitor the amount of force needed to assist with vehicle steering when the ignition is ON and the voltage supply to the PSCM is above 6 volts, all other EPAS sensors are functioning correctly and the EPAS gear is providing assist. • DTC P07AE:09 (Transmission Friction Element G Performance/Stuck Off: Component Failure) - If the amount of friction in the steering system exceeds the allowable threshold, DTC P07AE:09 will be set. Low air pressure in the tires could cause DTC P07AE:09 to set. **Possible Causes:** • Low tire air pressure. • Damaged steering gear bellows boot • Contaminated gear/rack. • Inner tie rods • Steering gear internal failure. **Diagnostic Aids:** During the ignition cycle when the DTC was set the following will happen: steering assist will be reduced, the PSCM will transmit an invalid steering angle message over the HS-CAN bus and the module will also send a message to the IPC to display the SERVICE POWER STEERING message in the message center. During the very next ignition cycle after the DTC was set the following will happen: the PSCM will remove steering assist and enter into a manual mode, the module will transmit an invalid steering angle message over the HS-CAN bus and the module will also send a message to the IPC to display the SERVICE POWER STEERING NOW message in the message center. **Action:** GO to Pinpoint Test F	PSCM

DTCs cleared since initial read:

DTC P07AE:09 (PSCM) - Transmission Friction Element G Performance/Stuck Off: Component failure

---

F: DTC P07AE: Transmission Friction Element G Performance/Stuck Off - Component Failure

Normal Operation

The power steering control module (PSCM) monitors various inputs and outputs of the electronic power assist steering (EPAS) system in order to keep the system operating at peak capacity. Information provided by sensors (steering torque, vehicle speed, vehicle travel distance, etc.) are all compared to programmed and learned information. Likewise, outputs like the motor and steering rack (travel) are tested against programmed and learned information.

Note:

The smart junction box (SJB) is also identified as the generic electronic module (GEM).

F1: MONITOR THE SJB LEFT FRONT TIRE PRESSURE (LF_PRES) AND RIGHT FRONT TIRE PRESSURE (RF_PRES) PIDS

- Ignition ON, engine OFF.
- Access the GEM_SJB and monitor the LF_PRES PID. Stored Value: 29.4 psi
- Access the GEM_SJB and monitor the RF_PRES PID. Stored Value: 29.9 psi
- Compare the PID readings to the information on the vehicle certification (VC) label.
- **Is the air pressure in the tires correct as indicated on the VC label?**

Yes
Go to F2.

F2: CHECK FOR UNLOADED STEERING RACK TRAVEL FEEL.

- With the vehicle in NEUTRAL, position it on a hoist. Refer to Section 100-02.
- Ignition OFF.
- Raise the vehicle until the front wheels no longer touch the ground.
- Rotate the steering wheel from lock-to-lock and inspect the steering rack travel for the following:
  —Abnormal noises
  —Rough spots
  —Sticky spots
  —Tight spots
- **Is steering rack travel smooth and free of any abnormal noises, rough, sticky and tight spots?**

Yes
Go to F4.

F4: TEST DRIVE TO CHECK FOR RETURNING DTCS. - Fault outcome

-
- Cycle the ignition to OFF and then back to RUN.

NOTE: Always drive the vehicle in a safe manner according to driving conditions and obey all traffic laws.

- Test drive the vehicle in the following manner:
  —With the engine running/ready, stop the vehicle on an unsealed concrete or asphalt surface (in order to provide adequate friction for a thorough test).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.
  —Return the steering wheel to the center position and move the vehicle forward approximately 32 cm (1 ft).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.
  —Return the steering wheel to the center position and move the vehicle forward approximately 32 cm (1 ft).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.

NOTE: The next portion of the test drive will require the vehicle to be driven at highway speeds.

NOTE: The test period is a cumulative time of 10 minutes. Stopping, going slower than 72 km/h (45 mph) or faster that 96 km/h (60

PE14-030 000083

mph) will not affect the test as long as a total time of 10 minutes is spent between 72-96 km/h (45-60 mph) with at least 4 lane changes during that time/speed window.

- Continue test driving the vehicle in the following manner:
  —Bring the vehicle to a minimum speed of 72 km/h (45 mph), maximum of 96 km/h (60 mph).
  —Maintain that speed for at least 10 minutes.
  —During this 10-minute time period, make a minimum of 4 lane changes or turns that achieve a steering wheel angle of at least 20 degrees.
  —The test drive is complete.
- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3FAHP0HA4AR[redacted]

System Related CMDTCs Active {retrieved 24 September 2009 12:05:05

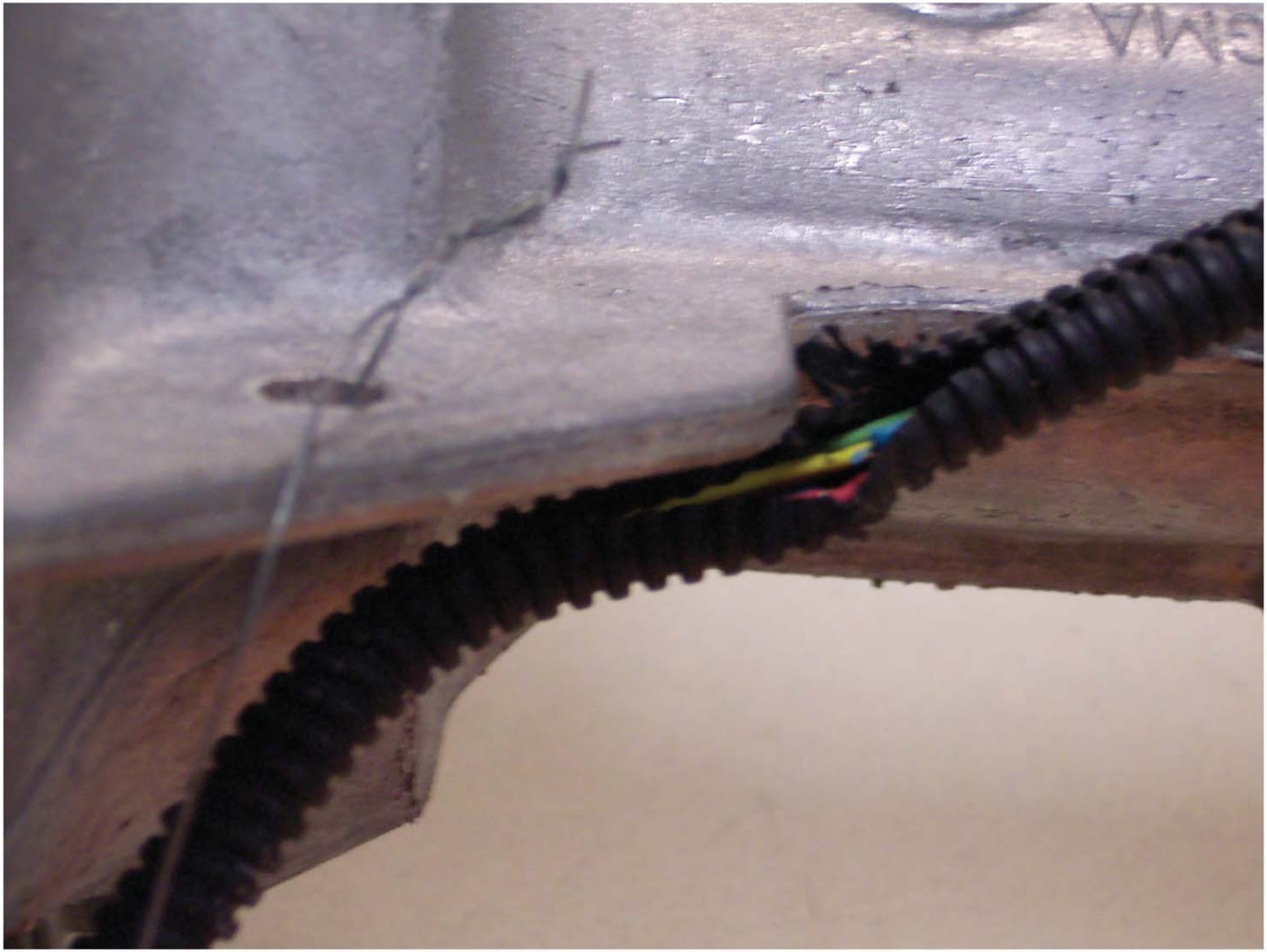
DTC	Description	Source	Status
P07AE:09	Transmission Friction Element G Performance/Stuck Off : Component failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

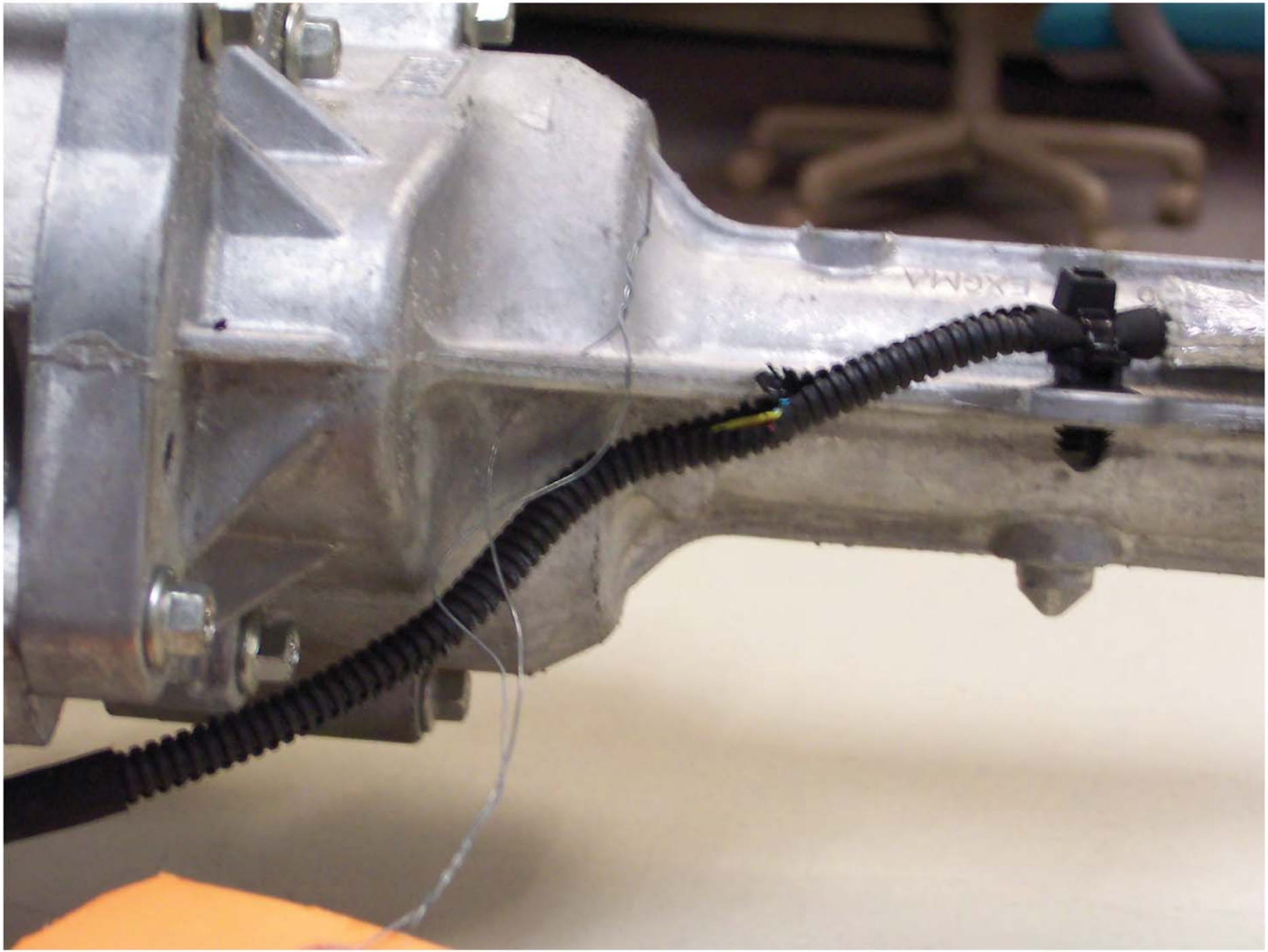
- **Is DTC P07AE:09 present?**

Yes
INSTALL a new EPAS gear. Refer to Section 211-02.

PE14-030 000084




EXGMA



From: Estes, Eric (E.E.)
Sent: Thursday, January 28, 2010 7:45 PM
To: Bahena, Miguel (Mike.); Snider, Tim (T.O.); Diez, Timothy (T.P.); Mrozek, Robert (R.M.)
Subject: FR0123 TS damage
Attachments: FR0123 - Damaged TS harness.pdf; EPAS Gear 001.jpg; EPAS Gear 002.jpg; EPAS Gear 003.jpg; EPAS Gear 004.jpg; EPAS Gear 005.jpg; EPAS Gear 006.jpg

This is one we did not have time for in yesterday's TS meeting but not sure if we can close this out since the dealer cut-out the evidence of a damaged TS harness. See attachments for pics & the interactive diagnosis. Vehicle was not in a wreck or had other repairs only came in for this complaint and the vehicle has 22k miles so unsure how this TS harness was damaged.

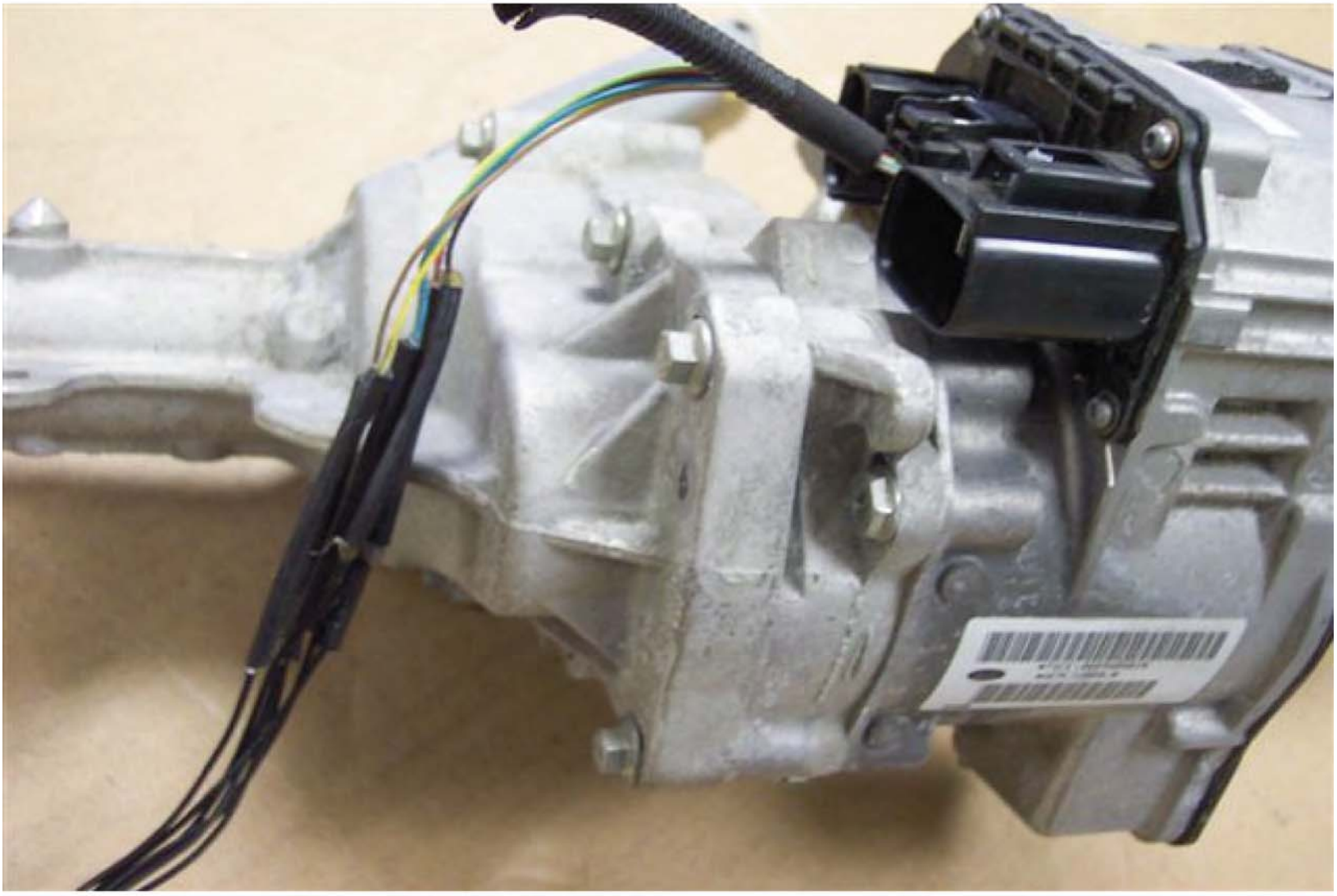
Eric

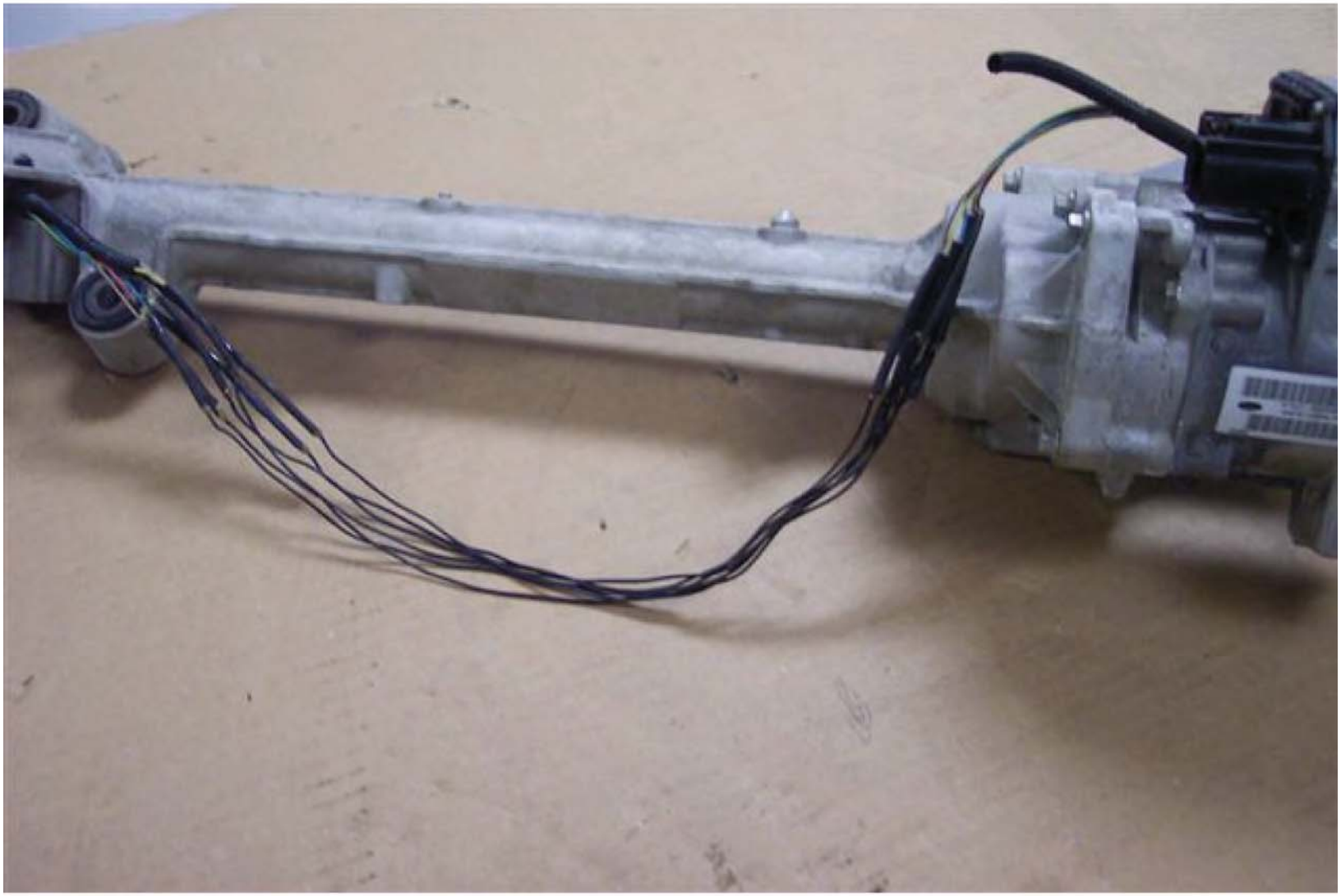
-----Original Message-----
From: Kerr, Jody (J.)
Sent: Tuesday, January 26, 2010 3:50 PM
To: Estes, Eric (E.E.)
Subject: Emailing: EPAS Gear 001.jpg, EPAS Gear 002.jpg, EPAS Gear 003.jpg, EPAS Gear 004.jpg, EPAS Gear 005.jpg, EPAS Gear 006.jpg

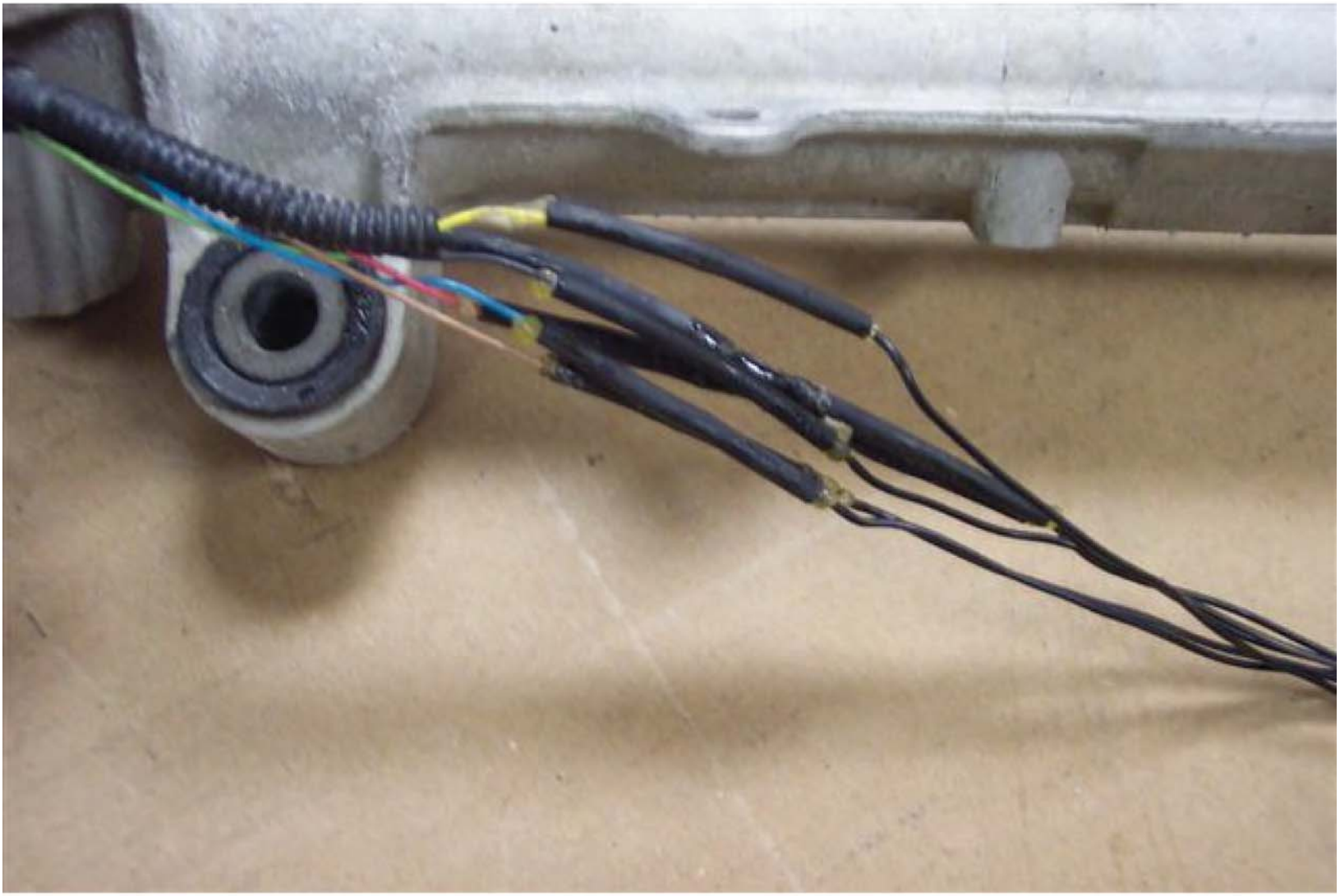
The message is ready to be sent with the following file or link attachments:

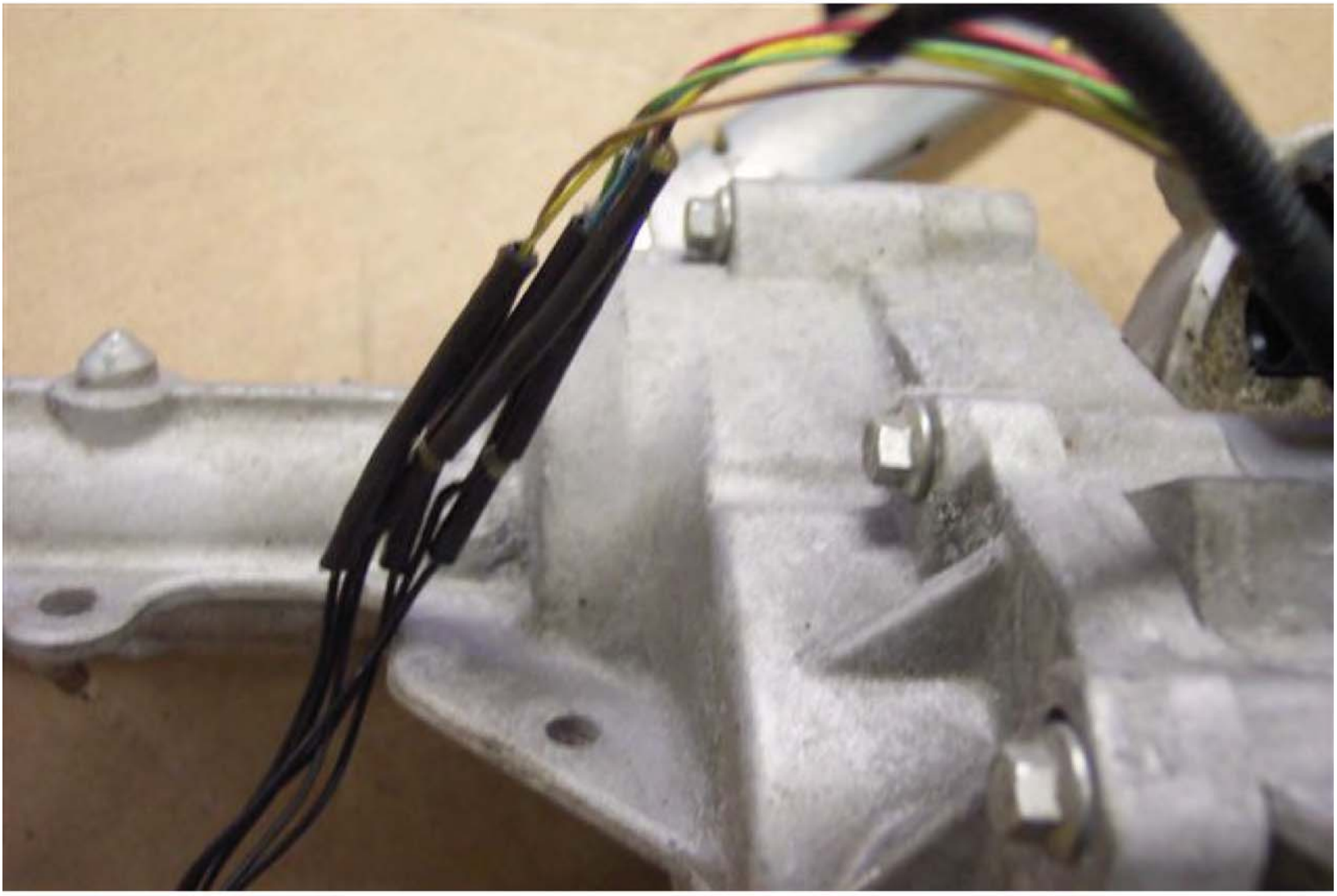
EPAS Gear 001.jpg
EPAS Gear 002.jpg
EPAS Gear 003.jpg
EPAS Gear 004.jpg
EPAS Gear 005.jpg
EPAS Gear 006.jpg

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










TQCE10609A0401
AE5C3200BJ

Year = MY10
Model = CD338
Engine = 2.5L
VIN = 3FADP0L32AR[redacted]
IDS Version = Not Available
PCM = AE5A-12A650-KH
ABS = 9E58-2D053-AH
ACM = AR3T-14D655-AB
APIM = 9L2T-14D205-AE
DSP = AL3T-14C589-AB
FCIM = AR3T-14D017-DB
GEM_SJB = AG1T-14B476-CB
HVAC = AE5H-18D619-HL
IC = AE5T-14C026-AF
OCS = 9E53-14C371-AD
PAM = AE5T-15K866-AC
PSCM = AE5C-14D003-AK
RCM = 9E53-14C028-AB
SODL = 9E5T-14D368-AF
SODR = 9E5T-14D368-AF
TCM = 9E58-7J104-AE
DCDC = 9E58-14D459-AD
BECM = AE58-14C197-AC
ACCM = 9E5H-14D491-AF

Current DTCs {retrieved 28 December 2009 09:43:35}

DTC	Snap Shot Data	Source
U0100:00	N/A	APIM
P1000:00	N/A	PCM

Historic DTCs {retrieved 28 December 2009 09:43:35}

DTC	Snap Shot Data	Source
U3000:96	00	PSCM
C200B:2F	0A3301003302FFFF33067FFF0000000000000000000330C7FD1118FD11728D118FF0CF40CFFFFF40D64FDAAD0	PSCM
C200C:2F	0A3301003302FFFF33067FFF0000000000000000000330C7FD1118FD11728D118FF0CF40CFFFFF40D64FDAAD1	PSCM

DTCs cleared since initial read:

DTC	Snap Shot Data	Source
C1B00:86	N/A	ABS
B1A69:11	N/A	HVAC

PE14-030 000098

Start: Mon Dec 28 09:40:26 EST 2009

Menu Selection: Inspection and Verification

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.
  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.

NOTE: If present, diagnose DTC U3000:96 before diagnosing any other DTCs.

- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3FADP0L32AR[redacted]

System Related CMDTCs Active {retrieved 28 December 2009 09:30:28

DTC	Description	Type	Source	Status
U3000:96	Control Module : Component Internal Failure	KOEC	PSCM	Historic
C200B:2F	Steering Shaft Torque Sensor 1 : Signal Erratic	KOEC	PSCM	Historic
C200C:2F	Steering Shaft Torque Sensor 2 : Signal Erratic	KOEC	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

Menu Selection: Inspection and Verification

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.
  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

PE14-030 000100

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.

NOTE: If present, diagnose DTC U3000:96 before diagnosing any other DTCs.

- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN 3FADP0L32AR[redacted]

System Related CMDTCs Active {retrieved 28 December 2009 09:43:35

DTC	Description	Type	Source	Status
U3000:96	Control Module : Component Internal Failure	KOEC	PSCM	Historic
C200B:2F	Steering Shaft Torque Sensor 1 : Signal Erratic	KOEC	PSCM	Historic
C200C:2F	Steering Shaft Torque Sensor 2 : Signal Erratic	KOEC	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

Recent Warranty Repair History: No recent repair history on vehicle

Review the OASIS results below for any known concerns related to the current vehicle.

TSB: 09-12-13 FUSION/MILAN HYBRID - CHANGE IN BRAKE PEDAL TRAVEL AND/OR ABS CONTROL/BRAKEWARNING LAMP - DTC C1011:1C, C1011:1F OR C100A:64 - BUILT ON OR BEFORE 5/15/2009 SOME 2010 FUSION AND MILAN HYBRID (HEV) VEHICLES MAY EXPERIENCE ELECTRONIC NOISEON THE MAIN POWER FEED CIRCUIT TO THE BRAKE CONTROL MODULE WITHIN THE 14290WIRING HARNESS. DEPENDING ON THE FREQUENCY AND DURATION OF THE NOISE IT MAYGENERATE A FALSE DIAGNOSTIC TROUBLE CODE (DTC) (C1011-1C, C1011-1F, OR C100A-64)IN THE BRAKE MODULE. THIS TURNS OFF THE BRAKE BY WIRE MODE, DEFAULTING TO DIRECTPEDAL ACTIVATION OF THE BRAKE SYSTEM, INCLUDING FULL VACUUM BRAKE ASSIST. SEETHE TSB FOR DETAILS AND FOLLOW SERVICE PROCEDURE STEPS TO CORRECT THE CONDITION. See TSB for complete details: Effective Date: 06/12/2009	1 out of 4 303000
SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE. ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A	1 out of 4 303000

PE14-030 000101

PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE.
Effective Date: 05/06/2009

SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE — 1 out of 4 303000

SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE: THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION.
Effective Date: 05/14/2009

SSM: 20903 2010 FUSION/MILAN/MKZ, FUSION/MILAN HYBRID - REMOVAL AND INSTALLATION OFINSTRUMENT PANEL REINFORCEMENT PLATE. - SERVICE TIP — 1 out of 4 303000

2010 FUSION/MILAN/MKZ AND FUSION/MILAN HYBRID, BUILT PRIOR TO 06/25/2009 WHERE REMOVAL AND REINSTALLATION OF INSTRUMENT PANEL REINFORCEMENT PLATE (BASE PART NUMBER 54017A28) IS NECESSARY, MAKE SURE TO USE HAND TOOLS TO REMOVE ANY FASTENERS AND FOLLOW WORKSHOP MANUAL SECTION 211-04. WHEN REINSTALLING THE FASTENERS, MAKE SURE TO ONLY APPLY 47 LB-IN (5.4NM) OF MAXIMUM TORQUE. FAILURE TO USE HAND TOOLS AND FOLLOW WSM SECTION 211-04 MAY DAMAGE THE INSTRUMENT PANEL RETAINER CLIPS AND/OR INSTRUMENT PANEL SURFACES. IF DAMAGE TO THESE COMPONENTS IS PRESENT, PROCEED WITH NORMAL SERVICE REPAIRS AND REFER TO FORD CATALOG FOR THE LATEST AND GREATEST SERVICE PART AVAILABILITY.
Effective Date: 07/23/2009

SSM: 21110 2010 FUSION/MILAN, TAURUS/MKS, FLEX/MKT - UPDATED ELECTRONIC POWER ASSIST SYSTEM (EPAS) - INTERACTIVE DIAGNOSIS - — 1 out of 4 303000

THE 2010 FUSION/MILAN/TAURUS/MKT WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH INTERACTIVE DIAGNOSTICS. THIS SECTION PROVIDES NEW INFORMATION ABOUT DIAGNOSTIC TOOLS FOR THE ELECTRONIC POWER ASSIST STEERING (EPAS) AND THE POWER STEERING CONTROL MODULE (PSCM). THIS NEXT GENERATION OF VEHICLE DIAGNOSTIC SOFTWARE IS DESIGNED TO AID TECHNICIANS IN IDENTIFYING VEHICLE CONCERNS BY ALLOWING PINPOINT TEST DIAGNOSTICS TO DIRECTLY ACCESS THE VEHICLE THROUGH A VEHICLE COMMUNICATIONS MODULE (VCM), DISPLAY TEST MEASUREMENTS IN REAL TIME AND PROVIDE LOGICAL DIAGNOSTIC PROGRESSION BASED ON TECHNICIAN INPUT. NOTE: IF DIAGNOSTIC TROUBLE CODES ARE PRESENT, DO NOT CLEAR THE CODES UNTIL USING INTERACTIVE DIAGNOSIS, THIS WILL HELP CAPTURE 'FREEZE FRAME' DATA DURING THE DIAGNOSTICS OF ANY DTC.
Effective Date: 11/25/2009

Search criteria with no matching OASIS results:
C200B
C200C

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

Detected DTCs / DTC Index

PE14-030 000102

- **DTCs retrieved are listed below. If the DTCs are related to the concern, proceed as directed.**
- **If there are no DTCs relevant to the customer concern then proceed to Symptom Chart.**

PSCM - Power Steering Control Module(DTCs Present)
Historic CMDTCs(3 DTCs) (28 December 2009 09:43:35)

DTC	Description / Action
U3000:96	Control Module: Component Internal Failure **Description:** The PSCM is self monitoring and will carry out self-tests at specific intervals (initial power up, power down, during normal operation, etc.). Each self-test requires the voltage supply to the PSCM to be at or above a specific level (above 6 volts, above 9 volts, between 10 and 17 volts, etc.) for the test to take place. If one or more of the self-tests should fail, then the module will set one or more DTCs. • DTC U3000:41 (Control Module: General Checksum Failure) - If at any time during normal operation the module detects an internal software error with more than 6 volts supplied to the PSCM, then DTC U3000:41 will be set. • DTC U3000:46 (Control Module: Calibration/Parameter Memory Failure) - At any time during normal operation with more than 6 volts supplied to the PSCM the module determines that one or more calibration files are missing or that they are corrupt or that the incorrect EPAS gear is installed on the vehicle, then DTC U3000:46 will be set . • DTC U3000:49 (Control Module: Internal Electronic Failure) - If at any time during normal operation with more than 6 volts supplied to the PSCM, the module detects a software or internal hardware error then the DTC U3000:49 will be set. • DTC U3000:61 (Control Module Signal Calculation Failure) - If the PSCM detects that assist torque calculation is faulty due to a software failure in the module, then DTC U3000:61 will be set. • DTC U3000:72 (Control Module Actuator Stuck Open) - During initial power up with voltage greater than 9 volts, the PSCM will check the internal relay for voltage. If voltage is not present the module will make several attempts to close the relay. If the voltage remains undetected after this test period, then DTC U3000:72 will be set. • DTC U3000:96 (Control Module: Component Internal Failure) - This DTC will set if there is an internal failure of the PSCM due to temperature, power supply or if multiple failures have occurred over a short period of time. **Possible Causes:** • Heat shield missing. • Steering gear internal failure. • Incorrect EPAS gear installed. • Ice/frost build up on relay contacts. • Heavy loads on the EPAS gear. • Excessive ambient temperatures. **Diagnostic Aids:** For DTC U3000:41, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The module will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:46, initially the PSCM will use a default steering assist and may set DTC U2100:00. If DTC U3000:46 returns on the next ignition cycle, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:49, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs (if any) are set along with U3000:49. Diagnose all other DTCs before diagnosing U3000:49. For DTC U3000:61, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The PSCM will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:72, this DTC indicates that a specific internal relay is either stuck open or has excessive resistance. In cold climates or climates where frost is possible, the relay contacts could develop a layer of frost which may prevent a clean connection between the relay contacts. It may be necessary to allow the vehicle to remain outside overnight in a cold climate to duplicate the DTC trigger conditions. If U3000:72 sets again on subsequent ignition cycles, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. • For DTC U3000:96, the instrument cluster will display the POWER STEERING ASSIST FAULT in the message center when this DTC is set

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure

Normal Operation

The power steering control module (PSCM) monitors various inputs and outputs of the electronic power assist steering (EPAS) system in order to keep the system operating at peak capacity. Information provided by sensors (steering torque, vehicle speed, vehicle travel distance, etc.) are all compared to programmed and learned information. Likewise, outputs like the motor and steering rack (travel) are tested against programmed and learned information.

Note:

If a damaged bellows boot(s) was discovered during Inspection and Verification and this pinpoint test DOES NOT lead to the installation of a new EPAS gear or bellows boot(s), then go to Pinpoint Test K to address the damaged boot(s) before returning the vehicle to the customer.

C1: CHECK PSCM DTCS. - Fault outcome

- Review the returned PSCM DTCs.
- **Is DTC U3000:96 present?**

Yes
INSTALL a new EPAS gear. REFER to Section 211-02.

Exit: Mon Dec 28 13:25:38 EST 2009

PE14-030 000104

From: Michael Fontana <Michael.Fontana@TRW.COM>
Sent: Monday, June 28, 2010 3:36 PM
To: Estes, Eric (E.E.); Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Diez, Timothy (T.P.); Snider, Tim (T.O.); Anthony Fleenor; Costas Chrysochoidis; Geoff Jacks; Guillermo Aguilar; Jason Johnson; Jim Loria; JoseJ Lopez; Mike Davies; Samuel Arreola; Simon Malsbury
Cc: Ulloa, Fernando (F.F.); Annadi, Hari (H.); Frey, Martin (M.F.); Puleri, Michael (M.J.); Rossi, Roberto (R.A.); Hernandez, Victor (V.M.); Abe Ghaphery; Andrew Williams; Angie Caudill; Engelbert Lu; Greg Bendzinski; Mark Karwowski; Salim Semssar; Sanjay Singh; Sergio Alvarez
Subject: FR0203 - Motor PCB Clearance Issue Confirmed
Attachments: Image1.jpg

Team,

See attached picture for conclusive proof of Pin PL2.12 being shorted to the ground plane on the Motor PCB.

Best Regards,

Michael Fontana
Product Engineer - TRW Electronics
Electric Power Steering
(586) 232-8533

>>> Estes, Eric (E.E.) 5/26/2010 8:08 PM >>>
Use the link below to join the webmeeting

General TRW warranty gear review

I need to extend the meeting to the end of July, also added & deleted some Attendee's

To start the online webmeeting
---
1. Go to https://www.meetingcenter.net
2. Join a meeting
3. Click on "Attend a Meeting"
3. Enter meeting# 596 168 143

Audio conference information: Call-in toll-free number: 1-866-2519196 (US)
Call-in number: 1-248-2265571 (US)
Show global numbers:
https://www2.audiocontrols.net/WebExAdaptor/globalnumber?participantcode=1842273552&tollfreecc=1&tollfree=866-2519196&tollnumbercc=1&tollnumber=248-2265571

Leader PIN:
Conference Code: 184 227 3552

To add this meeting to your calendar program (for example, Microsoft Outlook or Lotus Notes), do the following:

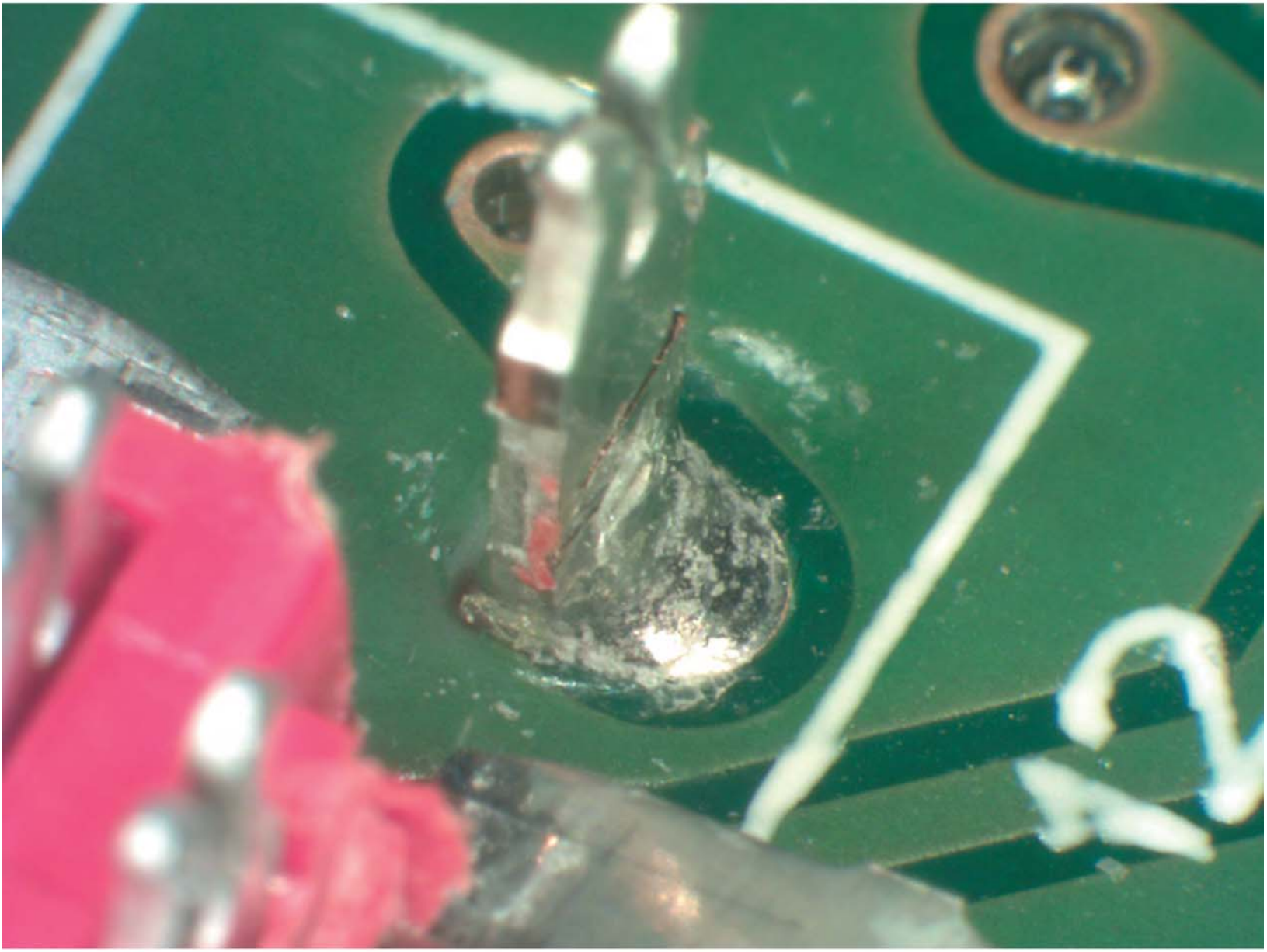
* For all calendar programs (except Lotus Notes), click the following link, or copy the link and paste it into your Web browser:
https://intercall.webex.com/intercall/j.php?ED=133176832&UID=490638792&ICS=MS&LD=1&RD=2&ST=1&SHA2=e8Me0IGaDKrn1IfNqsgvh2NEAyycJZ4Arz5ydaapeiI=

*For Lotus Notes, follow these steps:
1. Right-click the attached iCalendar format (*.ics) file, then choose View.
2. Click Import All. A new broadcast email message is added to your Inbox.
3. Open the new message.
4. Click Respond button. A menu appears.
5. Click Accept.

To check whether you have the appropriate players installed for UCF (Universal Communications Format) rich media files, go to https://intercall.webex.com/intercall/systemdiagnosis.php

If you need MeetingCenter technical support, please call 1-800-508-8758 or 1-706-634-4551 or email mcsupport@intercall.com.

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493



Concern: Customers are alleging the power steering lacks assist or is locking up

Vehicle Model: Fusion and Milan

Model Year: 2010

Engine: C/S3 ATK-CYC 2.5 4V PFI I4 GAS/ELEC — 20060 units built with S3 engine
C/SB 2.5L DOHC PFI 170HP DURATEC HE — 111255 units built with SB engine

Part Number Involved: 7E5Z 3504 A
7E5Z 3504 B
AE5Z 3504 B

Data Summary: 75 reports (AWS) of loss of power steering assist
67 reports indicate the steering gear was replaced; using part number AE5Z-3504-B

Repair cost range: $0 to $2845.98
Average Repair Cost per vehicle (74 units): $1,522.16

Mileage at time of repair	
0-2499	39
2500-4999	14
5000-7499	10
7500-9999	2
10000-12499	2
12500-14999	2
15000-17499	4
22500-24999	1
	74

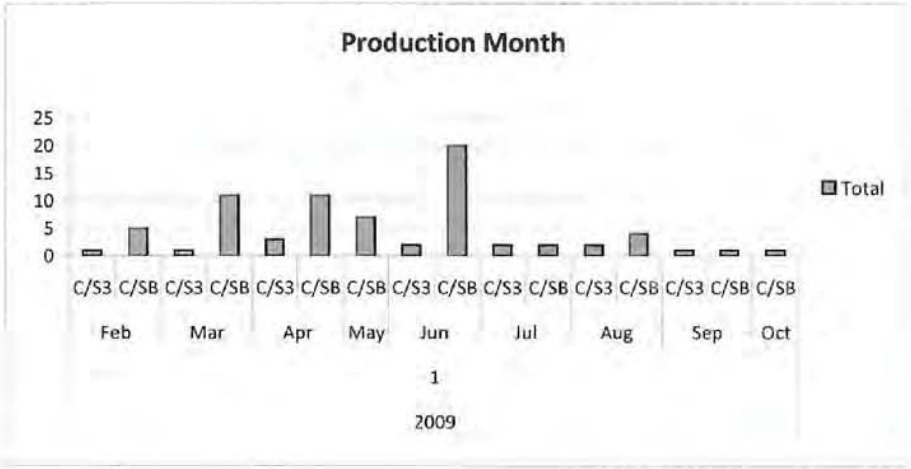
Time in Service	
-1	1
0	11
1	17
2	12
3	14
4	11
5	2
6	3
7	3
	74

Repairs by Engine Code	
C/S3	12
C/SB	62
	74

State/Province	
TX	9
MI	8
PA	7
OH	6
CA	5
MA	4
IN	4
MD	3
NM	3
OK	2
SC	2
NJ	2
NY	2
IL	2
WI	2
MS	2
MO	2
NC	1
KS	1
ID	1
CO	1
MT	1
FL	1
NH	1
MN	1
AL	1
	74

Parts Demand By Month (MMP)	
12 2009	0
11 2009	13
10 2009	31
09 2009	30
08 2009	22

Production Date	
10-Feb-09	1
14-Feb-09	2
17-Feb-09	1
18-Feb-09	1
19-Feb-09	1
11-Mar-09	3
12-Mar-09	3
14-Mar-09	1
18-Mar-09	1
19-Mar-09	2
20-Mar-09	1
23-Mar-09	1
3-Apr-09	1
6-Apr-09	1
8-Apr-09	1
14-Apr-09	1
15-Apr-09	4
17-Apr-09	2
20-Apr-09	1
23-Apr-09	1
24-Apr-09	1
30-Apr-09	1
7-May-09	1
8-May-09	1
9-May-09	1
12-May-09	1
18-May-09	1
23-May-09	1
28-May-09	1
1-Jun-09	1
3-Jun-09	1
4-Jun-09	1
9-Jun-09	2
10-Jun-09	1
11-Jun-09	1
12-Jun-09	2
13-Jun-09	2
15-Jun-09	2
16-Jun-09	2



07 2009	56
602009	18
05 2009	13
04 2009	12
03 2009	1
02 2009	51
01 2009	0
total 2009	247

17-Jun-09	1
18-Jun-09	1
19-Jun-09	2
20-Jun-09	2
26-Jun-09	1
8-Jul-09	1
15-Jul-09	1
17-Jul-09	1
24-Jul-09	1
4-Aug-09	2
6-Aug-09	1
8-Aug-09	1
10-Aug-09	1
12-Aug-09	1
16-Sep-09	1
18-Sep-09	1
1-Oct-09	1
	74

	S3 2.5L Hybrid			SB - 2.5L Duratec		
Prod Month 2009	Number of reports	Production Vol	R/1000	Number of reports	Production Vol	R/1000
Feb	1	676	1.47929	5	3034	1.647989
Mar	1	1397	0.71582	11	7018	1.567398
Apr	3	3249	0.923361	11	12028	0.914533
May		2962	0	7	11296	0.619688
Jun	2	1887	1.059883	20	14466	1.382552
Jul	2	2481	0.806127	2	12839	0.155775
Aug	2	1490	1.342282	4	9754	0.410088
Sep	1	2426	0.412201	1	13510	0.074019
Oct		2026	0	1	17640	0.056689
	12	18594	0.645369	62	101585	0.610326

From: Pienta, Alan (A.)
Sent: Friday, October 14, 2011 3:38 PM
To: Napoli, Laura (L.); Diez, Timothy (T.P.)
Cc: Rossi, Roberto (R.A.)
Subject: FW: B9A Issue

Laura,
Please see summary below of ground wire / cap strap program implementation.
Let me know if you need anything else.
Al

Tim,
Thanks for the quick response!
Al

From: Diez, Timothy (T.P.)
Sent: Friday, October 14, 2011 11:17 AM
To: Pienta, Alan (A.)
Cc: Rossi, Roberto (R.A.)
Subject: RE: B9A Issue

Al,

Enclosed is a summary of the EMC vehicle configurations with TRW EPAS.

Redacted for Relevance

2011MY U502: cap strap
2012MY U502: ground wire
2013MY U502: ground wire

2010MY CD3 - no cap or wire

C346N: ground wire

Redacted for Relevance

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

From: Pienta, Alan (A.)
Sent: Friday, October 14, 2011 9:57 AM
To: Diez, Timothy (T.P.)
Subject: B9A Issue

Tim,
In the B9A meeting the issue regarding the history of the ground strap implementation and cap strap implementation and on which programs and time frame they were implemented was questioned. I did not have the full background.

Can you please provide me with a brief summary of the programs which had these fixes implemented and when they were implemented? Maybe you have a matrix already?
Al

From: Snider, Tim (T.O.)
Sent: Friday, July 23, 2010 3:21 PM
To: JuanCarlos cano
Cc: Kostadina, Robert; 'Mathew Alder'; Bahena, Miguel (Mike.); Diez, Timothy (T.P.)
Subject: FW: B9A SW fix Timing for CD3/D3/U502 Current Production
Attachments: Microsoft Project - Timing for B9A .pdf

JC,

Based off Rob's timing, when would PPAP parts arrive at Hermosillo? Are you putting a timing plan together? And, could TRW support Job 2 TT on Sept 27. Looks like it. I'm thinking we do this change for 2011 Job 2, support TT build, and then, since this is a quality fix, implement for production after TT build. Which also means Hermosillo EOL would have to accommodate the pulled ahead Job 2 software part numbers.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

-----Original Message-----
From: Robert Kostadina [mailto:Robert.Kostadina@TRW.COM]
Sent: Thursday, July 22, 2010 4:39 PM
To: Bahena, Miguel (Mike.); Douglas Sherman; Hemang Mehta; Mohammed Yasin
Cc: Napoli, Laura (L.); Mrozek, Robert (R.M.); Snider, Tim (T.O.); Angel Andres; JuanCarlos cano
Subject: Re: B9A SW fix Timing for CD3/D3/U502 Current Production

Attached is the timing.

>>> "Bahena, Miguel (Mike.)" <mbahena1@ford.com> 7/21/2010 1:00 PM >>>
Mohammed, Rob, Doug, Hemang,

Can you please send us the timing for PURL3 SW available with the B9a fix for current production:

CD3
D3
U502(I'm not sure when Laura is working this in)

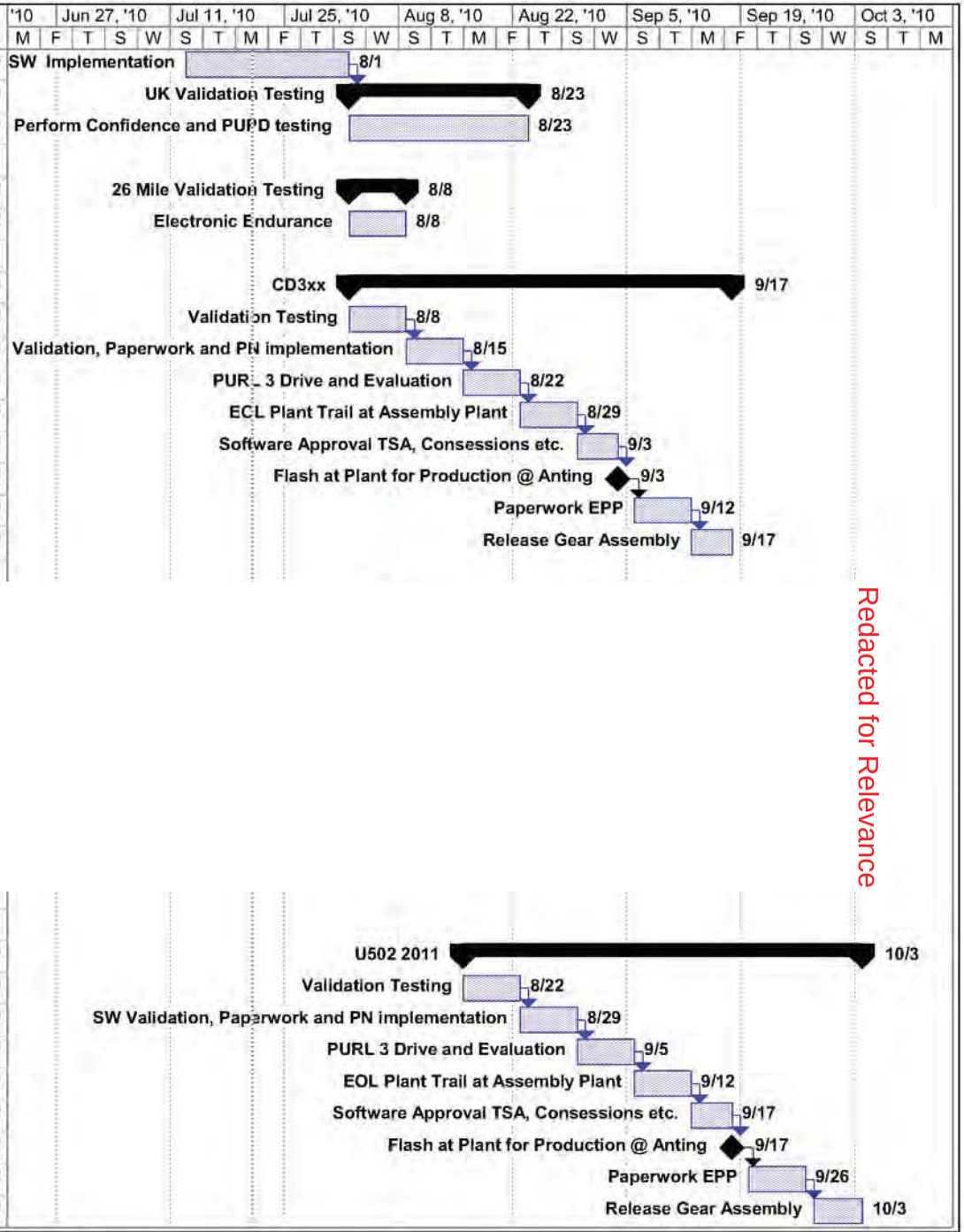
We need to start the WERS concern process and get QAO prepared to start re-flashing. Thanks.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.

Ph: (313) 805-3680
mbahena1@ford.com

ID	Task Name	Duration	Start	Finish
1	SW Implementation	14 days	Tue 7/13/10	Sun 8/1/10
2	**UK Validation Testing**	**16 days**	**Mon 8/2/10**	**Mon 8/23/10**
3	Perform Confidence and PUPD	16 days	Mon 8/2/10	Mon 8/23/10
4				
5	**26 Mile Validation Testing**	**5 days**	**Mon 8/2/10**	**Sun 8/8/10**
6	Electronic Endurance	5 days	Mon 8/2/10	Sun 8/8/10
7				
8	**CD3xx**	**35 days**	**Mon 8/2/10**	**Fri 9/17/10**
9	Validation Testing	5 days	Mon 8/2/10	Sun 8/8/10
10	SW Validation, Paperwork and F	5 days	Mon 8/9/10	Sun 8/15/10
11	PURL 3 Drive and Evaluation	5 days	Mon 8/16/10	Sun 8/22/10
12	EOL Plant Trail at Assembly Pla	5 days	Mon 8/23/10	Sun 8/29/10
13	Software Approval TSA, Conses	5 days	Mon 8/30/10	Fri 9/3/10
14	Flash at Plant for Production @	0 days	Fri 9/3/10	Fri 9/3/10
15	Paperwork EPP	5 days	Mon 9/6/10	Sun 9/12/10
16	Release Gear Assembly	5 days	Mon 9/13/10	Fri 9/17/10
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29	**U502 2011**	**36 days**	**Mon 8/16/10**	**Sun 10/3/10**
30	Validation Testing	5 days	Mon 8/16/10	Sun 8/22/10
31	SW Validation, Paperwork and F	5 days	Mon 8/23/10	Sun 8/29/10
32	PURL 3 Drive and Evaluation	5 days	Mon 8/30/10	Sun 9/5/10
33	EOL Plant Trail at Assembly Pla	5 days	Mon 9/6/10	Sun 9/12/10
34	Software Approval TSA, Conses	5 days	Mon 9/13/10	Fri 9/17/10
35	Flash at Plant for Production @	0 days	Fri 9/17/10	Fri 9/17/10
36	Paperwork EPP	5 days	Mon 9/20/10	Sun 9/26/10
37	Release Gear Assembly	5 days	Tue 9/28/10	Sun 10/3/10



From: Bahena, Miguel (Mike.)
Sent: Wednesday, January 13, 2010 12:51 AM
To: Bahena, Miguel (Mike.)
Subject: FW: Chassis ECB summary

From: Bahena, Miguel (Mike.)
Sent: Tuesday, January 12, 2010 1:09 PM
To: Mrozek, Robert (R.M.); Estes, Eric (E.E.)
Cc: Snider, Tim (T.O.); salim.semmsar@trw.com
Subject: RE: Chassis ECB summary

Rob,

The B3a (FR-0098) was an offset bridge. The gear was built on Sept 26th, 2009 which was before the 100 % Laredo X-ray came on-line, but after Hot Puma Activation testing started. The 100 % x-ray came on-line the week of Oct 1st, but I am working on getting the exact date of the first clean shipment.

Mike

From: Mrozek, Robert (R.M.)
Sent: Mon 1/11/2010 8:11 PM
To: Estes, Eric (E.E.); Bahena, Miguel (Mike.)
Cc: Snider, Tim (T.O.); Mrozek, Robert (R.M.)
Subject: FW: Chassis ECB summary

Eric -

Can we get an update on the attached Oct vehicle build ECB claims? Need some firm updates. Need by Tuesday please.

<<oct 09 epas ecb claims.xls>>

Bahena -

Does the one B3A have an answer perhaps from your visit to Tyco?

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Frey, Martin (M.F.)

Sent: Monday, January 11, 2010 5:22 PM
To: Snider, Tim (T.O.); Bahena, Miguel (Mike.); Mrozek, Robert (R.M.)
Subject: FW: Chassis ECB summary

Do we know much about the 7 Fusion claims for Oct?

Martin Frey
Manager Electric Steering/Advanced Features/R&P Gear
Chassis Engineering
Cell # 313 805 6301

From: Annadi, Hari (H.)
Sent: Monday, January 11, 2010 3:42 PM
To: Allard, Chris (C.E.); Allen, David (D.R.); Rendi, Anthony (A.J.); Castellano, Jim (J.C.); Roberts, Mark (M.A.); Caris, John (J.C.); Perri, Ron (R.J.); Frey, Martin (M.F.)

Cc: Branik, David (D.P.); Dimovski, Bill (Z.); Patel, Harendra (H.M.); Boullin, Stephanie (S.); Steele, Kimberly (K.A.); Waldron, Rob (R.M.); Doorlag, Chad (C.A.); Skwirsk, Tom (T.V.); Mrozek, Robert (R.M.); Surella, Matthew (M.M.); Syed, Shaheen (Q.); Serina, Flaminia (F.); Richardson, Brian (B.D.); Rogero, Antonio (A.)

Subject: Chassis ECB summary

Attached is the Chassis ECB summary sorted by the repairs that have the highest claims in the last 4MOP. We will be scheduling deep dives on the Top 10 issues at the FQR's starting from 1/26/10. Pl be prepared to present ICA and PCA for your issues. Thanks.

<<2010 MY VRTRDMultiVehLine Chassis 2010_0105.xls>>

Hari Annadi
Chassis Quality Supervisor
Master Black Belt
Building # PDC 2B-A57
Work Cell: 313 805 4746
Ford Motor Company, Dearborn, Michigan
email: hannadi@ford.com <mailto:hannadi@ford.com>

From: Docimo, Tony (A.F.)
Sent: Sunday, November 06, 2011 7:00 PM
To: Surella, Matthew (M.M.); McIntyre, Kathryn (K.L.); Perri, Ron (R.J.); Napoli, Laura (L.); Wheeler, Ngina (N.); Stroud, Nathan (JNS.)
Cc: Jackson, Bradley (B.G.); Farmer, Marty (M.F.); Keinath, Wayne (W.)
Subject: FW: EPAS Quality Issue

Importance: High

Do we have cutoff yet on any of the critical X's on the EPAS Quality issue?

Thanks,
Tony

From: Fisher, Marcy (M.J.)
Sent: Wednesday, November 02, 2011 10:20 AM
To: Docimo, Tony (A.F.)
Subject: FW: EPAS Quality Issue

Fyi status

From: Fisher, Marcy (M.J.)
Sent: Tuesday, November 01, 2011 5:46 PM
To: Collins, Ron (R.J.)
Subject: RE: EPAS Quality Issue

Great news on finding some parts and having some info about root cause.
Now, need clean cutoff/ICA and PCA for the error states identified to date.

From: Collins, Ron (R.J.)
Sent: Tuesday, November 01, 2011 5:43 PM
To: Fisher, Marcy (M.J.)
Subject: RE: EPAS Quality Issue

We have a TRW review with Bennie coming up. Their VPs are coming in, just FYI. Multiple steering issues on agenda, not just Explorer.

The status of B9A codes for Explorer (and Re , CD3, and C346):
- One warranty return part found with contamination in Hall effect sensor causing a short.
- TRW is tearing down other warranty return parts looking for similar contamination in the same region.
- This contamination is at the microscopic level in an IC, so difficult to find (scan with a microscope looking for debris).
- TRW is also at the IC maker confirming clean room procedures are being properly followed.

- One warranty return part repeated yesterday on a vehicle
- Vehicle was instrumented when the fault occurred and issue was captured with data logger
- Problem was with the encoder, not the hall effect.
- TRW is tearing down part now to determine encoder issue

Both of the above are encouraging progress in finding root cause, and key in moving us forward. We should have more later this week.

Thanks

Ron Collins
Chief Engineer, North American Chassis Engineering
Ford Motor Company
email: rcollin4@ford.com

From: Fisher, Marcy (M.J.)
Sent: Tuesday, November 01, 2011 5:30 PM
To: Collins, Ron (R.J.)
Subject: EPAS Quality Issue

Ron, Can you please provide a status update on the EPAS issue on Explorer? (I wasn't able to attend your FQR last week as I had to be out of the office.) We have a VQR on Thursday and Bennie in CAP for 3 days next week. Thanks - Marcy

From: Napoli, Laura (L.)
Sent: Monday, January 23, 2012 3:15 PM
To: Surella, Matthew (M.M.); 'Guillermo Aguilar'; Estes, Eric (E.E.); Flanagan, Thomas (T.P.); 'James Parker1'
Subject: FW: Ford /TRW B9A Review Strategy

Info on B3A and A3A...1 LIC raises a fault.

Jim, can you tell us if B43 is the same?

From: Geoff Jacks [mailto:Geoff.Jacks@TRW.COM]
Sent: Tuesday, November 15, 2011 11:18 AM
To: Estes, Eric (E.E.); Napoli, Laura (L.); Jim Duehring
Subject: RE: Ford /TRW B9A Review Strategy

Yes - A3A exactly the same as B3A.

>>> "Napoli, Laura (L.)" <lnapoli@ford.com> 15/11/2011 16:01 >>>
Thanks Geoff. Can you confirm that the same is for A3A?

From: Geoff Jacks [mailto:Geoff.Jacks@TRW.COM]
Sent: Tuesday, November 15, 2011 10:45 AM
To: Estes, Eric (E.E.); Napoli, Laura (L.); Jim Duehring
Subject: Re: Ford /TRW B9A Review Strategy

All,

Humble pie time. I've spoken to the software guys and they have confirmed that the B3A will be raised with only 1 LIC. Sorry for any confusion I may have caused.

Regards

Geoff

>>> Estes, Eric (E.E.) 14/11/2011 16:48 >>>
We need everyone to call in and review the B9A strategies and 8D revisions.

If I left someone out of this meeting that should be attending please forward on.

Let me know if you have any question, thanks

Hello ,

Eric Estes invites you to attend this online meeting.

Topic: B9A Review

Date: Tuesday ,
Time: 9:30-10:30 am, Eastern Daylight Time (New York, GMT-04:00)
Meeting Number: 592173581
Meeting Password: (This meeting does not require a password.)

To join the online meeting (Now from iPhones too!)
---
1. Go https://trwnameduser.webex.com
2. Enter Meeting Number: 592173581
3. Click "Join Now".

To view in other time zones or languages, please click the link:
https://trw.webex.com/trw/j.php?ED=144609377&UID=1159864637&ORT=MiMxMQ%3D%3D

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

TRW Limited

Registered in England, No. 872948

Registered Office Address: Stratford Road, Solihull B90 4AX

From: Diez, Timothy (T.P.)
Sent: Friday, December 04, 2009 2:32 PM
To: Rossi, Roberto (R.A.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); Snider, Tim (T.O.)
Cc: Hodgson, Keith (K.M.)
Subject: FW: FR0074

FYI...

A note on prevent recurrence for the field return 0074. FR0074 is the field return with the ribbon cable pin causing a short circuit between traces on the motor sense assembly pcb.

Thanks.

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

-----Original Message-----
From: Mike Davies [mailto:Mike.Davies@TRW.COM]
Sent: Friday, December 04, 2009 9:27 AM
To: Martha Abundis; Phil Browne
Cc: Diez, Timothy (T.P.); Eric Estes; Geoff Jacks
Subject: FR0074

Hello Martha
In a call with Tim Diez today, we were discussing the 8D which will be raised for FR0074. This is the motor PCB relayout which Nidec is addressing.
Tim has requested that we include in the 8D that as part of the section 7 in the document, we include an action that the PCB design rules are updated to consider such tolerance overlap situations between component legs and pcb layers.
I will try to ensure this is done, but as you are the supplier of the 8D to Ford (and your memory is younger than mine) please can you make a note of this so we do not overlook it at the appropriate time.

Thanks
Mike

From: Estes, Eric (E.E.)
Sent: Monday, March 22, 2010 4:34 PM
To: Snider, Tim (T.O.)
Cc: Mrozek, Robert (R.M.); Guillermo Aguilar; 'Angel Salazar'; Guillermo Aguilar; Greg Bendzinski
Subject: FW: FR0167

Tim here is another damaged torques sensor harness on a Hybrid same location as FR0160.

Angel could you find anywhere on the line where torque sensor harness could be contacted from the 2.5L hybrid motor installation, exhaust & etc?

VIN: 3FADP0L30AR170501 Dealer: 03148 Barbee's Freeway Ford, Miles: 7166, vehicle build date: 6/20/2009, gear build, 6/14/2009, Eng.: 2.5L Hybrid, &

RO date: 2/23/2010

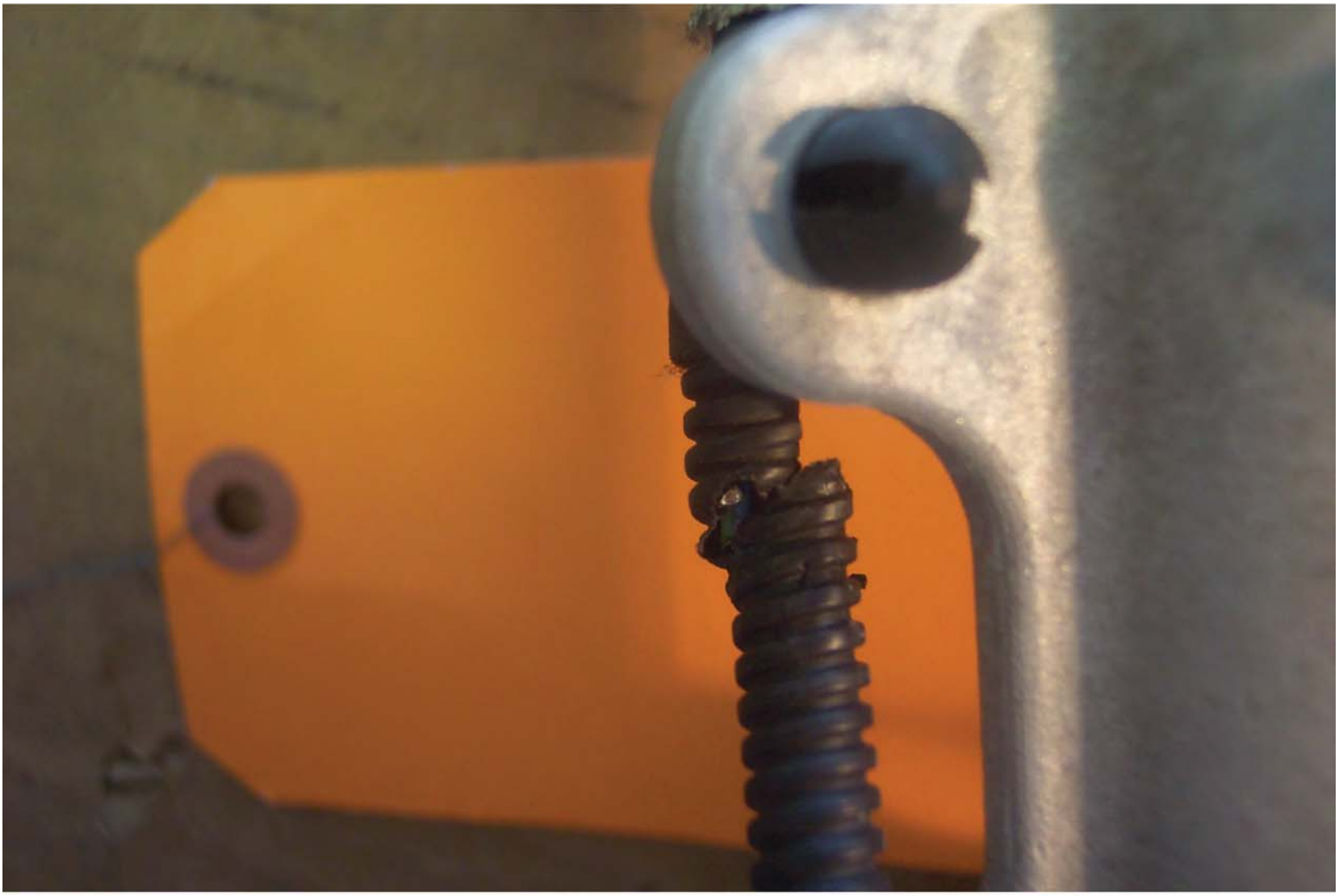
Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

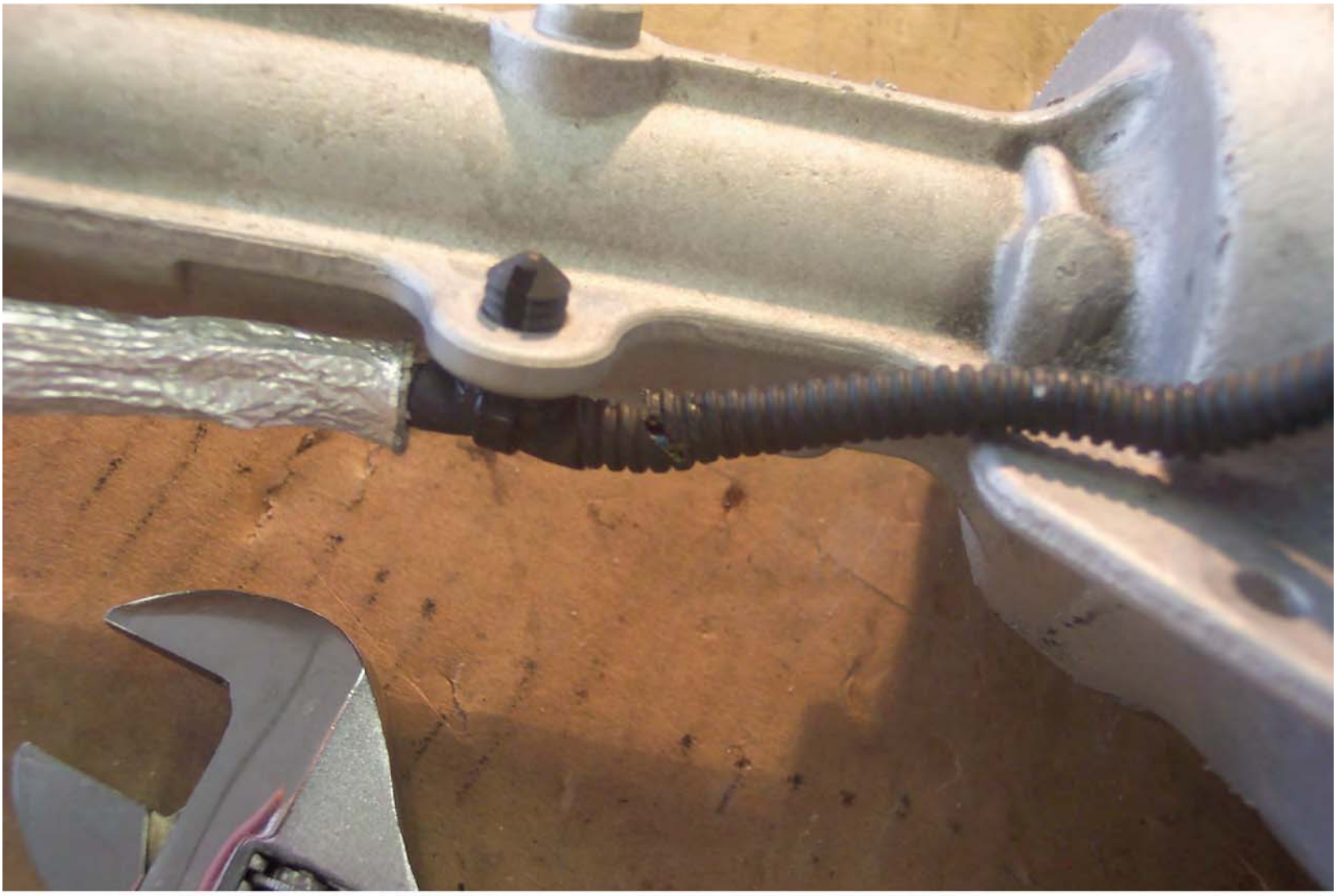
From: Tigney, Maurice (M.)
Sent: Friday, March 19, 2010 3:57 PM
To: Estes, Eric (E.E.)
Subject: fr0167


000_0003.jpg


000_0004.jpg


000_0002.jpg





From: Estes, Eric (E.E.)
Sent: Monday, May 11, 2009 8:55 PM
To: Beattie, Mike (M.A.)
Cc: Chacon, Jose (A.); Bouse, William (W.J.); Christiansen, Jens (J.F.); Bahena, Miguel (Mike.); Dorony, Kenneth (K.R.)
Subject: FW: Report Summary for the CQIS Report#9EKAV151

Mike in logviewer I did not see this code U2011 listed, would that have been the C1277 ABS code that was listed? because the tech did not mention anything about ABS . If this U3000-96 was a hard fault that would not clear that should be listed under current code retrieved not historic?

Eric

From: JCHACON3@ford.com [mailto:JCHACON3@ford.com]
Sent: Monday, May 11, 2009 4:28 PM
To: Chacon, Jose (A.)
Subject: Report Summary for the CQIS Report#9EKAV151

Attachments : 0

Report# :	9EKAV151 ACR			**Received:**	05/11/2009
CCRG/EPRC:		**Reviewed Status:**		**Date:**	
Vehicle:	2010,FUSION,SE ,SEDAN ,3FAHP0HG6AR[redacted]			**Build Date:**	04/13/2009
Odometer :	409 M	**Engine:**	3.0L 4V	**Calibration:**	
Transmission:	6SP 6F MID	**Axle:**		**A/C:**	YES
Dealer:	USA 01376 Pacifico Ford, Inc.			**Phone#:**	(215) 492-1700
City:	Philadelphia	**State:**	Pennsylvania	**Country :**	USA
Originator:	LES SLOSS				
Symptom:	3 03 1 55 CHASS.,STRG/HANDLING ,FUNCTION,LOSS OF STRG				
Status:					
VFG:	V89 RIDE & HANDLING				
Additional Symptom:	NO ASSIST - RENTAL UNIT				
Fix:	**Causal Component :**				
Condition Code:					

Region Code: N3 **Region Name:** Philadelphia

DTCs:
KOEO:U2011
KOEC:U3000

KOER:

Comments
:

REPAIR 05/11/2009 03:42PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
FAV REQUEST. UNIT HAS NO POWER ASSIST. TRW REQUESTED FEEDBACK FOR ANALYSIS.

ADD-ON **05/11/2009 03:48PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG**
SERVICE WRITER INDICATES THIS VEHICLE IS A RENTAL UNIT THAT BELONGS TO DOLLARE RENTAL CAR. THE VEHICLE HAS NO POWER ASSIT AND/OR IT WAS TOWED
TO THE DEALER AT THE BEGINNING OF THE MONTH. SW STEVE INDICATED THE MESSAGE CENTER DISPLAYED - POWER STEERING ASSIST FAULT.

ADD-ON **05/11/2009 04:06PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG**
ASKED SW TO SPEAK WITH TECHNICIAN LESS. LESS INDICATED THE STEERING ASSIST IS HARD. TECHNICIAN WAS UNABLE TO DRIVE THE VEHICLE. DURING DIAGNOSIS THE TECHNICIAN USED THE INTERACTIVE DIAGNOSIS OUTLINED IN THE ON-LINE WORKSHOP MANUAL. THE IDS DISPLAYED TWO CODES: U2011-49-48 FOR THE PSCM MODULE AND CODE U3000-96-C8 PSCM. LESS FOLLOWED THE PINPOINT TEST AND CLEARED THE CODES. RE-RAN THE DIAGNOSTICS AND CODE U3000-96-C8 PSCM CAME COMING BACK. FURTHER PINPOINT TEST DIAGNOSIS INDICATED TO REPLACE THE EPAS ASSEMBLY. ASKED LESS IF ANY OTHER WARNING LIGHT OR CONCERNS WITH THE VEHICLE. LESS INDICATED NONE. VEHICLE STARTS AND RUNS O.K. NO OTHER CODES IN THE NETWORK, BESIDES THE EPAS CODES. LESS INDICATED THEY ORDERED A NEW ASSEMBLY SINCE 05/05/09 AND WERE TOLD THE PART IS D99. ADVISED LESS TO MONITOR PACO TICKET FOR UPDATES. IF ANY CONCERNS PLEASE CALL JOSE AT 1-313-317-7047

ADD-ON **05/11/2009 04:07PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG**
THE VEHICLE IS STILL NOT REPAIRED AND/OR IT IS AT THE DEALER WAITING FOR THE BACK ORDER PARTS.

ADD-ON **05/11/2009 04:09PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG**
DEALER ORDERED REPLACEMENT PART # AE5Z-3504-B WITH ENGINEERING # AE5C-3504-BB. DEALER P&A ORDER 01376. DEALER REPAIR ORDER: 28039 LINE 1. PARTS MANAGER E-MAIL ADDRESS: CPRIOLE@PACIFICOCARS.COM

From: Estes, Eric (E.E.)
Sent: Wednesday, June 10, 2009 1:53 PM
To: Bouse, William (W.J.); Bahena, Miguel (Mike.); 'Greg Bendzinski'; 'Robert Kinnear'; 'Jason Johnson-contr'; Chacon, Jose (A.); Anthony Fleenor; 'Mark Karwowski'; 'Abe Ghaphery'; 'Simon Malsbury'; 'Robert Kostadina'; Mrozek, Robert (R.M.)
Subject: Local Dealer with EPAS codes
Attachments: #7 gear warranty return data.pdf

It looks like we have a vehicle at a local dealer in Garden City at Metropolitan Lincoln-Mercury setting codes U2011-49 & U3000-96(C69).

I don't know if we are interested in getting this gear? Greg do we have any gears available for service?

Let me know if we want to go out and check this vehicle out today or tomorrow.

Eric J. Estes
Warranty Analyst - TRW Automotive
6-Sigma Center 15010 S. Commerce Dr.
Dearborn, Michigan 48120
Ph.#(313) 390-3843 Fax#(888) 502-9600

Year = MY10
Model = CD334
Engine = 3.0L
VIN = 3MEHM0JGXAR[redacted]_STD
PCM = AE5A-12A650-NE
ABS = AE5C-2C219-FB
ACM = AR3T-14D655-AB
APIM = 9L2T-14D205-AE
DCDC = Could not retrieve part number from mandatory module!
DSP = AL3T-14C589-AB
FCIM = AR3T-14D017-DB
GEM_SJB = AG1T-14B476-CB
HVAC = AE5H-18D619-FL
IC = AE5T-14C026-BH
OCS = 9E53-14C371-AD
PAM = AE5T-15K866-AC
PSCM = AE5C-14D003-AK
RCM = 9E53-14C028-AB
SODL = 9E5T-14D368-AF
SODR = 9E5T-14D368-AF

Current DTCs {retrieved 9 June 2009 09:22:31}

DTC	Snap Shot Data	Source
P1000:00	N/A	PCM

Historic DTCs {retrieved 9 June 2009 09:22:31}

DTC	Snap Shot Data	Source
U0155:00	N/A	ACM
U0121:00	N/A	IPC
U0131:00	N/A	IPC
U3000:96	00	PSCM
U0028:08	N/A	RCM

DTCs cleared since initial read:

DTC	Snap Shot Data	Source
C1277	N/A	ABS
U2011:49	N/A	PSCM

Start: Tue Jun 9 09:13:00 EDT 2009

Menu Selection: Inspection and Verification

IV1: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned	Battery junction box (BJB)

steering column.	fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

Menu Selection: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others,	**Go to Known Concerns**

Click for details.	

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

Start: Tue Jun 9 09:13:00 EDT 2009

Menu Selection: Inspection and Verification

IV1: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft	Wiring, terminals or

couplings/U-joints	connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

Menu Selection: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.
- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN	3MEHM0JGXAR[redacted]STD

System Related CMDTCs Active {retrieved 9 June 2009 09:15:41}

DTC	Description	Source	Status
U3000:96	Control Module : Component Internal Failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

Recent Warranty Repair History: No recent repair history on vehicle

Review the OASIS results below for any known concerns related to the current vehicle.

SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE.	1 out of 2 303000

ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE. Effective Date: 05/06/2009	
SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE; THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION. Effective Date: 05/14/2009	1 out of 2 303000
SSM: 20831 2010 FUSION/MILAN ELECTRONIC POWER ASSIST SYSTEM (EPAS) - INTERACTIVE DIAGNOSIS THE 2010 FUSION/MILAN WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH INTERACTIVE DIAGNOSTICS. THIS SECTION PROVIDES NEW INFORMATION ABOUT DIAGNOSTIC TOOLS FOR THE ELECTRONIC POWER ASSIST STEERING (EPAS) AND THE POWER STEERING CONTROL MODULE (PSCM). THIS NEXT GENERATION OF VEHICLE DIAGNOSTIC SOFTWARE IS DESIGNED TO AID TECHNICIANS IN IDENTIFYING VEHICLE CONCERNS BY ALLOWING PINPOINT TEST DIAGNOSTICS TO DIRECTLY ACCESS THE VEHICLE THROUGH A VEHICLE COMMUNICATIONS MODULE (VCM), DISPLAY TEST MEASUREMENTS IN REAL TIME AND PROVIDE LOGICAL DIAGNOSTIC PROGRESSION BASED ON TECHNICIAN INPUT. NOTE; IF DIAGNOSTIC TROUBLE CODES ARE PRESENT, DO NOT CLEAR THE CODES UNTIL USING INTERACTIVE DIAGNOSIS, THIS WILL HELP CAPTURE 'FREEZE FRAME' DATA DURING THE DIAGNOSTICS OF ANY DTC. Effective Date: 06/06/2009	1 out of 2 303000
Search criteria with no matching OASIS results: U3000	

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

Detected DTCs / DTC Index

EPAS

Current DTCs {retrieved 9 June 2009 09:15:41}

DTC	Description / Action	Source
N/A	No DTCs to report	

Historic DTCs {retrieved 9 June 2009 09:15:41}

DTC	Description / Action	Source
U3000:96	Control Module: Component Internal Failure **Description:** The PSCM is self monitoring and will carry out self-tests at specific intervals (initial power up, power down, during normal operation, etc.). Each self-test requires the voltage supply to the PSCM to be at or above a specific level (above 6 volts, above 9 volts, between 10 and 17 volts, etc.) for the test to take place. If one or more of the self-tests should fail, then the module will set one or more DTCs. • DTC U3000:41 (Control Module: General Checksum Failure) - If at any time during normal operation the module detects an internal software error with more than 6 volts supplied to the PSCM, then DTC U3000:41 will be set. • DTC U3000:46 (Control Module: Calibration/Parameter Memory Failure) - At any time during normal operation with more than 6 volts supplied to the PSCM the module determines that one or more calibration files are missing or that they are corrupt or that the incorrect EPAS gear is installed on the vehicle, then DTC U3000:46 will be set . • DTC U3000:49 (Control Module: Internal Electronic Failure) - If at any time during normal operation with more than 6 volts supplied to the PSCM, the module detects a software or internal hardware error then the DTC U3000:49 will be set. • DTC U3000:61 (Control Module Signal Calculation Failure) - If the PSCM detects that assist torque calculation is faulty due to a software failure in the module, then DTC U3000:61 will be set. • DTC U3000:72 (Control Module Actuator Stuck Open) - During initial power up with voltage greater than 9 volts, the PSCM will check the internal relay for voltage. If voltage is not present the module will make several attempts to close the relay. If the voltage remains undetected after this test period, then DTC U3000:72 will be set. • DTC U3000:96 (Control Module: Component Internal Failure) - This DTC will set if there is an internal failure of the PSCM due to temperature, power supply or if multiple failures have occurred over a short period of time. **Possible Causes:** • Heat shield missing. • Steering gear internal failure. • Incorrect EPAS gear installed. • Ice/frost build up on relay contacts. • Heavy loads on the EPAS gear. • Excessive ambient temperatures. **Diagnostic Aids:** For DTC U3000:41, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The module will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:46, initially the PSCM will use a default steering assist and may set DTC U2100:00. If DTC U3000:46 returns on the next ignition cycle, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:49, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs (if any) are set along with U3000:49. Diagnose all other DTCs before diagnosing U3000:49. For DTC U3000:61, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The PSCM will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:72, this DTC indicates that a specific internal relay is either stuck open or has excessive resistance. In cold climates or climates where frost is possible, the relay contacts could develop a layer of frost which may prevent a clean connection between the relay contacts. It may be necessary to allow the vehicle to remain outside overnight in a cold climate to duplicate the DTC trigger conditions. If U3000:72 sets again on subsequent ignition cycles, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:96, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs are set along with U3000:96. If steering assist is affected the PSCM will send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. **Action:** GO to Pinpoint Test C.	PSCM

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure

Normal Operation

The power steering control module (PSCM) monitors various inputs and outputs of the electronic power assist steering (EPAS) system in order to keep the system operating at peak capacity. Information provided by sensors (steering torque, vehicle speed, vehicle travel distance, etc.) are all compared to programmed and learned information. Likewise, outputs like the motor and steering rack (travel) are tested against programmed and learned information.

Note:

If a damaged bellows boot(s) was discovered during Inspection and Verification and this pinpoint test DOES NOT lead to the installation of a new EPAS gear or bellows boot(s), then go to Pinpoint Test K to address the damaged boot(s) before returning the vehicle to the customer.

C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD

- Make sure the EPAS gear heat shield is present and installed correctly. Refer to Section 211-02.
- **Is the heat shield present and is it installed correctly?**

Yes
Go to C2.

Start: Tue Jun 9 09:13:00 EDT 2009

Menu Selection: Inspection and Verification

IV1: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

Menu Selection: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)

Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

KC1: KNOWN CONCERNS

- Ignition ON, engine OFF.
- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN	3MEHM0JGXAR[redacted]_STD

System Related CMDTCs Active {retrieved 9 June 2009 09:15:41}

DTC	Description	Source	Status
U3000:96	Control Module : Component Internal Failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

OASIS symptom code:
— Chassis \ Steering/Handling (303000)

- OASIS will return known TSB s and SSMs for the specific symptom code(s) and DTC(s) listed above.

Recent Warranty Repair History: No recent repair history on vehicle

Review the OASIS results below for any known concerns related to the current vehicle.

SSM: 20782 2008- 2010 FUSION, MILAN, MKZ - NO LONGER INCLUDE THE STEERING WHEEL LOCKFEATURE. ALL 2008 - 2010 FUSION, MILAN, AND MKZ VEHICLES BUILT AFTER 12/1/2007 HAVE INCORPORATED AN ELECTRONIC PASSIVE ANTI-THEFT SYSTEM (EPATS) KEY SYSTEM FOR THEFT PROTECTION AND REPLACING THE MECHANICAL STEERING WHEEL LOCK FEATURE THEFT PROTECTION. IMPORTANT: DO NOT REPLACE THE STEERING COLUMN FROM A PRE-12/1/2007 BUILT VEHICLE WITH THE NEW EPATS EQUIPPED COLUMN. THE COLUMNS ARE NOT INTERCHANGEABLE. A DEALER THAT INTERCHANGES THE COLUMNS COULD BE SUBJECT TO GOVERNMENT FINES UP TO $6,000 PER VEHICLE FOR RENDERING INOPERATIVE A REQUIRED SAFETY FEATURE. Effective Date: 05/06/2009	1 out of 2 303000
SSM: 20795 2010 FUSION/MILAN - 2.5L/3.0L EPAS EQUIPPED VEHICLES - SQUEAK AND RATTLE SOME 2010 FUSION/MILAN EQUIPPED WITH 2.5L OR 3.0L AND ELECTRONIC POWER ASSIST STEERING (EPAS) MAY EXHIBIT INCREASED LEVELS OF ROAD NOISE, THAT CAN BE HEARD INSIDE THE VEHICLE WHILE DRIVING. THE STEERING GEAR/DASH SEAL -(BASE PART NUMBER 3611B) MAY NOT BE PROPERLY SEATED. THE CORRECT POSITION OF THE STEERING GEAR/DASH	1 out of 2 303000

SEAL CAN FOUND IN WORKSHOP MANUAL SECTION 211-02. NOTE: THIS ROAD NOISE DOES NOT IMPACT THE FUNCTION OR DURABILITY OF THE STEERING SYSTEM AND IT IS CONSIDERED A CUSTOMER IRRITATION. Effective Date: 05/14/2009	
SSM: 20831 2010 FUSION/MILAN ELECTRONIC POWER ASSIST SYSTEM (EPAS) - INTERACTIVE DIAGNOSIS THE 2010 FUSION/MILAN WORKSHOP MANUAL SECTION 211-00A HAS BEEN UPDATED WITH INTERACTIVE DIAGNOSTICS. THIS SECTION PROVIDES NEW INFORMATION ABOUT DIAGNOSTIC TOOLS FOR THE ELECTRONIC POWER ASSIST STEERING (EPAS) AND THE POWER STEERING CONTROL MODULE (PSCM). THIS NEXT GENERATION OF VEHICLE DIAGNOSTIC SOFTWARE IS DESIGNED TO AID TECHNICIANS IN IDENTIFYING VEHICLE CONCERNS BY ALLOWING PINPOINT TEST DIAGNOSTICS TO DIRECTLY ACCESS THE VEHICLE THROUGH A VEHICLE COMMUNICATIONS MODULE (VCM), DISPLAY TEST MEASUREMENTS IN REAL TIME AND PROVIDE LOGICAL DIAGNOSTIC PROGRESSION BASED ON TECHNICIAN INPUT. NOTE: IF DIAGNOSTIC TROUBLE CODES ARE PRESENT, DO NOT CLEAR THE CODES UNTIL USING INTERACTIVE DIAGNOSIS, THIS WILL HELP CAPTURE 'FREEZE FRAME' DATA DURING THE DIAGNOSTICS OF ANY DTC. Effective Date: 06/06/2009	1 out of 2 303000
Search criteria with no matching OASIS results: U3000	

- **Are any of the listed known concerns related to the customer complaint?**

No
GO to Diagnostic Trouble Code (DTC) Charts.

Detected DTCs / DTC Index

EPAS

Current DTCs {retrieved 9 June 2009 09:15:41}

DTC	Description / Action	Source
N/A	No DTCs to report	

Historic DTCs {retrieved 9 June 2009 09:15:41}

DTC	Description / Action	Source
U3000:96	Control Module: Component Internal Failure **Description:** The PSCM is self monitoring and will carry out self-tests at specific intervals (initial power up, power down, during normal operation, etc.). Each self-test requires the voltage supply to the PSCM to be at or above a specific level (above 6 volts, above 9 volts, between 10 and 17 volts, etc.) for the test to take place. If one or more of the self-tests should fail, then the module will set one or more DTCs. • DTC U3000:41 (Control Module: General Checksum Failure) - If at any time during normal operation the module detects an internal software error with more than 6 volts supplied to the PSCM, then DTC U3000:41 will be set. • DTC U3000:46 (Control Module: Calibration/Parameter Memory Failure) - At any time during normal operation with more than 6 volts supplied to the PSCM the module determines that one or more calibration files are missing or that they are corrupt or that the incorrect EPAS gear is installed on the vehicle, then DTC U3000:46 will be set . • DTC U3000:49 (Control Module: Internal Electronic Failure) - If at any time during normal operation with more than 6 volts supplied to the PSCM, the module detects a software or internal hardware error then the DTC U3000:49 will be set. • DTC U3000:61 (Control Module Signal Calculation Failure) - If the PSCM detects that assist torque calculation is faulty due to a software failure in the module, then DTC U3000:61 will be set. • DTC U3000:72 (Control Module Actuator Stuck Open) - During initial power up with voltage greater than 9 volts, the PSCM will check the internal relay for voltage. If voltage is not present the module will make several attempts to close the relay. If the voltage remains undetected after this test period, then DTC U3000:72 will be set. • DTC U3000:96 (Control Module: Component Internal Failure) - This DTC will set if there is an internal failure of the PSCM due to temperature, power supply or if multiple failures have occurred over a short period of time. **Possible Causes:** • Heat shield missing. • Steering gear internal failure. • Incorrect EPAS gear installed. • Ice/frost build up on relay contacts. • Heavy loads on the EPAS gear. • Excessive ambient temperatures. **Diagnostic Aids:** For DTC U3000:41, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The module will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:46, initially the PSCM will use a default steering assist and may set DTC U2100:00. If DTC U3000:46 returns on the next ignition cycle, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:49, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs (if any) are set along with U3000:49. Diagnose all other DTCs before diagnosing U3000:49. For DTC U3000:61, the PSCM will remove steering assist, enter into a manual mode and transmit an invalid steering angle message over the HS-CAN bus. The PSCM will also send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:72, this DTC indicates that a specific internal relay is either stuck open or has excessive resistance. In cold climates or climates where frost is possible, the relay contacts could develop a layer of frost which may prevent a clean connection between the relay contacts. It may be necessary to allow the vehicle to remain outside overnight in a cold climate to duplicate the DTC trigger conditions. If U3000:72 sets again on subsequent ignition cycles, then the PSCM will remove steering assist, enter into a manual mode and send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. For DTC U3000:96, the presence of this DTC may or may not affect steering assist. It will depend on what other DTCs are set along with U3000:96. If steering assist is affected the PSCM will send a message to the instrument cluster to display the POWER STEERING ASSIST FAULT message in the message center. **Action:** GO to Pinpoint Test C.	PSCM

DTC U3000:96 (PSCM) - Control Module: Component Internal Failure

C: DTC U3000: Control Module - Signal Calculation Failure and Component Internal Failure

Normal Operation

The power steering control module (PSCM) monitors various inputs and outputs of the electronic power assist steering (EPAS) system in order to keep the system operating at peak capacity. Information provided by sensors (steering torque, vehicle speed, vehicle travel distance, etc.) are all compared to programmed and learned information. Likewise, outputs like the motor and steering rack (travel) are tested against programmed and learned information.

Note:

If a damaged bellows boot(s) was discovered during Inspection and Verification and this pinpoint test DOES NOT lead to the installation of a new EPAS gear or bellows boot(s), then go to Pinpoint Test K to address the damaged boot(s) before returning the vehicle to the customer.

C1: VERIFY PRESENCE OF EPAS GEAR HEAT SHIELD

- Make sure the EPAS gear heat shield is present and installed correctly. Refer to Section 211-02.
- **Is the heat shield present and is it installed correctly?**

Yes
Go to C2.

C2: TEST DRIVE TO CHECK FOR RETURNING DTCS. - Fault outcome

-
- Cycle the ignition to OFF and then back to RUN.

NOTE: Always drive the vehicle in a safe manner according to driving conditions and obey all traffic laws.

- Test drive the vehicle in the following manner:
  —With the engine running/ready, stop the vehicle on an unsealed concrete or asphalt surface (in order to provide adequate friction for a thorough test).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.
  —Return the steering wheel to the center position and move the vehicle forward approximately 32 cm (1 ft).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.
  —Return the steering wheel to the center position and move the vehicle forward approximately 32 cm (1 ft).
  —With the vehicle in gear and the brakes applied, turn the steering wheel lock-to-lock.

NOTE: The next portion of the test drive will require the vehicle to be driven at highway speeds.

NOTE: The test period is a cumulative time of 10 minutes. Stopping, going slower than 72 km/h (45 mph) or faster that 96 km/h (60 mph) will not affect the test as long as a total time of 10 minutes is spent between 72-96 km/h (45-60 mph) with at least 4 lane changes during that time/speed window.

- Continue test driving the vehicle in the following manner:
  —Bring the vehicle to a minimum speed of 72 km/h (45 mph), maximum of 96 km/h (60 mph).
  —Maintain that speed for at least 10 minutes.
  —During this 10-minute time period, make a minimum of 4 lane changes or turns that achieve a steering wheel angle of at least 20 degrees.
  —The test drive is complete.
- Press Read Vehicle Information button to retrieve DTC s from the vehicle. NOTE: DTCs may be displayed from previous diagnostic actions.

Vehicle Information:

VIN	3MEHM0JGXAR[redacted]	STD

System Related CMDTCs Active {retrieved 9 June 2009 09:22:31}

DTC	Description	Source	Status
U3000:96	Control Module : Component Internal Failure	PSCM	Historic

System Related CMDTCs cleared since initial read:

- **Is DTC U3000:61 and/or U3000:96 present?**

Yes
INSTALL a new EPAS gear. Refer to Section 211-02.

Exit: Tue Jun 9 09:33:00 EDT 2009

Start: Tue Jun 9 09:13:00 EDT 2009

Menu Selection: Inspection and Verification

IV1: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

  NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

Menu Selection: Inspection and Verification

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	
Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

Yes	No
For damaged steering gear bellows boots. Go to IV2. For all others, Click for details.	**Go to Known Concerns**

IV1: VISUAL INSPECTION

- Verify the customer concern.
- Visually inspect the electronic power assist steering (EPAS) system for obvious signs of mechanical or electrical damage.

NOTE: When inspecting the bellows boots make sure to use a strong light source and an inspection mirror.

VISUAL INSPECTION CHART

Mechanical	Electrical
Binding or misaligned steering column.	Battery junction box (BJB) fuses 1 (50A) and 2 (50A)
Loose steering column shaft bolts.	Smart junction box (SJB) fuse 42 (10A)
Steering column shaft couplings/U-joints	Wiring, terminals or connectors.
Steering gear	
Steering gear bellows boots	
Inner tie-rod ends	

Outer tie-rod ends	
Tire pressure	
Tires	

- **Is an obvious cause for an observed or reported concern found?**

No
Go to Known Concerns

From: Martha Abundis <Martha.Abundis@TRW.COM>
Sent: Friday, October 09, 2009 2:23 PM
To: Hochrein, Brad (B.G.); Harris, Jonathan (J.E.); Miralles, Juan (J.); Quijada, Jorge (J.); McIntyre, Kathryn (K.L.); Bahena, Miguel (Mike.); Brandenburg, Manfred (M.); Frey, Martin (M.F.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Snider, Tim (T.O.); Hernandez, Victor (V.M.); Bouse, William (Bill.); Aaron Blancas; Alexander Kleist; BaoYuan Tian; Douglas Sherman; Frank Fan; Geoff Collins; Geoff Jacks; Greg Collier; Jacky Shi; Jeff Jiang; Jim Rau-nonTRW; Keith Dusina; Mark Karwowski; Martha Abundis; Mike Davies; Pavel Vetz; Phil Browne; Philip Warren-Green; Robert Kostadina; Romance Zhu; Rudy Shuryan; Salim Semssar; Sanjay Singh; Simon Malsbury; Filipe.Matos@tycoelectronics.com; hugo.gomes@tycoelectronics.com
Subject: Meeting notes - EPAS loss of assistance 10/9

Part 2805
- Washing to quantify particles in the product - Sample once per shift
- Two projects with washing actions at the beginning and washing actions at the end, now Tyco is analyzing the results to be presented next Tuesday
- For next Tuesday Run chart for particles counted
-
- Reports for 2805, 2849 and the 8D's will be finished and submitted next Monday

From: Estes, Eric (E.E.)
Sent: Wednesday, August 11, 2010 3:06 PM
To: JoseJ Lopez; Samuel Arreola; Guillermo Aguilar
Cc: Anthony Fleenor; Snider, Tim (T.O.)
Subject: New gear testing in QAO

Gears outside the Ford requirements over 6months in service and under 24,000 miles

These new TS gears do not need to be tested, these are closed claims

FR0289
FR0291
FR0292
FR0298- I will close will overwound torque sensor

The gears that need to be tested are:(they are over 24,000 miles)

FR0293
FR0294

I will send the PFR's today

Eric

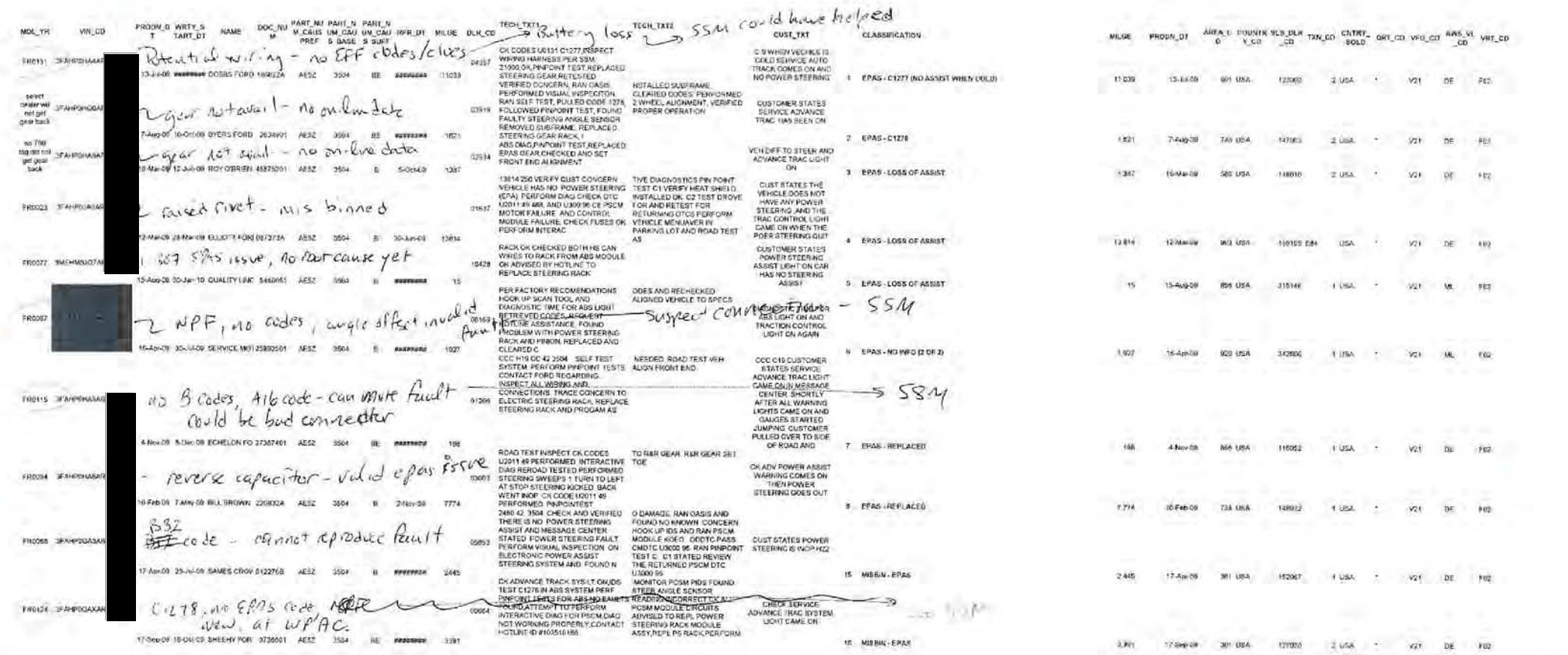
From: Pienta, Alan (A.)
Sent: Wednesday, August 31, 2011 6:24 PM
To: Ron.Caldwell@TRW.com
Cc: Mathew Alder; Rajinder SINGH; Diez, Timothy (T.P.)
Subject: Nidec Motor

Ron,
My name is Alan Pienta. I am with Ford Motor Company and work with Tim Diez in Chassis Electronics on TRW EPAS programs.

Tim and I were discussing the Nidec 150K capacity increase and recent issues arising with the B9A fault code. We would like to know how Nidec validates their magnetization process and untimately the flux density of the magnets used. Is the process a significant characteristic? Do you know if anything has changed in the process with the capacity increase such as change in sub suppliers, etc.?

Regarding the SREA, do you know what validation was completed and when? Can you forward the results to me or let me know who has the data?

Thanks,
Alan Pienta
EPAS Electronics Engineer



Battery loss

SSM could have helped

Rear strut wiring - no EFF codes/clears

gear not avail - no on-line data

gear not equal - no on-line data

2 raised rivet - mis binned

867 EPAS issue, no root cause yet

2 NPF, no codes, angle offset invalid

Suspect connector - SSM

NO B Codes, A16 code - can mute fault could be bad connector

SSM

reverse capacitor - valid epas issue

B32 code - cannot reproduce fault

C1278, no EPAS code NPF

NPF

10 claims:

2 gears not rec'd, no on-line data

3 loose connector. suspicious - SSM to help

4 valid EPAS issues → mis binned

1 new issue need to pick up part @ WPAC

10

Next Steps:

1. Meeting w/ warranty engineer, technician, improvements
2. Look @ wire harnesses for this connector
3. Speak to tech writing team re: adding DTC to applicable DTC
4. Work w/ tech PST on connector robustness

PE14-030 000149

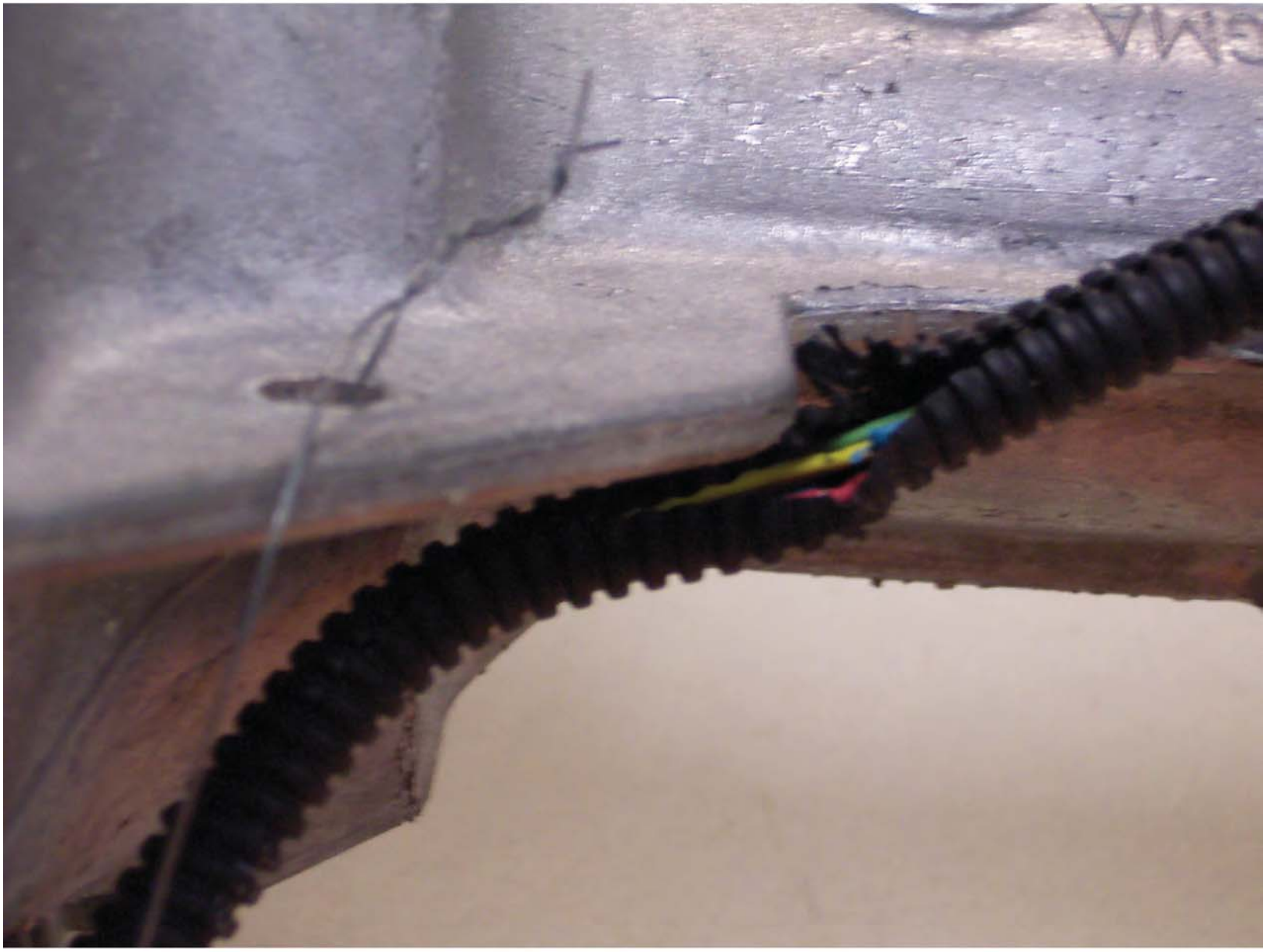
Fusion EPAS

'10 MY

should perform
better than the
11-12 MY cars
11-12 had the
ribbon cable issue

2006 - 2010 Fusion / Milan / Zephyr-Mkz
Alleged loss of steering From CDR

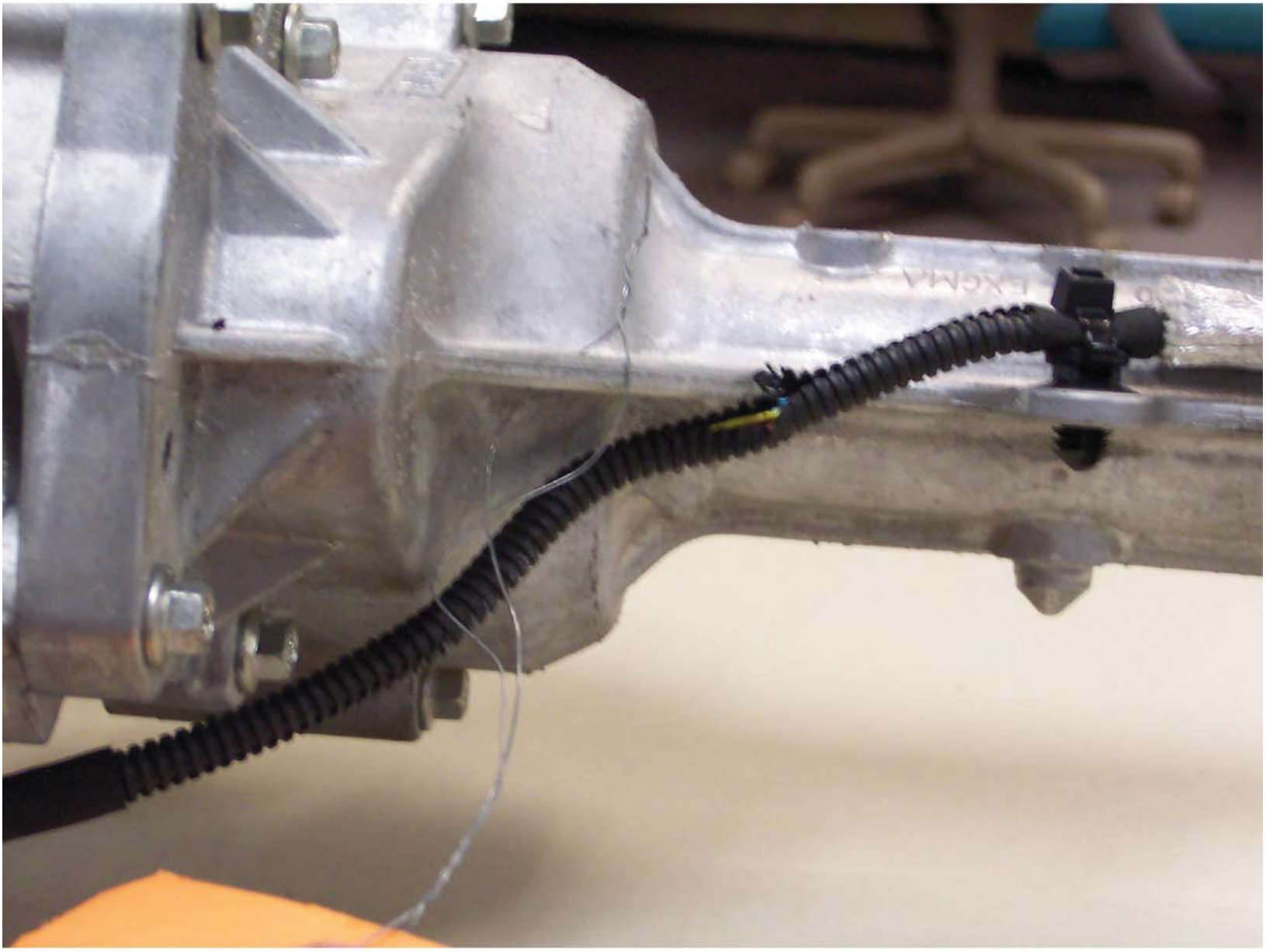
Engine Description	(All)					
Count of VIN	Model Year					
Causal Part Base	2006	2007	2008	2009	2010	Grand Total
3504	2028	844	272	123	597	3864
3A713	1862	884	159	62	15	2982
Unknown	683	586	205	127	384	1985
3600	540	534	347	140	134	1695
3A696	822	413	253	90	12	1590
3524	872	359	25	18	28	1302
	499	353	184	123	142	1301
3A719	742	225	83	63	9	1122
FRONT	141	162	169	122	111	705
3A705	286	78	78	13	3	458
3A130	181	142	74	30	18	445
NPF	129	76	47	18	60	330
3A674	197	60	49	12	7	325
3N824	136	96	31	31		294
3001	50	52	63	30	18	213
3D758	20	72	14	34	47	187
TIRE	37	40	66	15	11	169
3530	27	20	18	54	21	140
3511	51	28	7	9	7	102
3A697	39	24	20	15		98
3514	30	12	5	4	5	56
3A006	31	16	3	6		56
*	1	2	1	2	49	55
3E764		18	12	3	4	37
3078	9	15	1	4	1	30
3691	10	5	5	1	9	30
3B676	19	8	2		1	30
3C529	14	5		2	3	24
7326			5	5	11	21
3F690	5	4	7	2	2	20
SWHEEL	6	3	4	4	3	20
3719	15	1	3			19
3R807	9	6	3	1		19
3C611	4	4	3		7	18
3L547	10	2	1		3	16
3084	3	3	3	5		14
3329	5	5	3	1		14
3N623	11	1				12
3082	4	1	3	3		11
3Z719	8	3				11
3A005	4	1	2		3	10
3085	3	1	2	3		9
12A581	3	2	1	1	2	9
3304	2	1	1	1	2	7
3332	1	2	1	2	1	7
7A214		3	2	1	1	7
3A714	4	2				6
3050	3	1		1		5



PE14-030 000154

E14-030 000155


EXGMA



From: Chacon, Jose (A.)
Sent: Friday, June 05, 2009 3:14 PM
To: Estes, Eric (E.E.)
Cc: Bouse, William (W.J.); Bahena, Miguel (Mike.); 'Costas Chrysochoidis'; 'Anthony Fleenor'; 'Greg Bendzinski'
Subject: RE: #6 warranty gear U2011-49
Attachments: Report Summary for the CQIS Report#9FBAK121 (9.71 KB)

Eric,

Per phone conversation. Report attached.

Regards,

José Chacón
Product Concern Engineer
Fusion/Milan/Zephyr/MKZ
Ford Customer Service Division
(313) 317-7047

From: Estes, Eric (E.E.)
Sent: Thursday, June 04, 2009 9:40 AM
To: Chacon, Jose (A.)
Cc: Bouse, William (W.J.); Bahena, Miguel (Mike.); 'Costas Chrysochoidis'; Anthony Fleenor; Greg Bendzinski
Subject: #6 warranty gear U2011-49

Jose can you confirm that the code U2011 did not reset after the cold start. I don't know if the dealer ordered the gear because of the previous reports with the hotline or if the code cameback after the cold start. The parts registry shows an EPAS gear being delivered to this dealer today.

Report# :	9FBAK121 NHL			Received:	06/02/2009
CCRG/EPRC:S		Reviewed Status:		Date:	06/03/2009
Vehicle:	2010,MILAN,PREMIER,SEDAN ,3MEHM0JA8AR[redacted]			Build Date:	02/17/2009
Odometer :	1,814 M	Engine:	2.5L DOHC	Calibration:	ADE1F40A
Transmission:	6SP 6F MID	Axle:		A/C:	YES
Dealer:	USA 13123 Wall's Lincoln-Mercury, Inc.			Phone#:	(508) 687-3100
City:	Methuen	State:	Massachusett	Country :	USA
Originator:	SCOTT WALTON				

Symptom: 3 03 1 50 CHASS.,STRG/HANDLING ,FUNCTION,HIGH EFFORT
Status:
VFG: V87 STEERING
Additional Symptom: HIGH STEERING EFFORTS U2011:49
Fix: Causal Component :
Condition Code:

Hotliner: DKNAPP7 Phone: 000 317-6316 Regn Cd: N2 Boston
Engineering: Phone: TAR:
Dlr Contact: SCOTT WALTON Phone: 978 687-3100 Title Cde: T

KOEO: U2011
KOEC:
KOER:

REPAIR 06/02/2009 03:16PM DAVID KNAPP MSS - FCSD - TECH SVC HOTLINE
WEB FORM DATA - CONCERN: CUSTOMER LOST POWER STEERING DIAGNOSTICS: SELF TEST PSCM, U2011:49-08 - CONTINUOUS MEMORY. CLEARED DTC, AND RE-RAN SELF TEST, PASS. INSPECTED WIRING TO STEERING GEAR MOTOR, O.K. PARTS REPLACED:: NONE TECH QUESTION: ARE THERE ANY KNOWN CONCERNS? WERE YOU ABLE TO VERIFY THE CONCERN? YES IS THERE AN APPROPRIATE PINPOINT TEST IN THE WSM FOR THIS CONCERN? NO WAS THE PINPOINT TEST FOLLOWED? YES

RECOMM 06/02/2009 03:16PM DAVID KNAPP MSS - FCSD - TECH SVC HOTLINE
SCOTT, AS LONG AS THE POWER AND THE GROUND ARE PROPER TO THE EPAS POWER STEERING MODULE WE WOULD SUGGEST REPLACING THE POWER STEERING MODULE COLUMN ASSEMBLY FOR THIS CONCERN.

REPAIR 06/02/2009 03:41PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE
TECHNICIAN REPLY: DID YOU MEAN STEERING MODULE GEAR ASSY?????

RECOMM 06/02/2009 03:41PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE
CORRECT SCOTT, THE STEERING MODULE GEAR ASSEMBLY WILL NEED TO BE REPLACE.

REPAIR 06/02/2009 04:20PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE
CALL THE TECH BACK. HE REPORTED THAT HE TOOK THE VEHICLE FOR A TEST DRIVE AND THE CODE WOULD NOT COME BACK. HE DID ADD THAT THE THE CUSTOMER WAS COMPLAINING OF A INTERMITTENT HARD START CONCERN AS WELL. THERE WERE NO OTHER CODES AND NO AFTERMARKET COMPONENTS. THE BATTERY IS IN GOOD CONDITION

RECOMM 06/02/2009 04:20PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE
THE RACK REPLACEMENT WILL NOT BE NECESSARY IF THE CODES IS NOT CURRENTLY FLAGGING.

Eric J. Estes
Warranty Analyst - TRW Automotive
6-Sigma Center 15010 S. Commerce Dr.
Dearborn, Michigan 48120
Ph.#(313) 390-3843 Fax#(888) 502-9600

From: JCHACON3@ford.com
Sent: Friday, June 05, 2009 3:13 PM
To: Chacon, Jose (A.)
Subject: Report Summary for the CQIS Report#9FBAK121

Attachments : 0

Report# :	9FBAK121 NHL			**Received:**	06/02/2009
CCRG/EPRC:	S	**Reviewed Status:**		**Date:**	06/03/2009
Vehicle:	2010,MILAN,PREMIER,SEDAN ,3MEHM0JA8AR[redacted]			**Build Date:**	02/17/2009
Odometer :	1,814 M	**Engine:**	2.5L DOHC	**Calibration:**	ADE1F40A
Transmission:	6SP 6F MID	**Axle:**		**A/C:**	YES
Dealer:	USA 13123 Wall's Lincoln-Mercury, Inc.			**Phone#:**	(508) 687-3100
City:	Methuen	**State:**	Massachusett	**Country :**	USA
Originator:	SCOTT WALTON				
Symptom:	3 03 1 50 CHASS.,STRG/HANDLING ,FUNCTION,HIGH EFFORT				
Status:					
VFG:	V87 STEERING				
Additional Symptom:	HIGH STEERING EFFORTS U2011:49				
Fix:	**Causal Component :**				
Condition Code:					

Hotliner: DKNAPP7 **Phone:** 000 317-6316 **Regn Cd:** N2 Boston

Engineering: **Phone:** **TAR:**

Dlr Contact: SCOTT WALTON **Phone:** 978 687-3100 **Title Cde:** T

DTCs:
KOEO:U2011
KOEC:
KOER:

Comments :

REPAIR 06/02/2009 03:16PM DAVID KNAPP MSS - FCSD - TECH SVC HOTLINE
WEB FORM DATA - CONCERN: CUSTOMER LOST POWER STEERING DIAGNOSTICS: SELF TEST PSCM, U2011:49-08 - CONTINUOUS MEMORY. CLEARED DTC, AND RE-RAN SELF TEST, PASS. INSPECTED WIRING TO STEERING GEAR MOTOR,

O.K. PARTS REPLACED:: NONE TECH QUESTION: ARE THERE ANY KNOWN CONCERNS? WERE YOU ABLE TO VERIFY THE CONCERN? YES IS THERE AN APPROPRIATE PINPOINT TEST IN THE WSM FOR THIS CONCERN? NO WAS THE PINPOINT TEST FOLLOWED? YES

RECOMM 06/02/2009 03:16PM DAVID KNAPP MSS - FCSD - TECH SVC HOTLINE

SCOTT, AS LONG AS THE POWER AND THE GROUND ARE PROPER TO THE EPAS POWER STEERING MODULE WE WOULD SUGGEST REPLACING THE POWER STEERING

MODULE COLUMN ASSEMBLY FOR THIS CONCERN.

REPAIR 06/02/2009 03:41PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE

TECHNICIAN REPLY: DID YOU MEAN STEERING MODULE GEAR ASSY?????

RECOMM 06/02/2009 03:41PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE

CORRECT SCOTT, THE STEERING MODULE GEAR ASSEMBLY WILL NEED TO BE REPLACE.

REPAIR 06/02/2009 04:20PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE

CALL THE TECH BACK. HE REPORTED THAT HE TOOK THE VEHICLE FOR A TEST DRIVE AND THE CODE WOULD NOT COME BACK. HE DID ADD THAT THE THE CUSTOMER WAS COMPLAINING OF A INTERMITTENT HARD START CONCERN AS WELL.

THERE WERE NO OTHER CODES AND NO AFTERMARKET COMPONENTS. THE BATTERY

IS IN GOOD CONDITION

RECOMM 06/02/2009 04:20PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE

THE RACK REPLACEMENT WILL NOT BE NECESSARY IF THE CODES IS NOT CURRENTLY FLAGGING.

ADD-ON 06/05/2009 11:10AM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG

CALLED THE DEALER BACK AND THE TECHNICIAN STATES THE CONDITION IS INTERMITTENT. THE CODES GOT CLEARED AND ROAD TESTED FOR TWO DAYS. THE

EPAS RACK WAS NOT REPLACED. END OF CALL.

ADD-ON 06/05/2009 11:10AM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG

THERE ARE NO CODES IN EPAS. THE VEHICLE IS BACK WITH THE CUSTOMER. END OF CALL.

From: Guillermo Aguilar <Guillermo.Aguilar@TRW.COM>
Sent: Tuesday, April 20, 2010 12:09 AM
To: Snider, Tim (T.O.)
Subject: RE: 150 EPAS on hold release / TRW

Haven't checked this out Tim; let me confirm and I'll answer to the complete team.

Thanks,

>>> "Snider, Tim (T.O.)" <tsnider1@ford.com> 4/16/2010 7:55 AM >>>
Guillermo,

Okay. Have you noticed any groupings in the B9A warranty returns regarding date of manufacture of the motor, or module? The vehicle builds with B9A's appear to be spread out between Feb 2009 and Sept 2009.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

-----Original Message-----
From: Guillermo Aguilar [mailto:Guillermo.Aguilar@TRW.COM]
Sent: Thursday, April 15, 2010 10:40 PM
To: Ulloa, Fernando (F.F.); Snider, Tim (T.O.)
Cc: Maldonado, Sonia (S.); angelsaa@prodigy.net.mx
Subject: 150 EPAS on hold release / TRW

Tim,

As per the lack of any other possible containment to be performed as a gear level to the 150 pieces we have on hold at Benteler, we agreed this afternoon with Fernando, to start releasing the parts in lots of 10 pc./day, to closely track them down through the line, and perform a driving test that Fer suggested. As mentioned during the week, we feel very optimistic that parts will perform perfectly as per the rest of the julian date lot, basing our selves in the Bully results we have for the material.

In relation to it, we agree to proceed with this activity. We'll be supporting as agreed to control every 10 pc. lot that is assembled at Benteler and then shipped into the assembly line; Angel will be coordinating this activity and informing Fernando about the VIN numbers for your follow up.

Thanks for your support.

Guillermo Aguilar,

From: Estes, Eric (E.E.)
Sent: Wednesday, April 15, 2009 2:03 PM
To: Bahena, Miguel (Mike.)
Subject: RE: 2010 CD3 EPAS First Service Return - GCQIS # 9DIAI062

I overnighted the part but unsure if when the dealer is going to close the repair order so hopefully end of this week or early next week.

I'm trying to get a meeting number so once I get that I will set up the meeting.

Eric J. Estes
Warranty Analyst - TRW Automotive
6-Sigma Center 15010 S. Commerce Dr.
Dearborn, Michigan 48120
Ph.#(313) 390-3843 Cell#(734)560-3493

From: Bahena, Miguel (Mike.)
Sent: Wednesday, April 15, 2009 8:50 AM
To: Estes, Eric (E.E.)
Cc: Bouse, William (W.J.)
Subject: RE: 2010 CD3 EPAS First Service Return - GCQIS # 9DIAI062

Eric,

Did you hear when this part will be back at the warranty parts return center? Also I did not see the meeting notice for the Monday afternoon meetings to review warranty claims. Did you send? Thanks.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@messaging.sprintpcs.com>>>>>

From: Chacon, Jose (A.)
Sent: Monday, April 13, 2009 11:46 AM
To: Estes, Eric (E.E.)
Cc: Bouse, William (W.J.); Chacon, Jose (A.); Moody, Tom (T.J.); Hillaker, Glen (G.E.); Christiansen, Jens (J.F.); Bahena, Miguel (Mike.)

Subject: FW: 2010 CD3 EPAS First Service Return - GCQIS # 9DIAI062

Forward information to additional members.

Regards,

José Chacón
Product Concern Engineer
Fusion/Milan/Zephyr/MKZ
Ford Customer Service Division
(313) 317-7047

From: Chacon, Jose (A.)
Sent: Monday, April 13, 2009 11:44 AM
To: Estes, Eric (E.E.)
Cc: Moody, Tom (T.J.); Chacon, Jose (A.); Bouse, William (W.J.)
Subject: RE: 2010 CD3 EPAS First Service Return - GCQIS # 9DIAI062

Eric,

Please use the latest information from the dealer. The dealer will proceed with the EPAS Rack replacement. Dealer provided PDF. critical information on their findings. Please initiate the WPRC for parts analysis. WPRC information in GCQIS Report.

https://www.gcqis.dealerconnection.com/gcqis/asp/DIViewAttachment_Mainx.asp?ReportNumber=9DIAI062

<< File: GCQISREPORT #9DIAI062.pdf >> << Message: Report Summary for the CQIS Report#9DIAI062 >>

Regards,

José Chacón
Product Concern Engineer
Fusion/Milan/Zephyr/MKZ
Ford Customer Service Division
(313) 317-7047

From: Chacon, Jose (A.)
Sent: Monday, April 13, 2009 10:43 AM
To: Bouse, William (W.J.)
Cc: Estes, Eric (E.E.); Moody, Tom (T.J.)
Subject: RE: 2010 CD3 EPAS First Service Return
Importance: High

Good Morning Bill,

This morning we were reviewing the request regarding GCQIS Report # 9DIAI062. Please review the background of this program and/or new issues:

+ Report # 9DIAI062 in this E-mail is incomplete.
For the latest information and most current GCQIS data please refer to:
http://www.seo.ford.com/gcqis/cqis/decider.htm
https://www.gcqis.dealerconnection.com/gcqis/asp/WBRES_RptSummaryUpdMain.asp?rptnbr=9DIAI062

+ Supplier requests to contact Dealers, (Service/Parts) Department for EPAS follow up:
Currently, under current ford guidelines, no supplier can contact the Dealer for repairs, parts and/or follow-ups directly.

Supplier must work/follow through ford point of contact.

+ Current Point of Contact for Ford Dealers regarding EPAS is:
Jose C.

+ Status of GCQIS Report # 9DIAI062 the dealer has not completed all the diagnosis.
Jose C. to follow up with dealer on diagnosis and/or repairs once completed.

+ If a request for a part is needed. Requester (D&R) needs to follow WPRC guidelines:
http://www.quality.ford.com/6sigma_center/wpac/index.html

If you have any questions, please set up a meeting and we can discuss next steps.

Regards,

José Chacón
Product Concern Engineer
Fusion/Milan/Zephyr/MKZ
Ford Customer Service Division
(313) 317-7047

From: Estes, Eric (E.E.)
Sent: Monday, April 13, 2009 8:50 AM
To: Bouse, William (W.J.); Chacon, Jose (A.)
Subject: RE: 2010 CD3 EPAS First Service Return

Bill I don't see a phone number for your meeting this morning. The codes I put down was the PSCM codes Jose gave me when I talked to him Thursday. You need to talk to Jose about the other codes listed.

Eric

From: Bouse, William (W.J.)
Sent: Thursday, April 09, 2009 5:54 PM
To: Estes, Eric (E.E.); Chacon, Jose (A.)
Subject: RE: 2010 CD3 EPAS First Service Return

Eric/José, can you two please clarify what the actual fault codes were in the vehicle for the PSCM? The DTCs in Eric's note does not match the text from the CQIS case. It also states the report at the bottom that the car was connected to the IDS tool and if that is the case we should know a lot about this car and it seems we do not. So between the two of you can you please get the information needed so that we can react accordingly.

Thanks

Bill Bouse

CD3/4 Electric Steering System Engineer
(**cell**) (313) 805-2289
(**email**) wbouse@ford.com
(**page**) 3138052289@messaging.sprintpcs.com

From: Estes, Eric (E.E.)
Sent: Thursday, April 09, 2009 3:27 PM
To: Greg Bendzinski; Costas Chrysochoidis; anthony.fleenor@trw.com; Dean Flower; Mark Karwowski; 'Andrew.Williams@TRW.COM'; 'simon.malsberry@trw.com'; 'robert.kinnear@trw.com'

Cc: Bouse, William (W.J.); Christiansen, Jens (J.F.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.); Bahena, Miguel (Mike.); Porter, Wesley (W.)

Subject: 2010 CD3 EPAS First Service Return

I have some concerns with the lack of assistance FCSD is giving me to contact the dealers. All my information to the dealers need to go through Jose Chacon (product concern engineer) to get information. I contacted Jose this morning and advised that a gear was ordered from the dealer below but the dealer did not perform the new Interactive Online diagnosis to properly get detailed information like the diagnostic's, freeze-frame data and returning codes , so Jose wrote the CQIS case (see below).

This vehicle does not have any assist off the car hauler and from the report below not sure what codes are from other modules other than the EPAS U3000-49(0xF00049) & U3000-96(0xF00096) and what codes are current & history. I advised Jose that this dealer needs to hook up the IDS scan tool and follow the Interactive diagnosis so we can get the specific/one code that is causing the lack of assist.

Should get more detailed information on Monday so I can pull the TRW codes, also I will overnight the part back for fast analysis. I looked on the HSAP plant site and did not see any EPAS codes on this vehicle at the last "code check" stage.

Report# : 9DIAI062 ACR Received: 04/09/2009
CCRG/EPRC: << OLE Object: Picture (Metafile) >> << OLE Object: Picture (Metafile) >> Reviewed
Status: Date:
Vehicle: 2010,FUSION,SEL ,SEDAN ,3FAHP0JA3AR[redacted] Build Date: 02/14/2009
Odometer : 10 M Engine: 2.5L DOHC Calibration:
Transmission: 6SP 6F MID Axle: A/C: YES
Dealer: USA 01341 Fred Beans Ford Lincoln Mercur Phone#: (610) 696-4700
City: West Chester State: Pennsylvania Country : USA
Originator: JOHN STEWART
Symptom: 3 03 1 55 CHASS.,STRG/HANDLING ,FUNCTION,LOSS OF STRG
Status:
VFG: V89 RIDE & HANDLING
Additional Symptom: NO ASSIST AND MULTIPLE CODES
Fix: Causal Component :
Condition Code:

Region Code: N3 Region Name: Philadelphia

KOEO:
KOEC:
KOER:

WHY? 04/09/2009 12:30PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
RECEIVED VEHICLE REQUEST THROUGH FAV/TRW REQUEST. THE INFORMATION ON THIS VEHICLE INDICATES, A NEW EPAS ASSEMBLY WAS REQUESTED BY THE DEALER ON 04/08/09. TEAM REQUEST FOLLOW UP ON THIS REPAIR.

CONCER 04/09/2009 12:30PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
CALLED THE TECHNICIAN AND SPOKE WITH ED/JOHN STEWART AND SERVICE MANAGER PAUL HAY. TECH INDICATED HE RAN OASIS AND/OR DID NOT FIND ANY CONCERNS. TECH INDICATED THIS VEHICLE HAD COMPLETE NO ASSIST AT ALL. THE IDS WAS INSTALLED AND/OR CODES U3000:48, U3000:49, U3096:C8 WERE PRESENT. TECHNICIAN INDICATED HE CHECKED A FEW CONNECTIONS AND/OR DECIDED TO ORDER A EPAS ASSEMBLY. ASKED THE TECHNICIAN IF HE UTILIZED THE NEW EPAS WORKSHOP MANUAL DIAGNOSIS? TECH INDICATE NO, HE WAS NOT AWARE OF THIS DIAGNOSIS. ADVISED ED/JOHN HOW TO GET TO THE DIAGNOSIS AND/OR WHAT TO DO. I CALL THE TECHNICIAN AT A LATER TIME

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
RTDA ph# 313-390-3493
Cell ph# 734-560-3493

From: Paul IRELAND <Paul.IRELAND@TRW.COM>
Sent: Thursday, April 09, 2009 8:07 PM
To: Estes, Eric (E.E.); Andrew Williams; Anthony Fleenor; Costas Chrysochoidis; Dean Flower; Greg Bendzinski; Mark Karwowski; Robert Kinnear; simon.malsberry@trw.com
Cc: Christiansen, Jens (J.F.); Bahena, Miguel (Mike.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Bouse, William (W.J.); Porter, Wesley (W.)
Subject: Re: 2010 CD3 EPAS First Service Return

Eric,

Please can you keep me on copy regarding this issue?

Thanks and regards

Paul.

Paul Ireland
Quality & Product Support Engineering Manager
TRW Electronic Engineering
Steering & Powertrain

TRW Automotive Electronics
Technical Centre
Stratford Road
Shirley
Solihull
Birmingham
B90 4GW

Mob: +44 (0)7787 152278
E-mail: mailto:paul.ireland@trw.com
Web: http://www.trw.com

>>> On 09 April 2009 at 20:26, "Estes, Eric (E.E.)" <eestes@ford.com> wrote:

> I have some concerns with the lack of assistance FCSD is giving me to contact the dealers. All my information to the dealers need to go through Jose Chacon (product concern engineer) to get information. I contacted Jose this morning and advised that a gear was ordered from the dealer below but the dealer did not perform the new Interactive Online diagnosis to properly get detailed information like the diagnostic's, freeze-frame data and returning codes , so Jose wrote the CQIS case (see below).

This vehicle does not have any assist off the car hauler and from the report below not sure what codes are from other modules other than the EPAS U3000-49(0xF00049) & U3000-96(0xF00096) and what codes are current & history. I advised Jose that this dealer needs to hook up the IDS scan tool and follow the Interactive diagnosis so we can get the specific/one code that is causing the lack of assist.

Should get more detailed information on Monday so I can pull the TRW codes, also I will overnight the part back for fast analysis. I looked on the HSAP plant site and did not see any EPAS codes on this vehicle at the last "code check" stage.

Report# : 9DIAI062 ACR Received: 04/09/2009
CCRG/EPRC: Reviewed Status: Date:
Vehicle: 2010,FUSION,SEL ,SEDAN ,3FAHP0JA3AR[redacted] Build Date: 02/14/2009
Odometer : 10 M Engine: 2.5L DOHC Calibration:
Transmission: 6SP 6F MID Axle: A/C: YES
Dealer: USA 01341 Fred Beans Ford Lincoln Mercur Phone#: (610) 696-4700
City: West Chester State: Pennsylvania Country : USA
Originator: JOHN STEWART
Symptom: 3 03 1 55 CHASS.,STRG/HANDLING ,FUNCTION,LOSS OF STRG
Status:
VFG: V89 RIDE & HANDLING
Additional Symptom: NO ASSIST AND MULTIPLE CODES
Fix: Causal Component :
Condition Code:

Region Code: N3 Region Name: Philadelphia

KOEO:
KOEC:
KOER:

WHY? 04/09/2009 12:30PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
RECEIVED VEHICLE REQUEST THROUGH FAV/TRW REQUEST. THE INFORMATION ON THIS VEHICLE INDICATES, A NEW EPAS ASSEMBLY WAS REQUESTED BY THE DEALER ON 04/08/09. TEAM REQUEST FOLLOW UP ON THIS REPAIR.
CONCER 04/09/2009 12:30PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
CALLED THE TECHNICIAN AND SPOKE WITH ED/JOHN STEWART AND SERVICE MANAGER PAUL HAY. TECH INDICATED HE RAN OASIS AND/OR DID NOT FIND ANY CONCERNS. TECH INDICATED THIS VEHICLE HAD COMPLETE NO ASSIST AT ALL. THE IDS WAS INSTALLED AND/OR CODES U3000:48, U3000:49, U3096:C8 WERE PRESENT. TECHNICIAN INDICATED HE CHECKED A FEW CONNECTIONS AND/OR DECIDED TO ORDER A EPAS ASSEMBLY. ASKED THE TECHNICIAN IF HE UTILIZED THE NEW EPAS WORKSHOP MANUAL DIAGNOSIS? TECH INDICATE NO, HE WAS NOT AWARE OF THIS DIAGNOSIS. ADVISED ED/JOHN HOW TO GET TO THE DIAGNOSIS AND/OR WHAT TO DO. I CALL THE TECHNICIAN AT A LATER TIME

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
RTDA ph# 313-390-3493
Cell ph# 734-560-3493

TRW Limited

Registered in England, No. 872948

Registered Office Address: Stratford Road, Solihull B90 4AX

From: Paul IRELAND <Paul.IRELAND@TRW.COM>
Sent: Friday, April 10, 2009 8:26 AM
To: Bouse, William (W.J.); Anthony Fleenor; Costas Chrysochoidis; Craig Zeki; Geoff Jacks; Greg Bendzinski; Mark Karwowski; Andrew.Williams@TRW.COM; robert.kinnear@trw.com; simon.malsberry@trw.com
Cc: Christiansen, Jens (J.F.); Bahena, Miguel (Mike.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Porter, Wesley (W.)
Subject: RE: 2010 CD3 EPAS First Service Return

Bill,

This ECU_ID doesn't map to reprocessing from my data.

See below the traceability I have:

EPP_ID	PSTG_ID	ECU_ID	MOTOR_ID	Relay Wk/Yr
083191177D20285	083091175E10QJR	**083111173E10LGJ**	AAA0B254110022	33/2008

Please let me know if you get more data.

Regards

Paul.

Paul Ireland
Quality & Product Support Engineering Manager
TRW Electronic Engineering
Steering & Powertrain

TRW Automotive Electronics
Technical Centre
Stratford Road
Shirley
Solihull
Birmingham
B90 4GW

Mob: +44 (0)7787 152278
E-mail: mailto:paul.ireland@trw.com
Web: http://www.trw.com

sender immediately and delete from your system. Any views or opinions expressed are solely those of the author and do not necessarily represent those of TRW Automotive Ltd unless otherwise specifically stated.

>>> On 09 April 2009 at 22:22, in message
<47133697BE99E14AA51728457B5BD1CB066FAE84@na1fcm32.fmc1.ford.com>, "Bouse, William (W.J.)"
<wbouse@ford.com> wrote:

Eric, so we got the first warranty return and they did not follow the process. I will make some phone calls about the on-line diagnostics but it has been clear for several months that TRW does not directly contact a Ford dealership. Eric, also your DTCs do not match the CQIS text that was put out by Jose, can you please get with him can clarify what the real DTCs are since both of these map to several TRW faults. It also says in the text that the technician hooked up the IDS tool to retrieve the DTCs so have we confirmed that this car was or was not hooked up the system?

0xF00049 U3000-49 C Control Module Internal Electronic Failure

0xF00096 U3000-96 C Control Module Component Internal Failure

Paul, do you know if this EPP is on your re-processed EPPs:
RP_SN_PSCM=083111173E10LGJ , 730, PSCM, SERIAL NUMBER
Log file from HSAP.
<<First Warranty Claim 3FAHP0JA3AR[redacted]log>>
I will set up a meeting for Monday morning to discuss with all on this meeting notice. Eric, if you can schedule a weekly meeting to go through the current warranty status that would be most helpful.
Bill

From: Estes, Eric (E.E.)
Sent: Thursday, April 09, 2009 3:27 PM
To: Greg Bendzinski; Costas Chrysochoidis; anthony.fleenor@trw.com; Dean Flower; Mark Karwowski; 'Andrew.Williams@TRW.COM'; 'simon.malsberry@trw.com'; 'robert.kinnear@trw.com'
Cc: Bouse, William (W.J.); Christiansen, Jens (J.F.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.); Bahena, Miguel (Mike.); Porter, Wesley (W.)
Subject: 2010 CD3 EPAS First Service Return

I have some concerns with the lack of assistance FCSD is giving me to contact the dealers. All my information to the dealers need to go through Jose Chacon (product concern engineer) to get information. I contacted Jose this morning and advised that a gear was ordered from the dealer below but the dealer did not perform the new Interactive Online diagnosis to properly get detailed information like the diagnostic's, freeze-frame data and returning codes , so Jose wrote the CQIS case (see below).
This vehicle does not have any assist off the car hauler and from the report below not sure what codes are from other modules other than the EPAS U3000-49(0xF00049) & U3000-96(0xF00096) and what codes are current & history. I advised Jose that this dealer needs to hook up the IDS scan tool and follow the Interactive diagnosis so we can get the specific/one code that is causing the lack of assist.
Should get more detailed information on Monday so I can pull the TRW codes, also I will overnight the part back for fast analysis. I looked on the HSAP plant site and did not see any EPAS codes on this vehicle at the last "code check" stage.

Report# : 9DIAI062 ACR Received: 04/09/2009
CCRG/EPRC: << OLE Object: Picture (Metafile) >> << OLE Object: Picture (Metafile) >> Reviewed
Status: Date:
Vehicle: 2010,FUSION,SEL ,SEDAN ,3FAHP0JA3AR[redacted] Build Date: 02/14/2009
Odometer : 10 M Engine: 2.5L DOHC Calibration:
Transmission: 6SP 6F MID Axle: A/C: YES
Dealer: USA 01341 Fred Beans Ford Lincoln Mercur Phone#: (610) 696-4700
City: West Chester State: Pennsylvania Country : USA
Originator: JOHN STEWART
Symptom: 3 03 1 55 CHASS.,STRG/HANDLING ,FUNCTION,LOSS OF STRG
Status:
VFG: V89 RIDE & HANDLING
Additional Symptom: NO ASSIST AND MULTIPLE CODES
Fix: Causal Component :

Condition Code:

Region Code: N3 Region Name: Philadelphia

KOEO:
KOEC:
KOER:

WHY? 04/09/2009 12:30PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
RECEIVED VEHICLE REQUEST THROUGH FAV/TRW REQUEST. THE INFORMATION ON THIS VEHICLE INDICATES, A NEW EPAS ASSEMBLY WAS REQUESTED BY THE DEALER ON 04/08/09. TEAM REQUEST FOLLOW UP ON THIS REPAIR.
CONCER 04/09/2009 12:30PM JOSE CHACON(PCE) MSS - FCSD - VSP C/P SVC ENG
CALLED THE TECHNICIAN AND SPOKE WITH ED/JOHN STEWART AND SERVICE MANAGER PAUL HAY. TECH INDICATED HE RAN OASIS AND/OR DID NOT FIND ANY CONCERNS. TECH INDICATED THIS VEHICLE HAD COMPLETE NO ASSIST AT ALL. THE IDS WAS INSTALLED AND/OR CODES U3000:48, U3000:49, U3096:C8 WERE PRESENT. TECHNICIAN INDICATED HE CHECKED A FEW CONNECTIONS AND/OR DECIDED TO ORDER A EPAS ASSEMBLY. ASKED THE TECHNICIAN IF HE UTILIZED THE NEW EPAS WORKSHOP MANUAL DIAGNOSIS? TECH INDICATE NO, HE WAS NOT AWARE OF THIS DIAGNOSIS. ADVISED ED/JOHN HOW TO GET TO THE DIAGNOSIS AND/OR WHAT TO DO. I CALL THE TECHNICIAN AT A LATER TIME

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
RTDA ph# 313-390-3493
Cell ph# 734-560-3493

From: Mrozek, Robert (R.M.)
Sent: Monday, August 16, 2010 8:06 PM
To: Snider, Tim (T.O.)
Cc: Mrozek, Robert (R.M.)
Subject: RE: 2010 CD3 TC lamp on C1278,c1277 & C1963 ABS CODES

Good catch. Is there a reason we raise the ABS codes? Can we NOT raise them for this scenario? Or raise a DTC that tells the tech to service the wiring?

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Snider, Tim (T.O.)
Sent: Monday, August 16, 2010 3:28 PM
To: Estes, Eric (E.E.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Kremer, Doug (D.); Hanna, Bashar (B.A.); Ulloa, Fernando (F.F.); Mrozek, Robert (R.M.); 'Anthony Fleenor'; 'Greg Bendzinski'; 'Mark Karwowski'; 'Robert Kostadina'; 'Simon Malsbury'; Dayringer, Brett (.); Shekleton, James (J.); Chacon, Jose (A.); McCormick, John (J.P.); Chacon, Jose (A.)
Subject: RE: 2010 CD3 TC lamp on C1278,c1277 & C1963 ABS CODES

Eric,

Please advise the hotline to inspect connector C1010 for possible intermittent connection if a CD3 EPAS vehicle has C1963 or C1277 or C1278 DTC's.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Estes, Eric (E.E.)
Sent: Friday, June 25, 2010 12:52 PM
To: Snider, Tim (T.O.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Kremer, Doug (D.); Hanna, Bashar (B.A.); Ulloa, Fernando (F.F.); Mrozek, Robert (R.M.); Anthony Fleenor; Greg Bendzinski; Mark Karwowski; 'Robert Kostadina'; 'Simon Malsbury'; Dayringer, Brett (.); Shekleton, James (J.); Chacon, Jose (A.)
Subject: RE: 2010 CD3 TC lamp on C1278,c1277 & C1963 ABS CODES

I have seen many CQIS reports with this issue, make sure we write something up with connector number so I can sent out to the hotline here, this could turn into a SSM to prevent EPAS, ABS & RCM module replacements in the field. From my warranty pareto we have at 11 EPAS warranty claims, some of the other claims the tech states he has no assist with TC

lamp on c1278/C1277/c1263 but I did not find any b-codes and they did not mention problems with PSCM communication, so that number could be higher.

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Snider, Tim (T.O.)
Sent: Thursday, June 24, 2010 4:01 PM
To: Estes, Eric (E.E.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Kremer, Doug (D.); Hanna, Bashar (B.A.); Ulloa, Fernando (F.F.); Mrozek, Robert (R.M.)
Subject: RE: C1278 & C1963 ABS CODES

Eric,

Russ and I recreated the C1963 and C1277 codes last night in a Brakes development vehicle by unhooking the EPAS jumper CAN connector underneath the front bumper for about a half second. No codes were recorded in the PSCM or other modules and steering assist remained, but C1963 and C1277 were recorded in the brake module. If we left the connector disconnected longer, say 5 seconds, then the PSCM showed a low battery code, steering assist was lost, and the service advance trac light came on in the cluster in addition to the C1963 and C1277. Once Russ sends the codes we can discuss next steps. I don't think any further vehicle evaluation is needed on these gears.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Estes, Eric (E.E.)
Sent: Tuesday, June 01, 2010 2:25 PM
To: Biyashev, Russ (.)
Cc: Snider, Tim (T.O.); Bahena, Miguel (Mike.); Kremer, Doug (D.)
Subject: RE:C1278 & C1963 ABS CODES

Russ I have three EPAS gears at WPAC all TC lamp on C1278/77 & C1963 with no EPAS codes or loss of PS assist. Not sure if they replaced the ABS module, but you can select next gear to install for on-vehicle test.

VIN# 3FAHP0HA8AR[redacted](ABS C1963-20)- TRW# FR0194

VIN# 3FAHP0JA5AR[redacted]ABS C1278)- FR0212

VIN# 3MEHM0HA3AR[redacted](ABS C1278)- FR0215

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Biyashev, Russ (.)
Sent: Friday, May 07, 2010 9:46 AM
To: Estes, Eric (E.E.)
Subject: RE: Updated TRW Warranty Tracker

Okay. Sounds good.

Thank you,

Russ Biyashev
Ford Motor Company
Chassis Brake Controls
Phone: 313.805.**4793**
Text: 3138054793@vtext.com
Email: **rbiyashe**@ford.com

From: Estes, Eric (E.E.)
Sent: Thursday, May 06, 2010 3:44 PM
To: Biyashev, Russ (.); Snider, Tim (T.O.)
Subject: RE: Updated TRW Warranty Tracker

I have the gear at WPAC when you are ready. I know Tim is out till 5/17 so maybe at that time we can decide if we want to swap in a new gear.

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Biyashev, Russ (.)
Sent: Thursday, May 06, 2010 3:34 PM
To: Estes, Eric (E.E.); Snider, Tim (T.O.)
Subject: RE: Updated TRW Warranty Tracker

Eric

Previously provide gear from another return has been in my Milan for weeks now. No issues. If the team agrees to put a new rack in, we can do that next week.

Tim - I am unable to test on the Milan this week per our previous conversation. Hopefully we can do the connector terminal fault insertion next week.

Thank you,

Russ Biyashev
Ford Motor Company
Chassis Brake Controls
Phone: 313.805.**4793**
Text: 3138054793@vtext.com
Email: **rbiyashe**@ford.com

From: Estes, Eric (E.E.)
Sent: Thursday, May 06, 2010 10:13 AM
To: Nunn, Aaron (A.L.); Snider, Tim (T.O.); Jakubik, Paul (P.C.); Boughan, Jerry (J.D.)

Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Mrozek, Robert (R.M.); Kremer, Doug (D.)
Subject: RE: Updated TRW Warranty Tracker

I don't think we will find anything in our testing this would be a good on-vehicle test to see if the TC lamp comes on with ABS code C1963-20 because that was the only fault noted.

Russ let me know when your done with FR0124 road testing for C1277 and we can install this gear. thanks

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Nunn, Aaron (A.L.)
Sent: Thursday, May 06, 2010 8:08 AM
To: Snider, Tim (T.O.); Estes, Eric (E.E.); Jakubik, Paul (P.C.); Boughan, Jerry (J.D.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Mrozek, Robert (R.M.)
Subject: RE: Updated TRW Warranty Tracker

Before we get defensive--Have we properly tested the returned part? Any chance it is actually bad?

What was the prior history of repair for the vehicle? Is there any reason the steering angle sensor would have been out of calibration? Were there any other DTC's that would have pointed to a connection issue? If the ABS DTC was the only one and there was no prior repair on the vehicle where a dealer may have failed to properly connect a wire or calibrate the sensor then my vote goes to paying the dealer. The dealer was obviously trying to do the right thing. They took the time to call hotline. Nothing makes them do that and we do not pay the dealer extra to do it.

From: Snider, Tim (T.O.)
Sent: Monday, May 03, 2010 3:21 PM
To: Estes, Eric (E.E.); Jakubik, Paul (P.C.); Nunn, Aaron (A.L.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Mrozek, Robert (R.M.)
Subject: RE: Updated TRW Warranty Tracker

Doesn't sound like the Hotline advised the dealer to replace the gear. Also, doesn't look like the pinpoint tests tell the technician to replace the gear. Seems like a legitimate dealer charge back.

Paul / Aaron,

Your thoughts?

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Estes, Eric (E.E.)
Sent: Monday, May 03, 2010 3:02 PM
To: Snider, Tim (T.O.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.)
Subject: RE: Updated TRW Warranty Tracker

With no PSCM codes listed in PPT"F" (tech did not use Interactive Diagnosis if there was an EPAS code) leads to PPT"G" which test the ABS & RCM module only.

Here is the CQIS(Hotline) Report- the only warranty claim on this vehicle., below that is the AWS claim.

Report# :	ACPC6007 NHL			Received:	03/16/2010
CCRG/EPRC:	<< OLE Object: Picture (Metafile) >> << OLE Object: Picture (Metafile) >>	Reviewed Status:		Date:	
Vehicle:	2010,FUSION,SE ,SEDAN ,3FAHP0HA8AR[redacted]			Build Date:	08/12/2009
Odometer :	15,483 M	Engine:	2.5L DOHC	Calibration:	ADE1F40A
Transmission:	6SP 6F MID	Axle:	3.066RATIO	A/C:	YES
Dealer:	USA 00472 Jim Tidwell Ford			Phone#:	(770) 427-5531
City:	Kennesaw	State:	Georgia	Country :	USA
Originator:	CARL WHITE				
Symptom:	3 01 A 04 CHASS.,SERVICE BRAKE ,INDICATOR,T/C LIGHT				
Status:					
VFG:	V21 BRAKING				
Additional Symptom:	C1963				
Fix: N	Causal Component :				
Condition Code:					

Hotliner: JTAYL466	Phone: 000 000-0000	Regn Cd: S1 Atlanta
Engineering:	Phone:	TAR:
Dlr Contact: CARL WHITE	Phone: 770 427-5531	Title Cde: T

KOEO: C1963

KOEC:

KOER:

REPAIR 03/16/2010 01:14PM JASON TAYLOR MSS - FCSD - TECH SVC HOTLINE

WEB FORM DATA - CONCERN: TRACTION CONTROL LAMP ON/OFF DIAGNOSTICS:

PINPOINT TEST F FOR DTC 1963.20 PARTS REPLACED:: NONE TECH

QUESTION: PINPOINT TEST FOR THIS DTC STATES TO CK STEERING WHEEL ANGLE

SENSOR,HAVE DONE SO AND VEHICLE DOES NOT HAVE ONE,HAS SPOT FOR SENSOR

BUT NO SENSOR OR CONNECTOR.HAVE VARIFIED LOCATION PER WSM AND EVTM

BOTH PAPER AND ONLINE.WHAT AM I MISSING? WERE YOU ABLE TO VERIFY

THE CONCERN? YES IS THERE AN APPROPRIATE PINPOINT TEST IN THE WSM

FOR THIS CONCERN? YES WAS THE PINPOINT TEST FOLLOWED? YES

RECOMM 03/16/2010 01:14PM JASON TAYLOR MSS - FCSD - TECH SVC HOTLINE

CARL, THIS VEHICLE IS EQUIPPED WITH EPAS, SO THE STEERING WHEEL

ANGLE SENSOR IS LOCATED INTERNAL TO THE EPAS GEAR ASSEMBLY. ROTATION

SPEED AND ANGLE ARE SENT TO THE ABS MODULE FROM THE POWER STEERING

CONTROL MODULE (PSCM) ALONG THE HIGH SPEED CONTROLLER AREA NETWORK

(HS-CAN) BUS. IN THE PIN POINT TEST REFER TO STEP F2 IN WSM SECTION

206-09 SINCE THIS VEHICLE IS EQUIPPED WITH EPAS.

REPAIR 03/16/2010 02:15PM FRED SHEPHERD MSS - FCSD - TECH SVC HOTLINE

TECHNICIAN REPLY: THANKS,AFTER READING FARTHER,I FIGURED IT OUT.THANKS

FOR YOUR TIME,CARL

RECOMM 03/16/2010 02:15PM FRED SHEPHERD MSS - FCSD - TECH SVC HOTLINE

YOU'RE WELCOME. 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.

ADD-ON 03/19/2010 09:16AM MARK MCCLELLAND MSS - FCSD - TECH SVC HOTLINE

-RE-CONTACTED TECHNICIAN. REPLACING THE EPAS RACK RESOLVED THIS

CONCERN.

AWS Claim

Cust. Concern Code: H39 - TRACTION CONTROL/ADV TRAC WARNING LIGHT TROUBLES Condition Code: 42 - DOES NOT OPERATE PROPERLY Technician Comment: CUSTOMER CONCERN TRACTION CONTROL LIGHT ON AND OFF PERFORMED TRACTION CONTROL ABS DIAG PULLED CODES C1963 20 FOLLOWED PINPOINT TEST F WHICH LED TO STEERING WHEEL ANGLE SENSORS SPOKE WITH HOTLINE CONFIRMED SENSORS ONLY AVAILABLE IN STEERING RACK TECH REPLACED STEERING RACK NECESSARY TO LOWER SUBFRAME TO ACCESS AND REPLACE RACK AFTER REPLACING RACK TECH CHECKED ALIGNMENT AND CORRECTED TO SPEC RETEST Customer Comment: CUST STATES TRACTION CONTROL LIGHT COMES ON AND OFF

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Snider, Tim (T.O.)
Sent: Monday, May 03, 2010 2:33 PM
To: Estes, Eric (E.E.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.)

Subject: RE: Updated TRW Warranty Tracker

Eric,

Let me know what the Hotline advised.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Biyashev, Russ (.)
Sent: Monday, May 03, 2010 1:44 PM
To: Snider, Tim (T.O.)
Cc: Bahena, Miguel (Mike.); Estes, Eric (E.E.)
Subject: RE: Updated TRW Warranty Tracker

Tim

Checked on that VIN and basically there is not enough info to tell whether it was a good repair or not.

Looks like technician did call the hot line.

Thank you,

Russ Biyashev
Ford Motor Company
Chassis Brake Controls
Phone: 313.805.**4793**
Text: 3138054793@vtext.com
Email: **rbiyashe**@ford.com

From: Snider, Tim (T.O.)
Sent: Monday, May 03, 2010 1:40 PM
To: Biyashev, Russ (.)
Cc: Bahena, Miguel (Mike.); Estes, Eric (E.E.)
Subject: FW: Updated TRW Warranty Tracker

Russ,

Please see FR-0194 in the attachment. Should the steering gear have been replaced? I'll come to your desk to discuss it.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Estes, Eric (E.E.)
Sent: Friday, April 30, 2010 12:13 PM
To: Bahena, Miguel (Mike.); Snider, Tim (T.O.); Diez, Timothy (T.P.); Mrozek, Robert (R.M.)
Subject: Updated TRW Warranty Tracker

Here is today's update of the warranty tracker

<< File: 2010 CD3-D3 EPAS Warranty Apr_30_2010.xls >>

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Mrozek, Robert (R.M.)
Sent: Tuesday, October 27, 2009 6:10 PM
To: Meier, Kenneth (K.W.); Gudino Mendoza, Martin (J.M.)
Cc: Snider, Tim (T.O.); Quijada, Jorge (J.); Annadi, Hari (H.); Rogero, Antonio (A.); Chacon, Jose (A.)
Subject: RE: 2010 EPAS CD3 Claim # 40862 VIN#3FAHP0HA1AF[redacted]

3FAHP0HA1AR15...

Thank you Ken.

Rob Mrozek

Electric Power Steering Supervisor
CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Meier, Kenneth (K.W.)
Sent: Tuesday, October 27, 2009 2:08 PM
To: Gudino Mendoza, Martin (J.M.)
Cc: Snider, Tim (T.O.); Quijada, Jorge (J.); Annadi, Hari (H.); Mrozek, Robert (R.M.); Rogero, Antonio (A.); Chacon, Jose (A.)
Subject: RE: 2010 EPAS CD3 Claim # 40862 VIN#3FAHP0HA1AF[redacted]

Robert,

Give me a copy of the claim and I can forward to our Fleet Zone Manager that calls on Dollar rental for a name and phone number.

Ken Meier
Commercial Vehicle Operations
Commercial Service Manager
Regent Court Building
16800 Executive Pl. Dr.
Dearborn, MI 48126-4207
Phone: 313-317-1867 Fax: 313-248-3481

From: Gudino Mendoza, Martin (J.M.)
Sent: Tuesday, October 27, 2009 10:55 AM
To: Meier, Kenneth (K.W.)
Cc: Snider, Tim (T.O.); Quijada, Jorge (J.); Annadi, Hari (H.); Mrozek, Robert (R.M.); Rogero, Antonio (A.); Chacon, Jose (A.)
Subject: RE: 2010 EPAS CD3 Claim # 40862 VIN#3FAHP0HA1AR[redacted]

Ken:
Could you help Robert, to obtain information about EPAS concerns reported by Dollar/Thirfty fleet? If you are not the right contact, do you know who is in fleet department?

Regards

Martin Gudiño
FCSD-PVT Program Manager
HSAP

From: Rogero, Antonio (A.)
Sent: Tuesday, October 27, 2009 7:37 AM
To: Gudino Mendoza, Martin (J.M.)
Cc: Snider, Tim (T.O.); Quijada, Jorge (J.); Annadi, Hari (H.); Mrozek, Robert (R.M.)
Subject: RE: 2010 EPAS CD3 Claim # 40862 VIN#3FAHP0HA1AF[redacted]

Martin,
See you in your office to review this item.

From: Mrozek, Robert (R.M.)
Sent: Martes, 27 de Octubre de 2009 06:05 a.m.
To: Quijada, Jorge (J.); Rogero, Antonio (A.); Annadi, Hari (H.)
Cc: Snider, Tim (T.O.); Mrozek, Robert (R.M.)
Subject: 2010 EPAS CD3 Claim # 40862 VIN#3FAHP0HA1AR[redacted]

Jorge/Hari -

We have the attached CD3 EPAS claim with little useful description and no contact information. The dealer is a Dollar/Thirfty Rental company and I am not sure how to make contact with them w/o any information in the claim outside of making cold calls to them.

Who is the FCSD contact for HSAP and any suggestion on how we can follow up on this claim? Thank you.

<< OLE Object: Picture (Enhanced Metafile) >>
<< OLE Object: Picture (Enhanced Metafile) >>

Rob Mrozek

Electric Power Steering Supervisor
CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

Server: **AWS Prod**
Claims loaded through: **26-OCT-2009**

Claim Detail Report

Note: All costs are in US dollars
Model Year = 2010; **Claim Key** = 40862

Vehicle Information

Model Year: 2010
Market Derived: F - FORD
Body/Cab Type: C/FA - 4 DOOR SEDAN-4 LITE
Version/Series: *-[N/A]
Drive Type: C/A-2 WHL L/H FRONT DRIVE
Vehicle Line: C/DE-FUSION/MILAN/MKZ (ZEPHYR) [06-10]
Warranty Start Date: 25-JUN-2009
Production Date: 10-JUN-2009
VIN: 3FAHP0HA1AR[redacted]

Claim Information

Document Number: 90316801
Repair Date: 17-SEP-2009
Distance: 5216
TIS: 3

Dealer Information:

Dealer Name DTAG - HOUSTON
Dealer Code: 46569 - *
Address: 8620 PANAIR
City: HOUSTON
State: TX Zip Code:77061
Country: USA Region Code: NA
Phone: (*)*-*

Expense Information

Customer Paid Amount:	.00
Deductible Amount:	.00
Dealer Paid Amount:	.00
Labor Cost:	85.00
Misc. Expense Amount:	.00
Part Markup Amount:	187.96
Material Cost:	1127.76
Total Cost Gross:	1212.76

Cust. Concern Code: H50 - STEERING GEAR/PUMP TROUBLES
Condition Code: 42 - DOES NOT OPERATE PROPERLY
Technician Comment: REPLACE RACK AND PINION
Customer Comment: NO POWER STEERING

Labor Op Code	Labor Op Description	Labor Op Cost
3504A	STEERING GEAR ASSEMBLY REMOVE AND INSTALL OR REPLACE	85.00

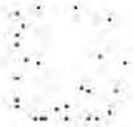
Causal Flag	Full Part Number PREF	BASE	SUFF	Part Description	Part CPSC	Part Quantity	Extended Amount

Y AE5Z 3504 B GEAR ASY-STEERING 110201 1 1127.76

DTC Sections: **Mil. Light On =** *

Flag	Test Type	Malfunction Cd	Malfunction Cd Description	Monitor Cd	Monitor Cd Description

Any comments? You can contact



webmaster

2830

From: Frey, Martin (M.F.)
Sent: Wednesday, December 02, 2009 7:15 PM
To: Matthews, Steve (S.D.); Galindo, Sergio (S.N.)
Cc: Patel, Bharat (B.J.); Jones, Rick (W.P.); Mrozek, Robert (R.M.)
Subject: RE: 2010 Fusion Milan Alleged Lack of Assist - EPAS

Thanks, Steve.

Martin Frey
Manager Electric Steering/Advanced Features/R&P Gear
Chassis Engineering
Cell # 313 805 6301

From: Matthews, Steve (S.D.)
Sent: Wednesday, December 02, 2009 2:03 PM
To: Frey, Martin (M.F.); Galindo, Sergio (S.N.)
Cc: Patel, Bharat (B.J.); Jones, Rick (W.P.); Mrozek, Robert (R.M.)
Subject: RE: 2010 Fusion Milan Alleged Lack of Assist - EPAS

As an analyst in ASO, I review approx 150-200 reports per day for various chassis component repairs/failures. The sources for these reports include GCQIS, AWS, MORS/CuDL and VOQ (from NHTSA). If we (as a department) come across a concern that has a potential to be safety related, we discuss these emerging concerns with the Critical Concern Managers (CCM) and members of the CCRG during a weekly teleconference. Based on the discussion regarding an individual concern, we receive direction to either forward the data to the appropriate product development personnel for their review and possible discussion with the CCM or develop a formal paper that may be used to escalate a concern to the CCRG. In this particular instance, the request was to forward the data to you and Sergio for your review. I am not requesting you do anything with the data specifically, instead this may be more of an awareness issue as the average cost of repair exceeds $1500. There are some production months where the failure rate exceeds 1 R/1000 and since this vehicle/steering gear application is new for 2010 and the vehicles have relatively few miles/months in service on them, there are concerns that this issue could grow into something larger as the products mature in the field.

Steve Matthews
Product Concern Analyst
Automotive Safety Office
313.24.83764

From: Frey, Martin (M.F.)
Sent: Wednesday, December 02, 2009 1:27 PM
To: Matthews, Steve (S.D.); Galindo, Sergio (S.N.)
Cc: Patel, Bharat (B.J.); Jones, Rick (W.P.); Mrozek, Robert (R.M.)
Subject: RE: 2010 Fusion Milan Alleged Lack of Assist - EPAS

All EPAS systems by design fail with lack of assist which is not a safety issue. CD3 failure rates are very low..... Approx 0.5Rs. We get every failed part back for root cause analysis and will continue to eliminate any/all failure modes.

Why was this discussed at ASO mtg?

Thx.

Martin Frey
Manager Electric Steering/Advanced Features/R&P Gear
Chassis Engineering
Cell # 313 805 6301

From: Matthews, Steve (S.D.)
Sent: Wednesday, December 02, 2009 1:08 PM
To: Galindo, Sergio (S.N.); Frey, Martin (M.F.)
Cc: Patel, Bharat (B.J.); Jones, Rick (W.P.)
Subject: 2010 Fusion Milan Alleged Lack of Assist - EPAS

Sergio and Martin,

Attached to this email is an excel file containing AWS data regarding customers alleging lack of assist on 2010 Fusion/Milan vehicles equipped with EPAS.
This concern was discussed with Bharat Patel and members of ASO this morning (12/2) during a conference call with Bharat. At Bharat's request, I am forwarding this file to you for your review.

<< File: 2010 Fusion Milan Alleged lack of Assist EPAS AWS 11172009.xls >>

Call me if you have questions regarding the file.

Steve Matthews
Product Concern Analyst
Automotive Safety Office
313.24.83764

From: McIntyre, Kathryn (K.L.)
Sent: Tuesday, October 13, 2009 2:53 PM
To: 'Martha Abundis'; Hochrein, Brad (B.G.); Harris, Jonathan (J.E.); Miralles, Juan (J.); Quijada, Jorge (J.); Bahena, Miguel (Mike.); Brandenburg, Manfred (M.); Frey, Martin (M.F.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Snider, Tim (T.O.); Hernandez, Victor (V.M.); Bouse, William (Bill.); Aaron Blancas; Alexander Kleist; BaoYuan Tian; Douglas Sherman; Frank Fan; Geoff Collins; Geoff Jacks; Greg Collier; Jacky Shi; Jeff Jiang; Jim Rau-nonTRW; Keith Dusina; Mark Karwowski; Mike Davies; Pavel Vetz; Phil Browne; Philip Warren-Green; Robert Kostadina; Romance Zhu; Rudy Shuryan; Salim Semssar; Sanjay Singh; Simon Malsbury; Filipe.Matos@tycoelectronics.com; hugo.gomes@tycoelectronics.com; Miralles, Juan (J.); Brandenburg, Manfred (M.)
Subject: RE: 8D B3A - Plastic contamination

Hi - The problem investigation has not gone far enough for return #2805. Tyco needs to determine if their detection method for contamination needs to change or if they need to do more destructive testing to confirm that they will not have this type of contamination in the future. If you make a part similar to 2805 today, the Tyco process would not detect the contamination and it would pass it on into the value stream.

Please use the 3 x 5 why tool to assist you with your root cause analysis (TRW has that tool). Please provide an updated 8D as soon as it is ready to Mike Davies, Geoff Jacks and Juan Miralles.

Thanks you.

Kathryn McIntyre
Cell 313 805-2408

-----Original Message-----
From: Martha Abundis [mailto:Martha.Abundis@TRW.COM]
Sent: Monday, October 12, 2009 3:17 PM
To: Hochrein, Brad (B.G.); Harris, Jonathan (J.E.); Miralles, Juan (J.); Quijada, Jorge (J.); McIntyre, Kathryn (K.L.); Bahena, Miguel (Mike.); Brandenburg, Manfred (M.); Frey, Martin (M.F.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Snider, Tim (T.O.); Hernandez, Victor (V.M.); Bouse, William (Bill.); Aaron Blancas; Alexander Kleist; BaoYuan Tian; Douglas Sherman; Frank Fan; Geoff Collins; Geoff Jacks; Greg Collier; Jacky Shi; Jeff Jiang; Jim Rau-nonTRW; Keith Dusina; Mark Karwowski; Martha Abundis; Mike Davies; Pavel Vetz; Phil Browne; Philip Warren-Green; Robert Kostadina; Romance Zhu; Rudy Shuryan; Salim Semssar; Sanjay Singh; Simon Malsbury; Filipe.Matos@tycoelectronics.com; hugo.gomes@tycoelectronics.com
Subject: 8D B3A - Plastic contamination

All -

Attached 8D for the CD3 gear that failed in Hermosillo on August 29, 2009

Any comment please let me know.

Martha

From: Mrozek, Robert (R.M.)
Sent: Wednesday, August 18, 2010 2:41 PM
To: 'Markus.Nowak@hella.com'
Cc: anthony.fleenor@trw.com; JoseJ.Lopez@TRW.COM; Jim.Loria@TRW.com; Bahena, Miguel (Mike.); Snider, Tim (T.O.); Diez, Timothy (T.P.); jason.johnson@trw.com; Engelbert.Lu@TRW.COM; Angie.Caudill@TRW.COM; Thomas.Surmann@hella.com; Guillermo.Aguilar@TRW.COM; Geoff.Jacks@TRW.COM; Samuel.Arreola@TRW.COM; Michael.Fontana@TRW.COM; pavel.vetz@trw.com; Mattern, Don (D.); Surella, Matthew (M.M.); Salim.Semssar@TRW.COM; Estes, Eric (E.E.)
Subject: RE: 8D Reports for the 2 Wr issues FR 113 and FR 257

Is there any explanation for the dirtiness and staining on FR113 and does it have any relationship to the ASIC failure?

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Markus.Nowak@hella.com [mailto:Markus.Nowak@hella.com]
Sent: Wednesday, August 18, 2010 9:49 AM
To: anthony.fleenor@trw.com; JoseJ.Lopez@TRW.COM; Jim.Loria@TRW.com; Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Snider, Tim (T.O.); Diez, Timothy (T.P.); jason.johnson@trw.com; Engelbert.Lu@TRW.COM; Angie.Caudill@TRW.COM; Thomas.Surmann@hella.com; Guillermo.Aguilar@TRW.COM; Geoff.Jacks@TRW.COM; Samuel.Arreola@TRW.COM; Michael.Fontana@TRW.COM; pavel.vetz@trw.com; Mattern, Don (D.); Surella, Matthew (M.M.); Salim.Semssar@TRW.COM; Estes, Eric (E.E.)
Subject: 8D Reports for the 2 Wr issues FR 113 and FR 257

Dear all,

here the 8Ds.

talk to you soon.

Markus

From: Mrozek, Robert (R.M.)
Sent: Monday, March 01, 2010 11:25 PM
To: Annadi, Hari (H.); Biyashev, Russ (.)
Cc: Patel, Harendra (H.M.); Snider, Tim (T.O.); Bahena, Miguel (Mike.)
Subject: RE: ABS lights on due to possible EPAS issue on CD3

I would like more time. I am not up to speed on the issue just coming back from vacation all last week and I am not too keen to be providing verbals in front of Ali. I would prefer to spend a week understanding the issue. My team is offsite all day tomorrow at TRW as well so that day is booked.

It really is too short a notice. Can we please move it a week?

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Annadi, Hari (H.)
Sent: Monday, March 01, 2010 12:45 PM
To: Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); Snider, Tim (T.O.)
Cc: Patel, Harendra (H.M.); Biyashev, Russ (.)
Subject: ABS lights on due to possible EPAS issue on CD3

Rob - The Brakes group is requesting a Steering rep to give them a verbal update on the subject issue on what the team is pursuing to reduce/eliminate the issue. Can you or Mike pl attend the Brakes FQR on 3/3/10 to talk to this item. Pl do let me know if you need more time. Thanks.

Hari Annadi

Chassis Quality Supervisor
Master Black Belt
Building # PDC 2B-A57
Work Cell: 313 805 4746
Ford Motor Company, Dearborn, Michigan
email: hannadi@ford.com <mailto:hannadi@ford.com>

From: Estes, Eric (E.E.)
Sent: Tuesday, June 02, 2009 8:47 PM
To: Bahena, Miguel (Mike.); Bouse, William (W.J.)
Cc: Chacon, Jose (A.); Beattie, Mike (M.A.)
Subject: RE: Another B3a just hit in IDS

I advised Earl to call the dealer back on this claim below because the code did not reset after clearing and the PPT leads to returning the vehicle to the customer. I advised to make sure the tech performed a parking lot road test and do a cold start if possible before returning the vehicle to the customer.
(Earl responded below)

He reported that he took the vehicle for a test drive and the code would not come back. He did add that the the customer was complaining of a intermittent hard start concern as well. there were no other codes and no aftermarket components. The battery is in good condition. He did do the parking lot test and a longer road test. He was going to let it sit over night to test the steering and the starting concern in the morning.

I told him not to replace the rack. Report number 9FBAK121

G. Earl Hillaker
Fusion/Milan/MKZ, Focus, Fiesta SME
Service Engineering Operations

Report# :	9FBAK121 NHL			Received:	06/02/2009
CCRG/EPRC:		Reviewed Status:		Date:	
Vehicle:	2010,MILAN,PREMIER,SEDAN ,3MEHM0JA8AR[redacted]			Build Date:	02/17/2009
Odometer :	1,814 M	Engine:	2.5L DOHC	Calibration :	ADE1F40A
Transmission:	6SP 6F MID	Axle:		A/C:	YES
Dealer:	USA 13123 Wall's Lincoln-Mercury, Inc.			Phone#:	(508) 687-3100
City:	Methuen	State:	Massachusett	Country :	USA
Originator:	SCOTT WALTON				
Symptom:	3 03 1 50 CHASS.,STRG/HANDLING ,FUNCTION,HIGH EFFORT				
Status:					
VFG:	V87 STEERING				

Additional Symptom: HIGH STEERING EFFORTS U2011:49

Fix: Causal Component :

Condition Code:

Hotliner: DKNAPP7 Phone: 000 317-6316 Regn Cd: N2 Boston

Engineering: Phone: TAR:

Dlr Contact: SCOTT WALTON Phone: 978 687-3100 Title Cde: T

KOEO: U2011

KOEC:

KOER:

REPAIR 06/02/2009 03:16PM DAVID KNAPP MSS - FCSD - TECH SVC HOTLINE

WEB FORM DATA - CONCERN: CUSTOMER LOST POWER STEERING DIAGNOSTICS:

SELF TEST PSCM, U2011:49-08 - CONTINUOUS MEMORY. CLEARED DTC, AND

RE-RAN SELF TEST, PASS. INSPECTED WIRING TO STEERING GEAR MOTOR,

O.K. PARTS REPLACED:: NONE TECH QUESTION: ARE THERE ANY KNOWN

CONCERNS? WERE YOU ABLE TO VERIFY THE CONCERN? YES IS THERE AN

APPROPRIATE PINPOINT TEST IN THE WSM FOR THIS CONCERN? NO WAS THE

PINPOINT TEST FOLLOWED? YES

RECOMM 06/02/2009 03:16PM DAVID KNAPP MSS - FCSD - TECH SVC HOTLINE

SCOTT, AS LONG AS THE POWER AND THE GROUND ARE PROPER TO THE EPAS

POWER STEERING MODULE WE WOULD SUGGEST REPLACING THE POWER STEERING

MODULE COLUMN ASSEMBLY FOR THIS CONCERN.

REPAIR 06/02/2009 03:41PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE

TECHNICIAN REPLY: DID YOU MEAN STEERING MODULE GEAR ASSY?????

RECOMM 06/02/2009 03:41PM GLEN HILLAKER MSS - FCSD - TECH SVC HOTLINE

CORRECT SCOTT, THE STEERING MODULE GEAR ASSEMBLY WILL NEED TO BE

REPLACE.

From: Bahena, Miguel (Mike.)
Sent: Tuesday, June 02, 2009 2:39 PM
To: Bouse, William (W.J.); Estes, Eric (E.E.)
Subject: Another B3a just hit in IDS

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@messaging.sprintpcs.com>>>>>

From: Mrozek, Robert (R.M.)
Sent: Sunday, April 18, 2010 2:55 PM
To: Estes, Eric (E.E.); Snider, Tim (T.O.); Bahena, Miguel (Mike.); Diez, Timothy (T.P.)
Subject: RE: Antwort: RE: Antwort: TS Meeting this Wednesday 2/14 at 6pm (CEST)

So we lost the rabbit on FR0152? Or is Hella proposing someone somehow shorted out the part?

Rob Mrozek
Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

-----Original Message-----
From: Estes, Eric (E.E.)
Sent: Thursday, April 15, 2010 1:49 PM
To: Snider, Tim (T.O.); Bahena, Miguel (Mike.)
Cc: Mrozek, Robert (R.M.); Diez, Timothy (T.P.)
Subject: FW: Antwort: RE: Antwort: TS Meeting this Wednesday 2/14 at 6pm (CEST)

Here are the 8D reports from Hella on FR0138 & FR0152. looking to close FR0152 and FR0138 waiting on ASIC jitter report from OnSemi sometime next week.

Eric

-----Original Message-----
From: Thomas.Surmann@hella.com [mailto:Thomas.Surmann@hella.com]
Sent: Wednesday, April 14, 2010 9:58 AM
To: Estes, Eric (E.E.)
Cc: Ian Ingram; Joerg.Schirmacher@hella.com; Markus.Nowak@hella.com
Subject: Antwort: RE: Antwort: TS Meeting this Wednesday 2/14 at 6pm (CEST)

Hello Eric,

attached the updated Interim 8D-Reports for FR0152 and FR0138 for the
telcon today.

(See attached file: Interim 8D-Report FR0152 QCCAR 372979 2010-04-14.pdf)

(See attached file: Interim 8D-Report BD-Sensor FR0138_2010_04-14.pdf)

For questions don't hesitate to contact me.

Best Regards

i. A. Thomas Surmann

W5-3QS, actuators & sensors

Hella KGaA Hueck & Co.
Berghäuser Strasse 30 Phone: +49-(0)2361-307-35227
45663 Recklinghausen Fax: +49-(0)2361-307-47-35227
Germany E-mail: Thomas.Surmann@hella.com
Internet: www.hella.com

"Estes, Eric (E.E.)" <eestes@ford.com>
An: <Markus.Nowak@hella.com>
Kopie: "Ian Ingram" <Ian.Ingram@TRW.COM>, <Joerg.Schirmacher@hella.com>, <Thomas.Surmann@hella.com>
13.04.2010 18:26
Thema: RE: Antwort: TS Meeting this Wednesday 2/14 at 6pm (CEST)

Thanks Markus

Eric

From: Markus.Nowak@hella.com [mailto:Markus.Nowak@hella.com]
Sent: Tuesday, April 13, 2010 11:47 AM
To: Estes, Eric (E.E.)
Cc: Ian Ingram; Joerg.Schirmacher@hella.com; Thomas.Surmann@hella.com
Subject: Antwort: TS Meeting this Wednesday 2/14 at 6pm (CEST)

Hello Eric,

one of us will be available.

I hope we can close both items tomorrow.

Regards

Markus

"Estes, Eric (E.E.)"
<eestes@ford.com>

13.04.2010 16:37

An
<Markus.Nowak@hella.com>
<Thomas.Surmann@hella.com>
Kopie
"Ian Ingram"
<Ian.Ingram@TRW.COM>
Thema
TS Meeting this Wednesday
2/14 at 6pm (CEST)

Markus/Thomas want to make sure someone is on the webmeeting call with Ford this Wednesday to discuss the progress of FR0138 & FR0152. Thanks

Global Network Access Toll-Free

Germany# 08003663322
Hang-on the line until operator comes on then enter conf. code & follow directions

Conf. Code: 1842273552

If that global number does not work use

248-226-5571- Reservationless-Plus International dial-in

To start the online webmeeting
---
1. Go to https://www.meetingcenter.net
2. Join a meeting
3. click on "Attend a Meeting"
4. Enter meeting# 592 291 871

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Napoli, Laura (L.)
Sent: Wednesday, February 29, 2012 3:55 PM
To: Collins, Ron (R.J.)
Subject: RE: B3A 6 Panel presentation

Thank you! It's getting tough to hold my patience with TRW lately, but the 2 people working on Warranty are good guys. It's the rest of the team that's testing my patience!

From: Collins, Ron (R.J.)
Sent: Tuesday, February 28, 2012 5:31 PM
To: Napoli, Laura (L.)
Subject: FW: B3A 6 Panel presentation
Importance: High

Laura: You have the patience of Job. Fine job (again!).

Thanks for all your hard work.

Ron Collins
Chief Engineer, North American Chassis Engineering
Ford Motor Company
email: rcollin4@ford.com

From: Perri, Ron (R.J.)
Sent: Tuesday, February 28, 2012 2:58 PM
To: Collins, Ron (R.J.); Tetley, John (J.K.)
Cc: Surella, Matthew (M.M.); Napoli, Laura (L.)
Subject: RE: B3A 6 Panel presentation
Importance: High

Latest 6 Panel for B3A and B43 Relay warranty.

<< File: B3A_6panel_v9.ppt >>

Ron Perri
Manager, Chassis - EPAS and Upper Steering, Systems & Core
2B-F77, Product Development Center
cell 313-805-0680
rperri@ford.com

From: Napoli, Laura (L.)
Sent: Tuesday, February 28, 2012 2:01 PM
To: Surella, Matthew (M.M.); Perri, Ron (R.J.); Geoff Jacks; Salim Semssar; Estes, Eric (E.E.); Anthony Fleenor; Andy Partridge; Pienta, Alan (A.); Rossi, Roberto (R.A.)
Subject: RE: B3A 6 Panel presentation

Thank you everyone for the hard work on this presentation today. We need to keep this presentation updated for next Tuesday's meeting with Ron Collins. Sorry the meeting for today was delayed a week. Here is the latest B3A 6-panel…
<< File: B3A_6panel_v8.ppt >>

From: Surella, Matthew (M.M.)
Sent: Tuesday, February 28, 2012 8:30 AM

To: Surella, Matthew (M.M.); Perri, Ron (R.J.); Napoli, Laura (L.); Geoff Jacks; Salim Semssar; Estes, Eric (E.E.)
Subject: B3A 6 Panel presentation
When: Tuesday, February 28, 2012 1:00 PM-1:30 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Ron's Office and conference call/webex

Note that Ron Collins is unavailable this afternoon so we will not be presenting to him but we would still like to have the meeting and present our 6 Panel to Ron Perri. Please use the call-in numbers and webex below instead of the original Chassis Quality Deep Dive meeting notice.

Call-in: 313-621-3673
Passcode: 58389976

Matthew Surella invites you to an online meeting using WebEx.
==========
Online Meeting Summary
==========
Meeting Link: https://ford.webex.com/ford/j.php?J=712528021
WebEx Meeting ID: 712 528 021
Meeting Password: This meeting does not require a password.
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: 712 528 021
Meeting Password: This meeting does not require a password.

To join this meeting (Now from mobile devices!)
---
1. Go to https://ford.webex.com/ford/j.php?J=712528021
2. If requested, enter your name and email address.
3. If a password is required, enter the meeting password: This meeting does not require a password.
4. Click "Join".
5. Follow the instructions that appear on your screen.

http://www.webex.com

MC06

From: Geoff Jacks <Geoff.Jacks@TRW.COM>
Sent: Thursday, December 10, 2009 9:33 AM
To: Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Snider, Tim (T.O.); Diez, Timothy (T.P.)
Cc: Anthony Fleenor; Estes, Eric (E.E.); Guillermo Aguilar; JoseJLopez; Pavel Vetz; SergioAlvarez
Subject: RE: B3A at FORD, 2nd Dec 09
Attachments: Geoff Jacks.vcf

Mike,

Puma testing was completed yesterday without fault or LIC. I am in contact with Sergio about next steps.

Regards

Geoff

Geoff Jacks
Quality and Product Support
European Steering Team Leader
TRW Electronic Engineering (TEE)
Technical Centre
Stratford Road
Shirley
Solihull
B90 4GW

Tel: +44 (0)121 627 4602
Fax: +44 (0)121 627 3773
Mob: +44 (0)7740 915 904
email: geoff.jacks@trw.com

>>> "Bahena, Miguel (Mike.)" <mbahena1@ford.com> 09/12/2009 20:19 >>>
Jeff,

Thanks for the update. Have you run ambient & heated activation testing? Is this part of the next steps as well? Thanks.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@vtext.com>>>>>

From: Geoff Jacks [mailto:Geoff.Jacks@TRW.COM]
Sent: Wednesday, December 09, 2009 12:42 PM
To: Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Snider, Tim (T.O.); Diez, Timothy (T.P.)

Cc: Anthony Fleenor; Estes, Eric (E.E.); Guillermo Aguilar; JoseJLopez; Pavel Vetz; SergioAlvarez
Subject: B3A at FORD, 2nd Dec 09

All,

Please find attached a summary of the investigations to date on the HSAP failure from last week. Also included are next steps.

Regards

Geoff

Geoff Jacks
Quality and Product Support
European Steering Team Leader
TRW Electronic Engineering (TEE)
Technical Centre
Stratford Road
Shirley
Solihull
B90 4GW

Tel: +44 (0)121 627 4602
Fax: +44 (0)121 627 3773
Mob: +44 (0)7740 915 904
email: geoff.jacks@trw.com

TRW Limited

Registered in England, No. 872948

Registered Office Address: Stratford Road, Solihull B90 4AX

From: Bouse, Bill (W.J.)
Sent: Sunday, February 22, 2009 2:26 PM
To: Adams, Renee (R.L.); Rossi, Roberto (R.A.); Bahena, Miguel (Mike.)
Subject: RE: B3A Investigation Status - Action Plan

Renee, the U2011-49 is the code that would be set for the TRW B3a diagnostic on the motor relay. You can pull the code with the Ford diagnostic tool by pulling the snapshot data (service 19) and putting in the U201149 and reading the last value of the returned data. Or you could directly read DID FDAA.

Also thanks for the link to report logiq.

-----Original Message-----
From: Adams, Renee (R.L.)
Sent: Saturday, February 21, 2009 6:07 PM
To: Rossi, Roberto (R.A.); Bahena, Miguel (Mike.); Bouse, Bill (W.J.)
Subject: RE: B3A Investigation Status - Action Plan

AR101831 failed Code Check for PSCM "DTC U2011-49 MTR" on Wed 2/18 at 12:11:57.
QLS system shows the vehicle was then penalized in PDI for "Steering Wheel Hard to Move" with a score of 70 (which is a major).

Is DTC U2011-49 the same as the B3A code? Is the B3A an internal code pulled by TRW? I did not see in the part 2 diag spec.

Hermosillo was just switched over from Qbay to Report Logiq, which is why Code Check does not show in in Qbay.
http://www.ecats.ford.com/FordHAP_Hermosillo/ReportLogiq.html

Regards,
Renee Adams
CD3 Electrical PMT Leader
phone: +1 (313) 805-3494
e-mail: RRAYMON1@ford.com

-----Original Message-----
From: Rossi, Roberto (R.A.)
Sent: Saturday, February 21, 2009 1:32 PM
To: Adams, Renee (R.L.)
Subject: RE: B3A Investigation Status - Action Plan

Mike Bahena provided the following vehicle history.

Roberto Rossi
Chassis Electronics Supervisor
313-805-4157

-----Original Message-----
From: Adams, Renee (R.L.)
Sent: Saturday, February 21, 2009 3:30 PM
To: Rossi, Roberto (R.A.)
Subject: RE: B3A Investigation Status - Action Plan

Do you have the VIN #?

Regards,
Renee Adams
CD3 Electrical PMT Leader
phone: +1 (313) 805-3494
e-mail: RRAYMON1@ford.com

-----Original Message-----
From: Rossi, Roberto (R.A.)
Sent: Saturday, February 21, 2009 12:52 PM
To: Adams, Renee (R.L.)
Subject: FW: B3A Investigation Status - Action Plan

Renee,

Angel Salazar (662 156 0977) from TRW is the HSAP contact which supported this issue.

Thanks,

Roberto Rossi
Chassis Electronics Supervisor
313-805-4157

-----Original Message-----
From: Martha Abundis [mailto:Martha.Abundis@TRW.COM]
Sent: Saturday, February 21, 2009 2:41 PM
To: Rossi, Roberto (R.A.)
Subject: RE: B3A Investigation Status - Action Plan

Angel Salazar cell phone 662 156 0977

>>> "Rossi, Roberto (R.A.)" <rrossi1@ford.com> 2/21/2009 6:35 AM >>>

Martha,

Do you have the contact name at HSAP who pulled the DTCs from the vehicle and supporting this issue?

Thanks,

Roberto Rossi
Chassis Electronics Supervisor

313-805-4157

-----Original Message-----
From: Martha Abundis [mailto:Martha.Abundis@TRW.COM]
Sent: Friday, February 20, 2009 5:03 PM
To: Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Bouse, Bill (W.J.); Abe Ghaphery; Andrew Williams; Angel Andres; Craig Zeki; David Leaver-NonTRW; Derek Lord; Geoff Jacks; Jon CHALMERS; JuanCarlos cano; Kevin Rushgrove; Mark Karwowski; Mark PHILLIPS; Mike APPLETON; Paul IRELAND; Robert Kostadina; Ron Caldwell; Simon Malsbury
Subject: Re: B3A Investigation Status - Action Plan

Gear shipping date: January 30, 2009

>>> Mark Karwowski 2/20/2009 12:33 PM >>>
Team,

Attached is the latest action plan update from today's discussions.
Please let me know if there are any further questions.

Regards,

Mark Karwowski
Systems Engineering Manager
TRWAutomotive
EPS Engineering
586.232.7792

From: Bouse, Bill (W.J.)
Sent: Wednesday, March 04, 2009 5:44 AM
To: 'Mark Karwowski'; Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Christian Helming; Craig Zeki; Geoff Jacks; Greg Bendzinski; Martha Abundis; Mike Davies; Paul IRELAND; Phil Browne; Simon Malsbury; Christian (Berlin) Mueller; tboyle@tycoelectronics.com
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Robert Kostadina; Ron Caldwell
Subject: RE: B3A Investigation Status Update

Quick update on gear updates from 3/3.

1050 gears were at HSAP (rattle fixed - green dot) that needed to be updated with J2 software (rattle fix and software fix combined - blue dot). We have updated 532 gears currently. We have 518 left for Wednesday AM. Rattle updates started at ~7pm today using blue does and be have begun clearing both the rattle and software OSMs. Plan is to have all gears updated prior to Tim's arrival and the beginning of flashing cars.

I will be in the 11am meeting in the morning any questions that you have please call me @ +521 662 169 0667 or 313-805-2289

Bill

From: Mark Karwowski [mailto:Mark.Karwowski@TRW.COM]
Sent: Tuesday, March 03, 2009 9:14 PM
To: Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Bouse, Bill (W.J.); Christian Helming; Craig Zeki; Geoff Jacks; Greg Bendzinski; Mark Karwowski; Martha Abundis; Mike Davies; Paul IRELAND; Phil Browne; Simon Malsbury; Christian (Berlin) Mueller; tboyle@tycoelectronics.com
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Robert Kostadina; Ron Caldwell
Subject: B3A Investigation Status Update
When: Wednesday, March 04, 2009 11:00 AM-12:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Conference Call (646-441-1003 p-code 810294)

- Review update on disposition of parts - Martha Abundis
- Review HSAP status - Bill Bouse/Greg Bendzinski
- Review update on visit to Dudocu - Geoff Collins

Updated Webex -
https://ford.webex.com (https://ford.webex.com/)
713 333 325

From: Diez, Timothy (T.P.)
Sent: Friday, March 06, 2009 3:46 PM
To: Bouse, Bill (W.J.); 'Simon Malsbury'; Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); 'Christian Helming'; 'Craig Zeki'; 'Geoff Jacks'; 'Greg Bendzinski'; 'Mark Karwowski'; 'Martha Abundis'; 'Mike Davies'; 'Paul IRELAND'; 'Phil Browne'; 'Christian (Berlin) Mueller'; 'filipe.matos@tycoelectronics.com'; 'tboyle@tycoelectronics.com'
Cc: 'Abe Ghaphery'; 'Andrew Williams'; 'Angel Andres'; 'Derek Lord'; 'Jim Duehring'; 'Jon CHALMERS'; 'JuanCarlos cano'; 'Mark PHILLIPS'; 'Mike APPLETON'; 'Robert Kostadina'; 'Ron Caldwell'
Subject: RE: B3A Investigation Status Update

Team,

Once the remaining 2000 cars on the lot and 107 cars on the line have been reflashed, we will be downloading all the data from the PUMA tools so we have a record of vehicles that have been successfully reflashed.

Thanks.

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

From: Bouse, Bill (W.J.)
Sent: Friday, March 06, 2009 10:26 AM
To: 'Simon Malsbury'; Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Christian Helming; Craig Zeki; Geoff Jacks; Greg Bendzinski; Mark Karwowski; Martha Abundis; Mike Davies; Paul IRELAND; Phil Browne; Christian (Berlin) Mueller; filipe.matos@tycoelectronics.com; tboyle@tycoelectronics.com
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Robert Kostadina; Ron Caldwell
Subject: RE: B3A Investigation Status Update

Folks, quick update on progress at HSAP. Over 3700 vehicles have been completed as of 6am this morning. Should finish the re-flash later tonight hopefully prior to midnight.

The remaining 107 cars now trapped in the system will be flashed "on-line" prior to prerolls Monday morning when the plant starts up. We have developed this plan with HSAP and will use the PUMA tools to complete this action.

From: Simon Malsbury [mailto:Simon.Malsbury@TRW.COM]
Sent: Friday, March 06, 2009 9:30 AM
To: Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Diez, Timothy (T.P.); Bouse, Bill (W.J.); Christian Helming; Craig Zeki; Geoff Jacks; Greg Bendzinski; Mark Karwowski; Martha Abundis; Mike Davies; Paul IRELAND; Phil Browne; Simon Malsbury; Christian (Berlin) Mueller; filipe.matos@tycoelectronics.com; tboyle@tycoelectronics.com
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Robert Kostadina; Ron Caldwell
Subject: B3A Investigation Status Update
When: Friday, March 06, 2009 3:00 PM-4:00 PM (GMT-05:00) Eastern Time (US & Canada).
Where: Conference Call (646-441-1003 p-code 810294)

Review action item updates.

Updated Webex -
https://ford.webex.com (https://ford.webex.com/)
713 333 325

From: Diez, Timothy (T.P.)
Sent: Tuesday, March 10, 2009 9:34 PM
To: Mark Karwowski; Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Schondorf, Steven (S.); Bouse, Bill (W.J.); Christian Helming; Craig Zeki; Geoff Jacks; Greg Bendzinski; Martha Abundis; Mike Davies; Paul IRELAND; Phil Browne; Philip Warren-Green; Simon Malsbury; Christian (Berlin) Mueller; Filipe Matos; tboyle@tycoelectronics.com
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Robert Kostadina; Ron Caldwell; Salim Semssar
Subject: RE: B3A Investigation Status Update

Team,

I have downloaded all the data from the PUMA's and analyzed it. The conclusion is that 126 vehicles need to be checked to determine if the flash was sucessful. I will be meeting with plant personnel later today to show them the suspect list of VIN's. My position is that they put a hold on the 126 vehicles until they are checked for the right level of software. If a reflash is required, the TRW on-site representative and perhaps plant personnel can flash them.

Also, there is another issue with the data that needs to be resolved. There is a discrepancy between what VIN's are recorded in the QLS system and the VIN's stored in all the PUMA tools combined. I am comparing this data to see if perhaps the plant read a barcode into QLS without actually using the PUMA to reflash. I am working to understand and resolve the discrepancy in the data.

Please let me know if you have further questions...

Thanks.

- Tim Diez

From: Mark Karwowski [mailto:Mark.Karwowski@TRW.COM]
Sent: Mon 3/9/2009 1:15 PM
To: Hochrein, Brad (B.G.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Mince, Robert (R.W.); Mrozek, Robert (R.M.); Rossi, Roberto (R.A.); Schondorf, Steven (S.); Diez, Timothy (T.P.); Bouse, Bill (W.J.); Christian Helming; Craig Zeki; Geoff Jacks; Greg Bendzinski; Mark Karwowski; Martha Abundis; Mike Davies; Paul IRELAND; Phil Browne; Philip Warren-Green; Simon Malsbury; Christian (Berlin) Mueller; Filipe Matos; tboyle@tycoelectronics.com
Cc: Abe Ghaphery; Andrew Williams; Angel Andres; Derek Lord; Jim Duehring; Jon CHALMERS; JuanCarlos cano; Mark PHILLIPS; Mike APPLETON; Robert Kostadina; Ron Caldwell; Salim Semssar
Subject: B3A Investigation Status Update

Engineering - Review action item updates
Quality - Review status of 8D

Updated Webex -
https://ford.webex.com (https://ford.webex.com/)
713 333 325

From: Diez, Timothy (T.P.)
Sent: Wednesday, October 28, 2009 3:30 PM
To: Snider, Tim (T.O.)
Cc: Bahena, Miguel (Mike.); 'Simon Malsbury'
Subject: RE: B3a's out of HSAP

The B3a is an internal TRW fault code that is associated with the motor link relay.

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

From: Snider, Tim (T.O.)
Sent: Wednesday, October 28, 2009 11:26 AM
To: Diez, Timothy (T.P.)
Cc: Bahena, Miguel (Mike.); 'Simon Malsbury'
Subject: RE: B3a's out of HSAP

Tim,

No, and what is a B3A? I don't see it on the diagnostic code list.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Diez, Timothy (T.P.)
Sent: Wednesday, October 28, 2009 10:46 AM
To: Bahena, Miguel (Mike.); Snider, Tim (T.O.); Simon Malsbury
Subject: RE: B3a's out of HSAP

Tim,

Do you know of this new B3a?

Simon,

Who from Ford informed you of the latest B3a discovered this past weekend out HSAP?

Thanks.

Sincerely,
Tim Diez

Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

From: Bahena, Miguel (Mike.)
Sent: Wednesday, October 28, 2009 10:44 AM
To: Diez, Timothy (T.P.); Snider, Tim (T.O.)
Subject: RE: B3a's out of HSAP

I don't know anything about this issue yet.

From: Diez, Timothy (T.P.)
Sent: Wednesday, October 28, 2009 10:43 AM
To: Snider, Tim (T.O.); Bahena, Miguel (Mike.)
Subject: B3a's out of HSAP

Tim/Mike,

I learned from Simon Malsbury today that there was another B3a out HSAP over the weekend. Please inform me as soon as you hear about electronics related issues from the plant.

Thanks.

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

From: Quijada, Jorge (J.)
Sent: Thursday, August 06, 2009 5:43 PM
To: 'Martha Abundis'; Vejar, Iris (I.V.); Hochrein, Brad (B.G.); Harris, Jonathan (J.E.); McIntyre, Kathryn (K.L.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Diez, Timothy (T.P.); Hernandez, Victor (V.M.); Bouse, William (Bill.); Porter, Wesley (W.); BaoYuan Tian; Frank Fan; Geoff Collins; Greg Collier; Jacky Shi; Jim Duehring; Mark Karwowski; Mike Davies; Paul IRELAND; Pavel Vetz; Phil Browne; Robert Kostadina; Romance Zhu; Salim Semssar; Sanjay Singh; Simon Malsbury; Steven qu; hugo.gomes@tycoelectronics.com
Subject: RE: B43 / B3A - HSAP EPAS loss of assistance

Team,
I was not able to stay connected today.

On regards to the 2 M10 units that failed, I spoke to the Drivers:
June event: the driver was close to the Plant 3 Miles away (on a Straight line coasting down to take a curve) no street bumps in this section of the Road which all M10 Units take due to proximity to the Plant
July Event: The Driver was about 7 miles away from the plant accelerating going Up in a curve when he noticed the High effort (after that the cluster alarm displayed)
No bumps or special road condition is present in this section of the road.

Thanks

From: Martha Abundis [mailto:Martha.Abundis@TRW.COM]
Sent: Jueves, 06 de Agosto de 2009 08:27 a.m.
To: Vejar, Iris (I.V.); Hochrein, Brad (B.G.); Harris, Jonathan (J.E.); Quijada, Jorge (J.); McIntyre, Kathryn (K.L.); Bahena, Miguel (Mike.); Frey, Martin (M.F.); Diez, Timothy (T.P.); Hernandez, Victor (V.M.); Bouse, William (Bill.); Porter, Wesley (W.); BaoYuan Tian; Frank Fan; Geoff Collins; Greg Collier; Jacky Shi; Jim Duehring; Mark Karwowski; Martha Abundis; Mike Davies; Paul IRELAND; Pavel Vetz; Phil Browne; Robert Kostadina; Romance Zhu; Salim Semssar; Sanjay Singh; Simon Malsbury; Steven qu; hugo.gomes@tycoelectronics.com
Subject: B43 / B3A - HSAP EPAS loss of assistance
When: Viernes, 07 de Agosto de 2009 07:00 a.m.-08:00 a.m. (GMT-07:00) Arizona.
Where: conference call

Item Type: Appointment
Start Date: Friday, 7 Aug 2009, 09:00:00am (Central Daylight Time (Mexico))
Duration: 1 Hour
Place: conference call

EPAS Loss of assistance issue at HSAP

B43: Status review
B3A: Status review

Voice conference 5045881058
Participant code 398788

Web Meeting address
https://www.webmeeting.att.com

Meeting number 5045881058
Participant code 398788

Martha Abundis
TRW Sistemas de Direcciones
ph: 52 (442) 211 0854
cell: 52 (442) 156 0154
email: martha.abundis@trw.com

From: Bahena, Miguel (Mike.)
Sent: Friday, May 28, 2010 6:33 PM
To: 'Geoff Jacks'; Snider, Tim (T.O.); Diez, Timothy (T.P.)
Subject: RE: B9A - FR0073 (Encoder IC)

Geoff,

Thanks, Can you clarify the ICA? I don't follow what is being 100 % checked. The 0.3 V criteria doesn't make sense to me. Thanks.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com

From: Geoff Jacks [mailto:Geoff.Jacks@TRW.COM]
Sent: Thursday, May 27, 2010 6:01 AM
To: Bahena, Miguel (Mike.); Snider, Tim (T.O.); Diez, Timothy (T.P.)
Subject: B9A - FR0073 (Encoder IC)

Gents,

First cut of Nidec 8D attached for FR0073. They have confirmed an Encoder IC issue. IC is being investigated by mnufacturer who should report back within 10 days.

Regards

Geoff

Geoff Jacks
Quality and Product Support Manager
Steering and Powertrain Products
TRW Electronic Engineering (TEE)
Technical Centre
Stratford Road
Shirley
Solihull
B90 4GW

Tel: +44 (0)121 627 4602
Fax: +44 (0)121 627 3773
Mob: +44 (0)7740 915 904
email: geoff.jacks@trw.com

TRW Limited

Registered in England, No. 872948

Registered Office Address: Stratford Road, Solihull B90 4AX

From: Bahena, Miguel (Mike.)
Sent: Monday, February 15, 2010 9:08 PM
To: Snider, Tim (T.O.); Mrozek, Robert (R.M.); Diez, Timothy (T.P.)
Subject: RE: B9A Epidemic: Updated 2010 CD3 R Warranty Tracker

We decided in our last meeting to meet every week on B9a. Next meeting is this Friday.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@vtext.com>>>>>

From: Snider, Tim (T.O.)
Sent: Monday, February 15, 2010 11:17 AM
To: Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); Diez, Timothy (T.P.)
Subject: RE: B9A Epidemic: Updated 2010 CD3 R Warranty Tracker

Should we start a daily call-in for B9A, like we did for Cricket??

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Mrozek, Robert (R.M.)
Sent: Sunday, February 14, 2010 8:47 AM
To: Estes, Eric (E.E.); Diez, Timothy (T.P.); Bahena, Miguel (Mike.); Snider, Tim (T.O.); Puleri, Michael (M.J.); 'anthony.fleenor@trw.com'; 'andrew.ellison@trw.com'; 'Mathew Alder'; 'Jim Loria'; 'Angie Caudill'; 'Andrew Williams'; Hochrein, Brad (B.G.); 'Ben Goellner'; 'Costas Chrysochoidis'; 'Dean Flower'; 'Danny Logsdon'; 'Engelbert Lu'; 'Geoff Jacks'; 'Guillermo Aguilar'; 'Greg Bendzinski'; 'Ian Ingram'; 'Jason Johnson-contr'; 'JoseJ Lopez'; 'Joel Rabideau'; 'jeri.rossiter@trw.com'; Chacon, Jose (A.); 'Jeffrey Wu'; 'Kelly Warren-Green'; 'Mike Davies'; 'Mark Karwowski'; 'Nick turovich'; 'Philip Warren-Green'; Quijada, Jorge (J.); 'Robert Kinnear'; 'Raymond Qiu'; 'Simon Malsbury'; 'Steve Zhou'; 'Theodor Brockmann'; 'Thiha Than'; 'Todd Williams'; Bouse, William (Bill.); 'William Olsen'
Cc: Frey, Martin (M.F.); 'Alastair.McQueen@TRW.COM'; Sanjay Singh; Andrew Williams; 'Salim Semssar'
Subject: B9A Epidemic: Updated 2010 CD3-I R /arranty Tracker

Eric -

These B9A's are starting to scare me. They keep popping up and we have been working on root cause for several months with lot of work but little success. Are there any other resources we have access to at TRW that can help in resolving this issue? Do you have some top technical specialist you can engage or do you have access to some university professors that can help? We need a crack investigative team working on this one.

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Estes, Eric (E.E.)
Sent: Friday, February 12, 2010 5:10 PM
To: Mrozek, Robert (R.M.); Diez, Timothy (T.P.); Bahena, Miguel (Mike.); Snider, Tim (T.O.); Puleri, Michael (M.J.); anthony.fleenor@trw.com; andrew.ellison@trw.com; Mathew Alder; 'Jim Loria'; Angie Caudill; Andrew Williams; Hochrein, Brad (B.G.); Ben Goellner; Costas Chrysochoidis; Dean Flower; 'Danny Logsdon'; Engelbert Lu; Geoff Jacks; Guillermo Aguilar; 'Greg Bendzinski'; Ian Ingram; Jason Johnson-contr; 'JoseJ Lopez'; Joel Rabideau; 'jeri.rossiter@trw.com'; Chacon, Jose (A.); Jeffrey Wu; 'Kelly Warren-Green'; 'Mike Davies'; Mark Karwowski; Nick turovich; 'Philip Warren-Green'; Quijada, Jorge (J.); Robert Kinnear; Raymond Qiu; 'Simon Malsbury'; 'Salim Semssar'; 'Sanjay.Singh@TRW.COM'; Steve Zhou; Theodor Brockmann; Thiha Than; Todd Williams; Bouse, William (Bill.); William Olsen
Subject: Updated 2010 CD3-D3 Warranty Tracker

Here is the updated warranty tracker sheet as of today 2/12.

Top 5 CD3 Warranty Claims

B3A's- 29 claims (contamination, raised rivet, offset bridge, cold weld)
NVH- 19 claims (cricket noise, damaged housing)
TS- 17 claims (torque sensor, TS ASIC, damaged TS harness)
B9A's- 16 claims (one claim- ribbon cable assembly process, unknown root cause all others)
BB7/9- 12 claims (reverse capacitor)

Monday we will go over the B3A's on the 0km & warranty returns in Monday's 2/15 warranty review meeting with Ford at 11am.

<< File: 2010 CD3- P EPAS Warranty Feb_12_2010.xls >>

Let me know if you have any questions.

Eric J Estes

TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Bahena, Miguel (Mike.)
Sent: Friday, May 21, 2010 12:37 PM
To: Mrozek, Robert (R.M.)
Cc: Rossi, Roberto (R.A.); Diez, Timothy (T.P.)
Subject: RE: B9A Faults - Getting Out of Hand

FYI, Geoff just told me that 2 of the recent 0Km failures have already been replicated in the UK. Good news....

From: Mrozek, Robert (R.M.)
Sent: Friday, May 21, 2010 8:36 AM
To: Bahena, Miguel (Mike.)
Cc: Rossi, Roberto (R.A.); Diez, Timothy (T.P.)
Subject: RE: B9A Faults - Getting Out of Hand

I will set something up for next week.

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Bahena, Miguel (Mike.)
Sent: Friday, May 21, 2010 8:32 AM
To: Mrozek, Robert (R.M.)
Cc: Rossi, Roberto (R.A.); Diez, Timothy (T.P.)
Subject: RE: B9A Faults - Getting Out of Hand

I think its possible we may have an emerging issue. Its hard to say conclusively but it seems that we have had an uptick in B9a's especially at HSAP. We have seen 4 B9a's and 1 B92 at HSAP as a 0Km since the beginning of March.

The two recent root causes identified may be related - Encode IC failure, and Encoder Signal Open Circuit.

In terms of help I think the process we are using is working we may need more UK resources under Geoff to trouble shoot the recent rash heading to the UK.

Key Players:

Geoff Jacks
Phil Browne
Andrew Williams
Alexander Kleist
Bal Panaser (Owns all of the EPP, He is a director level I believe)

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com

From: Mrozek, Robert (R.M.)
Sent: Friday, May 21, 2010 7:48 AM
To: Bahena, Miguel (Mike.)
Cc: Rossi, Roberto (R.A.); Diez, Timothy (T.P.)
Subject: B9A Faults - Getting Out of Hand

B9A's are getting out of control. I propose a meeting next week to take Marty thru it (basically I will ask for his help to stir up additional resources at TRW to resolve these issues) and we can invite Andrew, Phil, Alistair or Kleist. After Marty, we might take it into the FQR as help needed.

What do you think? If you agree, I can set it up. Just send me the names of the key players.

Rob Mrozek

Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Guillermo Aguilar [mailto:Guillermo.Aguilar@TRW.COM]
Sent: Thursday, May 20, 2010 5:50 PM
To: Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Snider, Tim (T.O.); Hernandez, Victor (V.M.)
Subject: Fwd: Ford Hermosillo Daily report for 05 / 19 / 2010

Guys,

HSAP Wednesday's report. We had a new B9A failure code that showed up without losing assistance, but decided to tear down the part for evaluation. Part it's being sent back to QAO for analysis this afternoon.

>>> "Angel Salazar" <angelsaa@prodigy.net.mx> 5/20/2010 7:42 AM >>>
Good morning Glenn,

1.- Here is the information for the production of vehicles with EPAS for 05 / 19 / 2010

a).- production : 1,132 units

b).- The total quantity of vehicles built with EPAS from Job # 1 to date is : 308, 420 units (to be updated).

2.- Critical Issues :

a).- During the second shift, the VRT reported a vehicle rejected by the code checker audit. I met G. Izaguirre (VRT analyst) at the repair bay to review this case.

Vehicle rotation # 5484 /VIN : 390291

EPP # 100781177J30251 / Julian date : 132

With the Ford Diagnosis Tool I found the DTC : C200D-49 (Motor Rotation Angle Sensor_internal electronic failure)

The CANape displayed the code : B9Ah

The containment action at Benteler plant to segregate the suspect Julian date 132 is on going. By 21:00 hrs there have not been found Gears of this Julian date.

The Gear will be removed from the vehicle today and will be sent to the quarantine area. I will return it to TRW QOA as soon as the Gear gets available.

3.- Comments of the day :

a).-The firsts 10 vehicles assembled with the Gears segregated at Benteler plant (suspect Julian date 124) could not be segregated for the M10 evaluation at Ford plant . The second group of 10 vehicles will be ready for tomorrow. There are still 380 Gears to be returned to production.

b).- Visit the Incoming Quality office and the quarantine crib. No issues found over here.

c).- Antonio Rogero (PVT Engr) has postponed the evaluation of the fused inner tie rods sent by Mat Alder for this Thursday 20. The objective is to check if the pacman tool used for wheel alignment can fit on the new inner tie rods without issues.

d).- We currently have one open QR at Ford Hermosillo (J240482).

e)- We have a containment action on going at Benteler plant to segregate the suspect Julian date 132..

Thanks & Best regards. Have a nice day.
A. Salazar

From: Guillermo Aguilar <Guillermo.Aguilar@TRW.COM>
Sent: Friday, December 17, 2010 7:01 PM
To: Snider, Tim (T.O.)
Cc: Mrozek, Robert (R.M.); angelsaa@prodigy.net.mx; JoseJ Lopez
Subject: RE: B9A info detail request from HSAP

Thanks Tim.

Pepe.- Can you please give Fernando an explanation about this case?

>>> "Snider, Tim (T.O.)" <tsnider1@ford.com> 12/17/2010 10:37 AM >>>
Memo,

It's okay to send information to Hermosillo. Please include Ford Engineering on whatever you send.

Regards,
Tim Snider (tsnider1@ford.com)
CD3/C489 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Guillermo Aguilar [mailto:Guillermo.Aguilar@TRW.COM]
Sent: Friday, December 17, 2010 11:34 AM
To: Snider, Tim (T.O.)
Cc: angelsaa@prodigy.net.mx; JoseJ Lopez
Subject: B9A info detail request from HSAP

Tim,

Fdo. Ulloa is asking us for a detailed explanation of the double start up B9A issue we have faced and how the new software is correcting it. In the past we had given information into the plant but you guys asked us to consult first the possibility to do this once again. Are you ok for us to send the required info. or would you prefer to send it yourself?

Thanks for your comment,

From: Napoli, Laura (L.)
Sent: Wednesday, August 03, 2011 8:20 PM
To: Estes, Eric (E.E.); Flanagan, Thomas (T.P.); Pienta, Alan (A.); Surella, Matthew (M.M.); Anderson, Eric (H.)
Cc: Christopher Woodruff; 'Sergio Alvarez'; 'JoseJ Lopez'; 'Mike Molloy'; 'Andy Partridge'; 'Geoff Jacks'
Subject: RE: B9A warranty returns all platforms

Thanks for the update Eric. Please send warranty tracker once updated.

From: Estes, Eric (E.E.)
Sent: Wednesday, August 03, 2011 3:40 PM
To: Napoli, Laura (L.); Flanagan, Thomas (T.P.); Pienta, Alan (A.); Surella, Matthew (M.M.)
Cc: Christopher Woodruff; Sergio Alvarez; JoseJ Lopez; Mike Molloy; 'Andy Partridge'; Geoff Jacks
Subject: B9A warranty returns all platforms

These are all the current B9A's that we recently just got back from the field.

I have not seen any B9A returns on 2012 C346 at this time.

MAO- Explorer
UR0030- Had extensive testing at both MAO & in UK all testing leads to NTF. Next Step- teardown analysis
UR0045- ambient & hot testing in MAO lead to NTF. Next step cold testing if NTF to ship to UK for further tri-temp testing- PU/PD rig.
UR0047- At WPAC(8/3) in process to ship out tomorrow hopefully, in process to 26mile for testing Chris Woodruff will lead the testing.
UR0048- At WPAC(8/3) in process to ship out tomorrow hopefully to Marion plant for Sergio to perform testing.

QAO-CD3

FR0493- arrived in QAO(8/3) ready for leak testing, Pepe to perform testing
FR0496- arrived in QAO(8/3) ready for leak testing, Pepe to perform testing

I still need to update the U502 warranty tracker with the new returns from yesterday(UR0047,48 then I will sent out the updated tracker)

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Estes, Eric (E.E.)
Sent: Friday, February 19, 2010 5:55 PM
To: Diez, Timothy (T.P.); Bahena, Miguel (Mike.); Snider, Tim (T.O.); Mrozek, Robert (R.M.); 'Simon Malsbury'; 'Mike Davies'; Geoff Jacks; 'Anthony Fleenor'; Salim Semssar; Sergio Alvarez; 'Guillermo Aguilar'; 'JoseJ Lopez'; Jason Johnson-contr; Andrew Williams; Thiha Than
Subject: RE: B9a Workshop Action Items 2/19

Action Items on B9A Workshop

Simon- Check early DV PV records on software changes related to B9A
FR0108- will put in tri-temp chamber early next week with data logging hooked up, report out any updates

Eric - Include Mike Davies on next B9A workshop.
Anting on Holiday this week will get there "B" code end of line failures next week, highlight any B9A failures.

Geoff- send out B9A presentation run chart
Email Ford out EMC BCI B9A testing results next week
FR0097- testing on going, forward any updates
QAO B9A line failures- forward any updates

Sergio/Pepe-
FR0129- update on bully test
New B9A gears arriving next week QAO- keep us updated with testing results
FR0134
FR0141
FR0146

Next B9A Workshop 3/3/2010

Let me know if I'm missing any action items, Thanks

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Diez, Timothy (T.P.)
Sent: Friday, February 19, 2010 10:53 AM
To: Estes, Eric (E.E.)
Cc: 'Geoff Jacks'
Subject: B9a workshop

Eric, Geoff,

Would you please send out the presentation and spread sheet for B9a's covered today? Thanks.

Sincerely,
Tim Diez
Ford Electric Power Steering, EESE
313-805-1060; Fax: 313-317-4387
e-mail: tdiez@ford.com
cube 3C071, Building 5

From: Rossi, Roberto (R.A.)
Sent: Wednesday, February 24, 2010 7:28 PM
To: Snider, Tim (T.O.); Biyashev, Russ (.)
Cc: Diez, Timothy (T.P.); Bahena, Miguel (Mike.)
Subject: RE: Brake DTC's C1277 / C1278 and Key Position

Tim,

I think Russ may know more than I do on this but we have seen contamination issues with the yaw sensor in the RCM that has caused some ABS and RCM DTCs.

Russ,

Based on your understanding of the issue, could the RCM problem cause the C1277?

Thanks,

Roberto Rossi
Chassis Electronics Supervisor
313-805-4157

Lord Jesus Christ, Son of the Father, send now Your Spirit over the earth. Let the Holy Spirit live in the hearts of all nations that they may be preserved from degeneration, disaster and war. May The Lady of All Nations, the Blessed Virgin Mary, be our advocate. Amen.

From: Snider, Tim (T.O.)
Sent: Wednesday, February 24, 2010 2:19 PM
To: Rossi, Roberto (R.A.)
Cc: Diez, Timothy (T.P.); Bahena, Miguel (Mike.)
Subject: RE: Brake DTC's C1277 / C1278 and Key Position

Rob,

What was your RCM concern?

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Ulloa, Fernando (F.F.)
Sent: Wednesday, February 24, 2010 12:44 PM
To: Bahena, Miguel (Mike.)
Cc: Biyashev, Russ (.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.); Snider, Tim (T.O.); Hanna, Bashar (B.A.); Lujan, Pablo (P.); Ruiz Izaguirre, Gildardo (G.)
Subject: FW: Brake DTC's C1277 / C1278 and Key Position

Mike, We have a new car produced on Monday which has the C1277, we performed the procedure included in this email you sent yesterday and we could not replicate the DTC. I drove the car in the city until I reached 45 miles, all the time the VODU (diagnostic tool) was connected to the OBDII and we could not find anything.

What do you recommend to do next?

Thanks.

From: Bahena, Miguel (Mike.)
Sent: Tuesday, February 23, 2010 11:08 AM
To: Hanna, Bashar (B.A.); Lujan, Pablo (P.); Ulloa, Fernando (F.F.)
Cc: Biyashev, Russ (.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.); Snider, Tim (T.O.)
Subject: RE: Brake DTC's C1277 / C1278 and Key Position

Fernando, Pablo,

Please see the agreed directions below for investigating wiring on a vehicle with ABS code C1277/C1278. Please let us know if you find anything. Thanks for your help.

Tim Snider and I discussed with Bashar and agreed on the following procedure for reviewing one or two vehicles that exhibit a C1277/C1278 at HSAP with no loss of assist observed:

1. As discussed please inspect all the HS-CAN wiring & connectors between the PSCM and ABS for any damage, pinch points, cuts, pierced wire conditions and that all connectors are properly seated. Also inspect the PSCM & ABS ground. At this point do not disconnect connectors. Please be sure to inspect the in-line connection between the PSCM jumper and the 14290 harness (see attached picture below).

2. Then perform a **controlled light wiggle** test on all connectors and in several spots along the HS-CAN wiring circuits in between the ABS & EPAS modules while continuously checking DTCs to see if an intermittent issue exists (make sure the key is in run, but the engine does not need to be running). Another alternative would be to measure the HS-CAN circuit resistances between the appropriate EPAS CAN connector pins and the appropriate OBD2 pins while performing the wiggle test to see if the resistance ever exceeds 5 Ohm. Then repeat for the ABS module. Make sure you use the proper tools specified in workshop manual section 418-00. If the DTCs or a high resistance is ever observed then note where you were wiggling when the DTC/resistance was observed.

3. If no DTCs or high resistance are measured then please disconnect and inpect the PSCM, in-line, and ABS connector for any pushed out, loose, cooroded or spread terminals or any signs of water intrusion.

Lastly we need to identify what powertrains we have seen these DTCs on at HSAP. Thanks.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680

mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@vtext.com>>>>>

From: Hanna, Bashar (B.A.)
Sent: Tue 2/23/2010 12:49 PM
To: Bahena, Miguel (Mike.)
Cc: Biyashev, Russ (.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.); Snider, Tim (T.O.)
Subject: RE: Brake DTC's C1277 / C1278 and Key Position

I discussed this procedure with Mike and I agree with it.

Regards,
Bashar Hanna
CD3 Electrical Systems
Phone/Pager : (313) 805-4085
Fax: (313) 845-7416
PDC, 1DB40
Mail Drop 1220
Email: bhanna@ford.com

From: Bahena, Miguel (Mike.)
Sent: Monday, February 22, 2010 6:24 PM
To: Hanna, Bashar (B.A.)
Cc: Biyashev, Russ (.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.); Snider, Tim (T.O.)
Subject: RE: Brake DTC's C1277 / C1278 and Key Position

Bashar, (all)

Are you ok with the following directions being sent to Fernando & Pable (HSAP) PVT? Thanks for your help.

Tim Snider and I discussed with Bashar and agreed on the following procedure for reviewing one or two vehicles that exhibit a C1277/C1278 at HSAP with no loss of assist observed:

1. As discussed please inspect all the HS-CAN wiring & connectors between the PSCM and ABS for any damage, pinch points, cuts, pierced wire conditions and that all connectors are properly seated. Also inspect the PSCM & ABS ground. At this point do not disconnect connectors. Please be sure to inspect the in-line connection between the PSCM jumper and the 14290 harness (see attached picture below).

2. Then perform a **controlled light wiggle** test on all connectors and in several spots along the HS-CAN wiring circuits in between the ABS & EPAS modules while continuously checking DTCs to see if an intermittent issue exists (make sure the key is in run, but the engine does not need to be running). Another alternative would be to measure the HS-CAN circuit resistances between the appropriate EPAS CAN connector pins and the appropriate OBD2 pins while performing the wiggle test to see if the resistance ever exceeds 5 Ohm. Then repeat for the ABS module. Make sure you use the proper tools specified in workshop manual section 418-00. If the DTCs or a high resistance is ever observed then note where you were wiggling when the DTC/resistance was observed.

3. If no DTCs or high resistance are measured then please disconnect and inpect the PSCM, in-line, and ABS connector for any pushed out, loose, cooroded or spread terminals or any signs of water intrusion.

Lastly we need to identify what powertrains we have seen the DTCs on at HSAP.
<< File: cd3.wiring1.gif >>
Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com
Pager: Click Here <<<<<mailto:3138053680@vtext.com>>>>>

From: Hanna, Bashar (B.A.)
Sent: Monday, February 22, 2010 5:04 PM
To: Snider, Tim (T.O.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Ulloa, Fernando (F.F.); Lujan, Pablo (P.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.)

Subject: RE: Brake DTC's C1277 / C1278 and Key Position

The issue with wiggle test is that it is not a scientific test. How hard are you going to wiggle? Are you going to stress the harness to damage to the point of damaging it?

Before we start looking into wiggling the harness, please look ate the following:

1. The system ground, loose, corroded, etc…
2. Water intrusion in the system at the connection for any corrosion inside the connector.

Regards,
Bashar Hanna
CD3 Electrical Systems
Phone/Pager : (313) 805-4085
Fax: (313) 845-7416
PDC, 1DB40
Mail Drop 1220
Email: bhanna@ford.com

From: Snider, Tim (T.O.)
Sent: Monday, February 22, 2010 3:43 PM
To: Hanna, Bashar (B.A.)
Cc: Bahena, Miguel (Mike.); Biyashev, Russ (.); Ulloa, Fernando (F.F.); Lujan, Pablo (P.); Diez, Timothy (T.P.); Rossi, Roberto (R.A.)

Subject: RE: Brake DTC's C1277 / C1278 and Key Position

Bashar,

Do you have any concerns with wiggle testing the PSCM and ABS wires on one vehicle, to trouble shoot if there is a wiring issue causing the C1277 / C1278 DTC's? There is a wiggle test in the shop manual for diagnosing ABS issues, but the Hermosillo Electrical PVT engineer, Pablo Lujan, is concerned the wiggle test may cause an issue, and apparently there has been direction in the past not to wiggle test.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201

2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Snider, Tim (T.O.)
Sent: Monday, February 22, 2010 2:20 PM
To: Biyashev, Russ (.)
Cc: Bahena, Miguel (Mike.)
Subject: Brake DTC's C1277 / C1278 and Key Position

Russ,

Can the brake DTC's C1277 and/or C1278 be set with the key in the "on" position, but with the engine not running? We would like Hermosillo to do wiggle testing on the CD3 wires between the PSCM and ABS module, which requires the vehicle to be on a hoist, but they are concerned there may be a safety issue if the engine is running.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Ulloa, Fernando (F.F.)
Sent: Tuesday, June 18, 2013 9:56 PM
To: Galindo, Sergio (S.N.); Tallman, Ronald (R.M.); Larios, Karla (K.L.)
Subject: RE: BSAQ#2013260820 Steering Gear Asymmetry concern.

There is no MKZ affected at all in the 624 Gears involved in this issue.

From: Galindo, Sergio (S.N.)
Sent: Tuesday, June 18, 2013 2:15 PM
To: Tallman, Ronald (R.M.); Larios, Karla (K.L.)
Cc: Ulloa, Fernando (F.F.)
Subject: RE: BSAQ#2013260820 Steering Gear Asymmetry concern.

Fernando, can you please let us know for this stop shipment how many are Fusion and MKZ please

Sergio Galindo
HSAP PVT Manager
T + 52 1 6621 420197
Ford Net 456 8308
sgalind1@ford.com

From: Tallman, Ronald (R.M.)
Sent: Tuesday, June 18, 2013 1:14 PM
To: Galindo, Sergio (S.N.); Larios, Karla (K.L.)
Subject: RE: BSAQ#2013260820 Steering Gear Asymmetry concern.
Importance: High

Sergio/Karla:

Can you tell me how many units being held are Fusions and how many MKZ? Sitting in AOCM...thank you

From: Galindo, Sergio (S.N.)
Sent: Tuesday, June 18, 2013 11:06 AM
To: Tallman, Ronald (R.M.); Larios, Karla (K.L.)
Subject: RE: BSAQ#2013260820 Steering Gear Asymmetry concern.

Ronald,
There are meeting schedule already,

Karla, can you please share the followings meeting please.
Do we need help to cover production and replacement parts of the vehicles?

Sergio Galindo
HSAP PVT Manager
T + 52 1 6621 420197
Ford Net 456 8308
sgalind1@ford.com

From: Tallman, Ronald (R.M.)
Sent: Monday, June 17, 2013 4:39 PM
To: Galindo, Sergio (S.N.)
Subject: Re: BSAQ#2013260820 Steering Gear Asymmetry concern.

Is there an audio to determine supply of replacement stock? What help do you require?
Ron Tallman sent from my blackberry

From: Galindo, Sergio (S.N.)
Sent: Monday, June 17, 2013 07:32 PM
To: Tetreault, James (J.P.); Fowler, Bennie (B.W.); Samardzich, Barb (B.J.); Reitz, Graydon (G.A.); Bakaj, Joe (J.); Pittel, Kimberly (K.L.); Kuehn, Dave (D.E.); Contreras, Alba (M.); Pardi, Joseph (J.); Hettle, Bruce (B.W.); Spencer, Jeff (.); Cash, Linda (L.G.); Hettel, Daniel (D.F.); Torolski, Michael (M.A.); Winegarden, Marsha (M.E.); Vido, Adriano (.); Opaleski, Steven (S.J.); Calhoun, Philip (P.T.); Khan, Mohammod (T.); Myers, Matthew (M.D.); Cadwell, Rhoda (R.A.); Huff, Bradford (B.D.); Ebbing, David (D.G.); Roth, John (J.C.); Nair, Raj (S.S.); Thai-Tang, Hau (H.N.); Mascarenas, Paul (P.); Visintainer, Randal (R.H.); Davis, Frank (F.V.); Collareno, Philip (P A.); Fascetti, Robert (R.J.); Christensen, Kris (K.S.); Oswalt, Greg (G.G.); Belanger, Grant (G.E.); Stec, Pamela (P.); Davis-Smith, Kenyatta (K.T.); Sovoda, Richard (R.P.); Gaecke, Pete (P.A.); Miettinen, Kevin (K.J.); Perrin, Kathryn (K.M.); Brown, Tony (Thomas K.); Aselage, Jane (J.M.); Wickenheiser, Francis (F.J.); Jett, Pete (P.P.); Parlow, Katie (K.M.); House, Michael (M.T.); Stoddard, Jeff (J.W.); Contreras, Gonzalo (.); Trepanier, Eric (E.L.); Auclair, Genevieve (.); Roy, Paul (P.F.); Schofield, Denis (D.P.); Smith, Kim (K.E.); Piccirilli, Claudio (.); Ahadi, Fritz (F.D.); Johnston, Dennis (D.T.); Herbert, Jonathan (G.); Jarvis, Ryan (R.C.) <rjarvi18@ford.com>; Biskelonis, Brian (B.A.); Watkins, Brad (B.J.); Wilyard, Dan (D.J.); Shashlo, Michael (M.L.); Jasser, Rima (R.G.); Lehmkuhl, David (D.B.); Madej, Jeanette (J.); Kainz, Laura (L.L.); Johnson, Greg (G.T.); Johnson, Risa (R.A.); Sparks, Douglas (D.S.); kgniewek@ford.com <kgniewek@ford.com>; Storves, Bill (W.K.); Velliky, David (D.A.) <dvelliky@ford.com>; Grandstaff, Brian (B.D.); Leone, Sue (M.); Agosta, Dawn (D.M.); Nissen, Todd (T.); Thomas, David (D.G.); Frascaroli, Emily (E.E.); Roy, Brock (.) <broy1@ford.com>; Mills, Walter (R.); Gourneau, Frank (F.B.); Clifford, Mark (M.B.); Gubing, William (Bill.); Reddy, BJ (.) <breddy@ford.com>; Patel, Bharat (B.J.); Channell, Scott (S.G.); Hand, James (J.E.); Wong, Milton (M.D.); Turner, Steve (S.F.); Geist, Daniel (D.R.); Suthar, Rajesh (R.C.); Gryglak, Adam (A.J.); Wegrzyn, Michael (M.J.); cmarti33@mazdausa.com <cmarti33@mazdausa.com>; Navarro, Jose (JN.) <jnavarr9@ford.com>; Morales, Juan (.); Maldonado, Sonia (S.); Beltran, Victor (V.); Curran, Judith (J.M.); Whittle, Adrian (A.R.); Perez, Ricardo (HSAP.); Rosas, Alejandro (HSAP.); Ferguson, Rick (R.M.); Abdelrazzaq, Naser (N.A.); Sherwood, Karen (K.); Harrison, Michael (M.J.); Collins, Ron (R.J.); Jammoul, Ali (A.); Krawiec, David (J.D.); Kellerwessel, Christof (C.); Whitens, Mike (M.J.); Fusco, Frank (F.D.); Halow, George (G.F.); Brown, Jerry (J.R.); McLoughlin, Andy (A.); Morgan, James (M.) <jmorga22@ford.com>; Barthelemy, Bruno (B.); D'Alessandro, Frank (F.J.); Trecapelli, Robert (R.M.); von Foerster, Steve (SvF.); Arbitter, Daniel (D.S.); Ufford, Donald (D.A.); Mikkelsen, William (W.J.); Walsh, Steve (S.); VanSlambrouck, James (J.M.); LaFaive, Rita (R.A.); Halabisky, Darren (D.H.); Shuttleworth, David (D.L.); Santos,

Reinaldo (R.Diniz.); Marquez, Eduardo (E.); Takayasu, Odair Kiho (O.K.); Wrobel, Susan (S.M.); Jahant, Jeanine (J.M.); Kinnie, Yvonne (Y.C.); Jovanovski, Ladica (.); Wilson, Marie (M.); Dare, Shannon (S.); Green, Ann (A.D.); Guillen, Felix (F.); Islas, Jose (J.J.); Perez, Marcos (M.); Chacon, Luis (L.); Davila, Roberto (R.); Diaz, Juan Manuel (J.M.); Flores, Fausto (F.); Johnson, Angelica (A.O.); Madrid, Juan (J.); Madrigal, Samuel (S.); Rodarte, Eduardo (E.); Tinoco, Alejandro (A.); Valenzuela, Jose (J.A.); Larios, Karla (K.L.); Manrique, Gerardo (G.G.); Lozano, Rafael (R.); Ramirez, Paola (P.R.); Alvarez, Mario (M.); Durand, Gerardo (G.D.); Gilabert, Julian (J.); Gudino Mendoza, Martin (J.M.); Ocana, Norma (N.); Quijada, Jorge (J.); Trizon Dyck, Javier (J.T.); Lugo, Aureliano (A.); Santillan, Juan (J.M.); Ortiz, Abel (A.); Torres de Unanue, Leo (L.A.); Hudson, Tom (T.M.); Fuher, Michael (M.J.); Cadagin, Ed (E.J.); Mendoza, Reyna (R.I.); Ozog, Thomas (T.J.); Rodriguez, Cynthia (C.R.); Molina, Roxana (R.P.); Behrendt, Birgit (B.A.); Jraiche, John (J.J.); Dugan, Mike (M.L.); Villalobos, Luisa (L.); Balzer, Stacy (S.L.); Manzo, Roberto (A.); Garant, Dan (DCG.); Brown, Lytrel (L.D.); Albertson, Derrick (D.S.); Rotellini, Joseph (J.); Malone, John (J.M.); Mann, Mickey (N.S.); Schnierle, Jesus (J.); Oroz, Miguel (M.); Rios, Marco (M.); Corral, Dimas (DC.); Hirata, Natsuo (N.); Duron, Ariel (A.); Ronayne, Kelly (K.W.); Tallman, Ronald (R.M.); Lovelace, Ronald (R.); Hirata, Natsuo (N.); Ozog, Thomas (T.J.); Brown, Lytrel (L.D.); Rosas, Alejandro (HSAP.); Mazur, Nicole (N.); Hajhassan, Ali (A.M.); Hallway, Fred (F.X.); Spencer, Beth (B.); Brown, Lytrel (L.D.); Hallway, Fred (F.X.); Hajhassan, Ali (A.M.); Albertson, Derrick (D.S.); Garant, Dan (DCG.); Villalobos, Luisa (L.); Balzer, Stacy (S.L.); Hudson, Tom (T.M.); Rotellini, Joseph (J.); Diaz, Juan Manuel (J.M.); Rios, Marco (M.); Quijada, Jorge (J.); Nematollahi, Sonya (A.S.); LaFaive, Rita (R.A.); Livernois, Stephen (S.M.); Schneider, John (J.H.); Reitz, Graydon (G.A.); Quijada, Jorge (J.); Ozog, Thomas (T.J.); Brown, Lytrel (L.D.); Larios, Karla (K.L.); Manrique, Gerardo (G.G.); Perri, Ron (R.J.); Brown, Todd (T.A.); Eschtruth, Kirt (.); White, Isiah (I.C.)
Subject: BSAQ#2013260820 Steering Gear Asymmetry concern.

Stop Shipment Number: SAQ201326082
Vehicle(s) Affected: Fusion & MKZ (411 vehicles only)
Plant(s) Affected: HSAP/FRAP
Other Plants Potentially Affected: None
Part(s) Affected: Steering Gears
Supplier: ZF
Vehicles held: 411
WERS Alert Number(s): A12701171

Description:

CD391 and CD533 have been placed in a Stop Ship due to a quality concern with the steering gear. An asymmetry issue was identified at HSAP EOL; the parts with the defect are from one of the supplier production lines (Line i) from production window of June 7th thru June 15th.
The supplier has two production lines (Line I and Line J).
This stop shipment is only for those 411 vehicles, the rest of the production can be shipped.

Initial binning of the concern is Supplier Quality.

The Vehicles affected by this Stop shipment will require a steering gear replacement.

Root Cause:

TBD

ICA:

6/17: To Build with Steering Gears from Line J only.

PCA:

TBD

Sergio Galindo
HSAP PVT Manager
T + 52 1 6621 420197
Ford Net 456 8308
sgalind1@ford.com

From: Gabor, Daniel (D.A.)
Sent: Wednesday, May 05, 2010 12:59 PM
To: Biyashev, Russ (.); Snider, Tim (T.O.)
Cc: Bahena, Miguel (Mike.); Bouse, William (Bill.)
Subject: RE: C1B00 on 3FADP0L37AR[redacted]

CB100-28
DESCRIPTION: calculated steering wheel angle offset is out of the specified range
A failure is detected if the absolute value of the calculated steering wheel angle offset is greater than 15.0deg.
Note: Steering Angle Data is sent from EPAS to brake module via CAN Bus.
MINIMUM FAULT DURATION FOR DETECTION: 10ms
FAULT TRIGGERS:
External:
- wrong mounting position of the EPAS module
- loose EPAS module
- misalignment of the steering system
- high frequency interferences
- faulty sensors in EPAS module
- insecurely mounted inner sensors in EPAS module
- excessive wear in steering system

Internal: None
FAILSAFE FAULTS:
45h.0 Swa_sensor_offset
Extended

CB100-29
DESCRIPTION: SteeringMessageNumber is not updated for 3 continuous loops
Note: Steering Angle Data is sent from EPAS to brake module via CAN Bus.
MINIMUM FAULT DURATION FOR DETECTION:
Signal Invalid Timeout (Message is coming in, but signal is invalid) (when velocity > 3 km/h): 30ms
FAULT TRIGGERS:
External:
-SWA sensor working not properly
Internal: None
FAILSAFE FAULT:
44h.7 Swa_rolling_count_invalid
Extended

From: Biyashev, Russ (.)
Sent: Tuesday, May 04, 2010 4:37 PM
To: Snider, Tim (T.O.); Gabor, Daniel (D.A.)
Cc: Bahena, Miguel (Mike.); Bouse, William (Bill.)
Subject: RE: C1B00 on 3FADP0L37AR[redacted]

Dan - can you respond.

Thank you,

Russ Biyashev
Ford Motor Company
Chassis Brake Controls
Phone: 313.805.**4793**
Text: 3138054793@vtext.com
Email: **rbiyashe**@ford.com

From: Snider, Tim (T.O.)
Sent: Tuesday, May 04, 2010 4:08 PM
To: Biyashev, Russ (.)

Cc: Bahena, Miguel (Mike.); Bouse, William (Bill.); Gabor, Daniel (D.A.)
Subject: RE: C1B00 on 3FADP0L37AR[redacted]

Russ,

What does C1B00-28 and C1B00-29 mean for CD3 Brakes?

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Bouse, William (Bill.)
Sent: Tuesday, May 04, 2010 12:42 PM
To: Gabor, Daniel (D.A.)
Cc: Bahena, Miguel (Mike.); Snider, Tim (T.O.)
Subject: FW: C1B00 on 3FADP0L37AR[redacted]
Importance: High

What exactly does the brake system look at for these codes, C1B00:28, AND C1B00:29 ?

From: Trizon Dyck, Javier (J.T.)
Sent: Tuesday, May 04, 2010 12:25 PM
To: Bouse, William (Bill.)
Subject: C1B00 on 3FADP0L37AF[redacted]
Importance: High

Hello Bill,
Please take a look at the field issue below. If you think this requires more engineering input, please follow up. Otherwise, please confirm if the published recommendation is OK.
Thanks

Javier

Attachments : 0

Report# :	AECCH013 NHL			**Received:**	05/03/2010
CCRG/EPRC:		**Reviewed Status:**		**Date:**	
Vehicle:	2010,FUSION,HYBRID ,SEDAN ,3FADP0L37AF[redacted]			**Build Date:**	10/27/2009
Odometer :	2,769 M	**Engine:**	2.5 ATKINS	**Calibration:**	ADE1HV0A
Transmission:	CVT AUTO	**Axle:**	2.57 RATIO	**A/C:**	YES
Dealer:	USA 09331 Superior/Brookdale Ford			**Phone#:**	(763) 585-8390
City:	Plymouth	**State:**	Minnesota	**Country :**	USA

Originator: KYLE LEJONVARN

Symptom: 3 03 1 99 CHASS.,STRG/HANDLING ,FUNCTION,NOT LISTED

Status:

VFG: V89 RIDE & HANDLING

Additional Symptom: C1B00

Fix: **Causal Component : --**

Condition Code:

Hotliner: KHENDR13 **Phone:** 313 317-4279 **Regn Cd:** G5 Twin Cities

Engineering: **Phone:** **TAR:**

Dlr Contact: KYLE LEJONVARN **Phone:** 000 000-0000 **Title Cde:** T

DTCs:

KOEO:C1B00

KOEC:

KOER:

Comments :

REPAIR 05/03/2010 12:54PM KIRK HENDRICKSON MSS - FCSD - TECH SVC HOTLINE

WEB FORM DATA - CONCERN: ADVANCED LIGHT COMES ON AT TIME AND WILL GO

OUT DIAGNOSTICS: NONE LAST TIME IN REFLASHED FOR U CODE PARTS

REPLACED:: NONE TECH QUESTION: HAVE YOU SEE THIS CODE ON OTHER

FUSION WERE YOU ABLE TO VERIFY THE CONCERN? NO IS THERE AN

APPROPRIATE PINPOINT TEST IN THE WSM FOR THIS CONCERN? NO WAS THE

PINPOINT TEST FOLLOWED? NO

RECOMM 05/03/2010 12:54PM KIRK HENDRICKSON MSS - FCSD - TECH SVC HOTLINE

KYLE, THE TECHNICAL HOTLINE HAS NOT SEEN ANY REPORTS RELATED TO

C1B00. PLEASE CONTINUE TO ATTEMPT TO DUPLICATE THIS CONCERN. CODE

C1B00:28, AND C1B00:29 BOTH RELATE TO THE STEERING ANGLE SENSOR THAT

IS INTERNAL TO THE EPAS. NO REPAIR ATTEMPTS ARE RECOMMENDED UNTIL THE

CONCERN CAN BE DUPLICATED. IF THE CONCERN CAN BE DUPLICATED THE

RECOMMEND PROCEEDING WITH EPAS INTERACTIVE DIAGNOSTICS ON PTS WEBSITE

SECTION 211-00A:

Javier Trizon Dyck

HSAP HEV PVT
Cell Phone: 011 521 (662)142-0474
Fax: 011-52(662)259-8310
Email: jtrizon@ford.com

From: Estes, Eric (E.E.)
Sent: Friday, April 09, 2010 2:30 PM
To: Snider, Tim (T.O.)
Subject: RE: CD3 EPAS Feb 2010 Warranty Cutoff

Those are all rent-a-car dealers Hertz,Thrifty,Dollar, etc.

Eric

From: Snider, Tim (T.O.)
Sent: Friday, April 09, 2010 9:03 AM
To: Estes, Eric (E.E.)
Subject: RE: CD3 EPAS Feb 2010 Warranty Cutoff

Eric,

Thanks. What does "RAC dealer" mean?

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Estes, Eric (E.E.)
Sent: Thursday, April 08, 2010 5:28 PM
To: Snider, Tim (T.O.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.)
Cc: Annadi, Hari (H.)
Subject: RE: CD3 EPAS Feb 2010 Warranty Cutoff

Tim here is your list I found a couple but in late in Jan. 2010 we went over the 50 gears allowed in a six month span and the request expired and I had to put in another request so we lost a few weeks of EPAS gears in Feb. 2010. Now I have unlimited amount so we should not have a problem with getting almost all the gears back.

Canadian gears are only when needed, very hard to get those gears back very time consuming and hard to get a response from the person shipping the gears back to the WPAC.

<< File: Fusion Verbatims EPAS 4 12 2010.xls >>

Eric

From: Snider, Tim (T.O.)
Sent: Thursday, April 08, 2010 3:49 PM
To: Estes, Eric (E.E.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.)
Cc: Annadi, Hari (H.)
Subject: CD3 EPAS Feb 2010 Warranty Cutoff

Eric,

Do you have information on any of the warranty replaced gears shown in the attachment not returned to TRW? I could not find the VINs on your April 7 tracker sheet. There are 12 out of 30. Also, have you heard anything on the process to receive Canadian gears? There is a pie chart on the last tab summarizing the claims.

<< File: Fusion Verbatims EPAS 4.12.2010.xls >> << File: 2010 CD3-D3 EPAS Warranty Apr_7_2010.xls >>

Rob / Mike,

Notice there is one pushed out pin for the PSCM battery connector.

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Estes, Eric (E.E.)
Sent: Tuesday, October 05, 2010 1:13 PM
To: Mrozek, Robert (R.M.); Rogero, Antonio (A.); Snider, Tim (T.O.); Bahena, Miguel (Mike.); 'Guillermo Aguilar'
Cc: Ulloa, Fernando (F.F.)
Subject: RE: CD3 EPAS-Steering gears from warranty returns.

All the parts request are in for all 2010 & 2011 CD3/Dcar vehicles in the US with the 6months TIS & high mileage vehicles(except fleet dealers)
I would need to put in special request for any warranty returns from Mexico or Canada.

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Mrozek, Robert (R.M.)
Sent: Monday, October 04, 2010 8:24 PM
To: Estes, Eric (E.E.); Rogero, Antonio (A.); Snider, Tim (T.O.); Bahena, Miguel (Mike.); 'Guillermo Aguilar'
Cc: Ulloa, Fernando (F.F.)
Subject: RE: CD3 EPAS-Steering gears from warranty returns.

We already get most gears back, right, Eric? PVT should know this.

Rob Mrozek
Electric Power Steering Supervisor
C346N/CD3/D3/D4/U502/Police/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Estes, Eric (E.E.)
Sent: Monday, October 04, 2010 4:04 PM
To: Rogero, Antonio (A.); Snider, Tim (T.O.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); 'Guillermo Aguilar'
Cc: Ulloa, Fernando (F.F.)
Subject: RE: CD3 EPAS-Steering gears from warranty returns.

These will get a 700 tag per my parts request, so they will come back to WPAC. You don't need to put a parts request for them.

Eric J Estes
TRW EPAS Steering Systems
Quality Specialist
Hotline ph# 313-317-9358
Cell ph# 734-560-3493

From: Rogero, Antonio (A.)
Sent: Monday, October 04, 2010 3:52 PM
To: Estes, Eric (E.E.); Snider, Tim (T.O.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); 'Guillermo Aguilar'
Cc: Ulloa, Fernando (F.F.)
Subject: CD3 EPAS-Steering gears from warranty returns.

Every day, the chassis PVT engineers are receiving an excel file (from Mike Morton) which contains a list of parts which can be requested from dealerships for analysis.
Attached is the list of parts for today. You will see 2 EPAS-steering gears replaced due to lost assistance.
I can do the request of those EPAS-steering geras immediately. The replaced parts will be shipped to WPAC (to your attention) or to other location that you prefer.
The request is immediately approved and will arrive at final destination in 3 or 5 days via UPS.
Please let me know if want these gears for analysis.

Thanks.

<< File: Parts from WPAC Oct 4th 2010.xls >>

Antonio Rogero
Hermosillo Assembly Plant
Fusion / Milan / MKZ - PVT Chassis Engineer
+52 662 259 8317

From: Surella, Matthew (M.M.)
Sent: Monday, September 19, 2011 2:22 AM
To: Annadi, Hari (H.); Perri, Ron (R.J.); Flanagan, Thomas (T.P.)
Subject: RE: CD3 F/u items : PDQR Assignment Follow Up - Response Requested

Hari,
Yes, same issue is hitting CD3. For tomorrow's quality meeting, I know CD3 is on the agenda but Tom has to reflash VP C344 vehicles at the pilot plant and I have my stick slip meeting at the same time. Would you like Laura there to give an update on C200D?

Matthew (Matt) Surella
Steering EPAS Supervisor / MBB
313-805-3997

From: Annadi, Hari (H.)
Sent: Friday, September 16, 2011 11:00 AM
To: Perri, Ron (R.J.); Surella, Matthew (M.M.); Flanagan, Thomas (T.P.)
Subject: FW: CD3 F/u items : PDQR Assignment Follow Up - Response Requested

Is it the same issue we are seeing with U502 C200D or is it mixed in with the Control arm issue?

From: Moody, Sandra (S.L.)
Sent: Friday, September 16, 2011 10:41 AM
To: Annadi, Hari (H.)
Subject: CD3 F/u items : PDQR Assignment Follow Up - Response Requested

<< File: ECB_WARRANTY Claims Summary Report _MYTD Sort__MY-2011_TopN-100_16Sep2011.xls >>
Hari ,
Can we add to the FQR agenda :
Update on CD3 EPAS : summary of the claims and ICA/PCA as a request from the PDQR.

Sandy Moody
Chassis Quality Manager
Americas PD Quality
313-805-3236
SMoody1@Ford.com

From: Simons, Brenda (J.)
Sent: Thursday, September 15, 2011 12:52 PM
To: Moody, Sandra (S.L.)
Subject: RE: PDQR Assignment Follow Up - Response Requested

<< File: UNTITLED.PPT >>
Here is the relative slide. Items 5 and 8 were in question. KP wanted updates on both, relative to Fusion.
Make better sense?

S. Moody	Fusion ECB YTD Sort Issues - Bring back updates for issues. Including but not limited to: Item 5- Wheels, etc...

From: Simons, Brenda (J.)
Sent: Thursday, September 15, 2011 11:10 AM
To: Moody, Sandra (S.L.)
Subject: RE: PDQR Assignment Follow Up - Response Requested

I will get more detail on the 1st item. I will let you know shortly.

B

From: Moody, Sandra (S.L.)
Sent: Thursday, September 15, 2011 11:08 AM
To: Simons, Brenda (J.)
Subject: RE: PDQR Assignment Follow Up - Response Requested

Boy ! I don't know what is needed for the first item ??? It is not clear ? But yes on item 957 for Oct PDQR discussion item but only if Raj is in attendence.

Sandy Moody
Chassis Quality Manager
Americas PD Quality
313-805-3236
SMoody1@Ford.com

From: Simons, Brenda (J.)
Sent: Thursday, September 15, 2011 8:38 AM
To: Moody, Sandra (S.L.)
Subject: PDQR Assignment Follow Up - Response Requested

<< OLE Object: Picture (Metafile) >>

Hi Sandy,
Just looking for an updated status on the assignments? I expect that 957 will be included in the 10/13 PDQR review but I did not want to make
assumptions, let me know, thanks!

Brenda J. Simons
Tactical and Interface Quality Analyst
Six Sigma Black Belt
Telephone - 313-621-2838

From: Bahena, Miguel (Mike.)
Sent: Wednesday, May 26, 2010 3:49 PM
To: Snider, Tim (T.O.); Mrozek, Robert (R.M.)
Subject: RE: CD3 Paynter Chart

We have root cause for many of the B3as but Erics tracking sheet is out of date.

From: Snider, Tim (T.O.)
Sent: Wednesday, May 26, 2010 11:22 AM
To: Mrozek, Robert (R.M.)
Cc: Bahena, Miguel (Mike.)
Subject: CD3 Paynter Chart

Rob,

There are not many non-cricket NVH warranty claims. There are quite a few B3A's that are still being investigated. There are 12 B3A's under investigation, and 6 were added since the last Paynter chart update on April 29.

<< File: CD3 EPAS Warranty May 22, 2010 Paynter.xls >> << File: 2010 CD3-D3 EPAS Warranty May_18_2010.xls >>

Regards,
Tim Snider (tsnider1@ford.com)
CD3 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Bouse, William (Bill.)
Sent: Tuesday, September 29, 2009 6:02 PM
To: Frey, Martin (M.F.)
Cc: Snider, Tim (T.O.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); Puleri, Michael (M.J.)
Subject: RE: CD3 warranty paynter chart

I was going to actually put them on a separate chart.

From: Frey, Martin (M.F.)
Sent: Tuesday, September 29, 2009 11:38 AM
To: Bouse, William (Bill.); Snider, Tim (T.O.); Mrozek, Robert (R.M.); Bahena, Miguel (Mike.); Puleri, Michael (M.J.)
Subject: RE: CD3 warranty paynter chart

Nice …. Does this capture field and plant failures? I propose we should include plant failures but may want to distinguish some way …. Perhaps coud be #plant/# field shown in the box or literally type Plant: x
……..Whatever
Field: y

Please add our latest and new favorite with the Tyco weld issue….. Two HSAP failures

Will we have a separate chart for I Re ?

Thanks

Martin Frey
Manager Electric Steering/Advanced Features/R&P Gear
Chassis Engineering
Cell # 313 805 6301

From: Bouse, William (Bill.)
Sent: Thursday, September 24, 2009 12:25 PM
To: Frey, Martin (M.F.); Hochrein, Brad (B.G.)
Cc: Snider, Tim (T.O.); Mrozek, Robert (R.M.)
Subject: CD3 warranty paynter chart

Here is the data that was to be reviewed today in the design review. I will present to JD later this afternoon in hard rocks.

<< File: CD3 warranty Sept_15 Paynter.xls >>

Bill Bouse
CD Platform EPS System Engineer
(**cell**) (313) 805-2289
(**email**) wbouse@ford.com
(**text**) 3138052289@vtext.com

From: Bouse, William (Bill.)
Sent: Sunday, September 27, 2009 7:10 PM
To: Mrozek, Robert (R.M.); Snider, Tim (T.O.)
Subject: RE: CD3 warranty paynter chart

Rob, I can re-do the chart since most of the open items have changed and sit down with you and Tim next week?

From: Mrozek, Robert (R.M.)
Sent: Thursday, September 24, 2009 3:49 PM
To: Bouse, William (Bill.); Snider, Tim (T.O.)
Cc: Mrozek, Robert (R.M.)
Subject: RE: CD3 warranty paynter chart

Notes from today:

1) Add a monitor category to take one-offs off the list
2) break down and separate the tbd's when they appear to have a common bin or failure type. For instance, if we have 3 "no comms" then separate them into a bin/group on the chart.
3) interested in a long term projection to 3MIS. Can we make some type of intelligent projection? I think hari can help us with this one…I doubt we have to invent something here.
4) bring in 0km claims somewhere

These were requests from JD. I take them as "suggestions" since we can't modify the sheet to meet everyone's needs. But, let's talk and decide how we want to incorporate these suggestions.

Rob Mrozek

Electric Power Steering Supervisor
D3/D4/U502/Limo Programs
Ford Motor Company
Phone: (313) 805-5947
e-mail: rmrozek@ford.com

From: Bouse, William (Bill.)
Sent: Thursday, September 24, 2009 12:25 PM
To: Frey, Martin (M.F.); Hochrein, Brad (B.G.)
Cc: Snider, Tim (T.O.); Mrozek, Robert (R.M.)
Subject: CD3 warranty paynter chart

Here is the data that was to be reviewed today in the design review. I will present to JD later this afternoon in hard rocks.

<< File: CD3 warranty Sept_15 Paynter.xls >>

Bill Bouse
CD Platform EPS System Engineer
(**cell**) (313) 805-2289
(**email**) wbouse@ford.com
(**text**) 3138052289@vtext.com

From: Bahena, Miguel (Mike.)
Sent: Wednesday, February 02, 2011 10:13 PM
To: Snider, Tim (T.O.); 'Robert Kostadina'
Cc: 'Michael Fontana'; Napoli, Laura (L.); Diez, Timothy (T.P.); Mrozek, Robert (R.M.); Estes, Eric (E.E.)
Subject: RE: CD3 Woodpecker Strategy

Tim,

I believe Laura is referring to the higher current relay closure test which is not in the CD3 SW.

Sincerely,

Mike Bahena
D3 Electric Power Steering Systems
Ford Motor Co.
Ph: (313) 805-3680
mbahena1@ford.com

From: Snider, Tim (T.O.)
Sent: Wednesday, February 02, 2011 4:54 PM
To: 'Robert Kostadina'
Cc: 'Michael Fontana'; Napoli, Laura (L.); Diez, Timothy (T.P.); Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Estes, Eric (E.E.)
Subject: CD3 Woodpecker Strategy

Rob K,

Have there been any changes to the CD3 woodpecker strategy for production vehicles? Laura tells me U502 has temporarily changed their strategy. I don't remember hearing of any CD3 software change having a woodpecker change in it. Let me know, thanks.

Regards,
Tim Snider (tsnider1@ford.com)
CD3/C489 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Robert Kostadina <Robert.Kostadina@TRW.COM>
Sent: Thursday, February 03, 2011 12:21 AM
To: Snider, Tim (T.O.)
Cc: Estes, Eric (E.E.); Napoli, Laura (L.); Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Diez, Timothy (T.P.); Michael Fontana
Subject: Re: CD3 Woodpecker Strategy

It is high current relay closure test.

>>> "Snider, Tim (T.O.)" 02/02/11 4:54 PM >>>

Rob K,

Have there been any changes to the CD3 woodpecker strategy for production vehicles? Laura tells me U502 has temporarily changed their strategy. I don't remember hearing of any CD3 software change having a woodpecker change in it. Let me know, thanks.

Regards,
Tim Snider (tsnider1@ford.com)
CD3/C489 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Napoli, Laura (L.)
Sent: Monday, February 07, 2011 3:16 PM
To: Snider, Tim (T.O.)
Subject: RE: CD3 Woodpecker Strategy

Not sure if you sent me this email before or after I sent you the presentation. Did you check out the presentation? Simon can explain more, but it's a more effective way to run the woodpecker to break through ice and contamination. Running at a higher current in the part of the flow chart that was a lower current is more effective. Instead of removing the lower current portion and replacing it with higher current, they split the total time up into two portions. First the lower current, then the higher current.

From: Snider, Tim (T.O.)
Sent: Thursday, February 03, 2011 9:41 AM
To: Napoli, Laura (L.)
Subject: RE: CD3 Woodpecker Strategy

Laura,

What is the benefit of the higher current relay closure test? Doesn't sound like CD3 has it.

Regards,
Tim Snider (tsnider1@ford.com)
CD3/C489 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA

From: Napoli, Laura (L.)
Sent: Wednesday, February 02, 2011 4:59 PM
To: Snider, Tim (T.O.)
Subject: RE: CD3 Woodpecker Strategy

Info from TRW for your reference on woodpecker sequence and addition of higher current contact relay closure test…
<< File: Retry strategy_flow chart_Tune Parameter Confirmation_V4.pdf >>

From: Snider, Tim (T.O.)
Sent: Wednesday, February 02, 2011 4:54 PM
To: 'Robert Kostadina'
Cc: 'Michael Fontana'; Napoli, Laura (L.); Diez, Timothy (T.P.); Bahena, Miguel (Mike.); Mrozek, Robert (R.M.); Estes, Eric (E.E.)
Subject: CD3 Woodpecker Strategy

Rob K,

Have there been any changes to the CD3 woodpecker strategy for production vehicles? Laura tells me U502 has temporarily changed their strategy. I don't remember hearing of any CD3 software change having a woodpecker change in it. Let me know, thanks.

Regards,
Tim Snider (tsnider1@ford.com)

CD3/C489 Steering Engineering
Ford Motor Company
Cell 313-805-3201
2B-L18 Product Development Center
Dearborn, MI 48124 USA