

INFORMATION Redacted PURSUANT TO THE FREEDOM OF  
INFORMATION ACT (FOIA), 5 U.S.C . 552(B)(6)

**PE12-025**

**FORD**

**11/9/2012**

**APPENDIX B**

**2005 through 2008 model year Ford Crown Victoria Police Interceptor  
Separation of the upper intermediate shaft from the steering column**

**OWNER REPORTS**

As the agency is aware, within FCSD's North American Customer Service Operations, there is a Customer Relationship Center (CRC) that is responsible for facilitating communication between customers, dealerships and Ford Motor Company. Among other things, the CRC handles telephonic, electronic, and written inquiries, suggestions, informational requests, and concerns ("contacts") from Ford and Lincoln-Mercury vehicle owners about their vehicles or sales and service experience. The contacts are handled by CRC customer service representatives who enter a summary of the customer contact into a database known as CuDL (Customer Data Link). Certain contacts, such as letters from customers, are entered into the CuDL database. Those that were entered into the earlier MORS II system were also microfilmed. More recently, the records in MORS III/CuDL are imaged and stored electronically.

The CRC assigns to each vehicle-related contact report a "symptom code" or category that generally characterizes the nature of the customer contact or vehicle concern, as described by the owner. The CRC does not undertake to confirm the accuracy of the description provided by the owner; they simply record what is reported. Therefore, given the complexity of the modern motor vehicle, it is Ford's experience that a significant percentage of owner contacts do not contain sufficient information to make a technical assessment of the condition of the vehicle or the cause of the event reported. Accordingly, although MORS contact reports may be useful in identifying potential problems and trends, the records are not the empirical equivalent of confirmed incidents and/or dealership's diagnosis. In the interest of responding promptly to this inquiry, Ford has not undertaken to gather the electronic images related to these contacts because of the largely duplicative nature of the information contained in the images, as well as the time and the burden associated with locating and producing those documents. The pertinent information related to those contacts generally would be included in the contact reports obtained from the CuDL system. To the extent that those documents exist, they are characterized in the comments of MORS III contact reports. Upon request, Ford will attempt to locate any specific items that are of interest to the agency.

In responding to this information request, Ford electronically searched CuDL using the following criteria:

Model Year: 2005 through 2008

Subject Vehicle: Ford Crown Victoria Police Interceptor manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Date Parameters: January 1, 2004 through September 21, 2012

Types of Contacts: All, including suspended data, canceled contacts and inquiries

MORS III Symptom Code(s):

Symptom Category	Symptom Code	Symptom Description
Steering/Handling	303000	
Steering/Handling	3031*	Function
Steering/Handling	3032*	Pull/Drift
Steering/Handling	3033*	Vibration/Shimmy
Steering/Handling	3034*	Noise
Steering/Handling	3035*	Steering Column
Steering/Handling	303600	Fluid Concerns
Steering/Handling	303999	Not Listed
Steering/Handling	303A00	Steering Wheel

MORS III Reason Code(s):

Reason Code	Description
07	Legal Contacts

**LEGAL CONTACTS**

Beginning in early 2008, most consumer complaints and all legal claim processing has been centralized in OGC within the Consumer Litigation team. A transition has occurred such that all legal contacts (including those formerly handled by "Litigation Prevention") are coordinated through this team.

Prior to the transition, there was a Consumer Affairs Department within FCSD that managed customer concerns, which could not be resolved by the Customer Relationship Center (CRC). Among other things, the Consumer Affairs Department had a section, known as "Litigation Prevention," that handled a variety of informal (i.e., non-litigation) claims, such as property damage claims or attorney demand claims.

The Litigation Prevention section had been centralized in the Consumer Affairs Department since 1995, in Dearborn, Michigan. Prior to that time, Litigation Prevention personnel operated on a regional basis. For matters that the Litigation Prevention section handled, there were typically paper files that reflected the handling, investigation and resolution of property damage claims.

The claims, known as "Legal Contacts" are entered into the CuDL database that the CRC uses to enter other customer communications. When a customer contact is designated as a Legal Contact, it is so indicated near the top of the contact report.

**FIELD REPORTS**

Within FCSD, there is a Vehicle Service & Programs Office that has overall responsibility for vehicle service and technical support activities, including the administration of field actions. That Office is the primary source within Ford of vehicle concern information originating from Ford and Lincoln-Mercury dealerships, field personnel, and other sources. The information is maintained in a database known as the Common Quality Indicator System (CQIS). The CQIS database includes reports compiled from more than 40 Company sources (e.g., Company-owned vehicle surveys, service technicians, field service and quality engineers, and technical

hot line reports, etc.) providing what is intended to be a comprehensive concern identification resource. As with MORS contact reports, CQIS reports are assigned a "symptom code" or category that generally reflects the nature of the concern.

In responding to this information request, Ford electronically searched CQIS using the following criteria:

In July 2011, FCSD launched a new coding system for the CQIS database. All reports maintained in the CQIS database prior to the coding change have been re-coded using the new CQIS coding system.

Model Year: 2005 through 2008

Subject Vehicle: Ford Crown Victoria Police Interceptor manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Date Parameters: January 1, 2004 through September 21, 2012

Symptom Code(s):

Symptom Category	Symptom Code	Symptom Description
Stop/Steer/Ride	662000	Steering/Steering Wheel, OTHER, OTHER
Stop/Steer/Ride	662100	Steering/Steering Wheel, Tilt/Telescope, OTHER
Stop/Steer/Ride	662138	Steering/Steering Wheel, Tilt/Telescope, Inoperative
Stop/Steer/Ride	662142	Steering/Steering Wheel, Tilt/Telescope, Loose/Attachment
Stop/Steer/Ride	6622*	Steering/Steering Wheel, Appearance/Clear Vision
Stop/Steer/Ride	6623*	Steering/Steering Wheel, Feel/Wander/Pull
Stop/Steer/Ride	6624*	Steering/Steering Wheel, Performance
Stop/Steer/Ride	662Z00	Steering/Steering Wheel, Not Listed, OTHER
Stop/Steer/Ride	6682*	Noise, Steering
Stop/Steer/Ride	6692*	Vibration, Steering
Stop/Steer/Ride	6693*	Vibration, Front
Stop/Steer/Ride	666100	Fluids, Steering, OTHER

### **OASIS MESSAGES**

FCSD is responsible for communicating a variety of vehicle and service information, such as warranty information for up to the past 360 days, Extended Service Plan part coverage information, and technical repair information, to North American Ford and Lincoln-Mercury dealers. This information is communicated primarily through OASIS, which serves as an electronic link between Ford Motor Company and the dealers. OASIS covers all North American Ford and Lincoln-Mercury cars and light trucks, and medium and heavy-duty Ford trucks, for the ten most current model years. Technical diagnostic and repair information on OASIS is contained in Special Service Messages (SSMs) and Technical Service Bulletin (TSBs) titles and brief summaries. It should be noted that dealers cannot access brief summaries.

SSMs and TSB titles are coded in OASIS by model year and vehicle line, and may be coded to other specific vehicle attributes (body style, engine code, or vehicle identification number)

and one or more OASIS Service Code(s). The dealers with access to OASIS usually search for information on the database by entering a VIN and the applicable Service Codes. SSMs and TSB titles that become inactive or superseded continue to be accessible by Ford employees, but no longer are accessible by the dealers. Dealers also are able to determine the recalls applicable to a particular vehicle by searching a particular VIN in OASIS. Recall information available on OASIS cannot be searched by Service Codes.

In July 2011, FCSD launched a new coding system for OASIS. All active SSMs and TSB titles have been re-coded using the new OASIS coding system. All inactive and superseded SSMs and TSB titles are still maintained under the old coding system.

In responding to this information request, Ford searched Global OASIS using both the new and old OASIS service codes for active, inactive, and superseded TSB titles and SSMs using the following search criteria:

Model Year: 2005 through 2008

Subject Vehicle: Ford Crown Victoria Police Interceptor manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Date Parameters: January 1, 2004 through September 21, 2012

OASIS Service Code(s):

#### Old Codes

Symptom Category	Symptom Code	Symptom Description
Steering/Handling	303000	
Steering/Handling	3031*	Function
Steering/Handling	3032*	Pull/Drift
Steering/Handling	3033*	Vibration/Shimmy
Steering/Handling	3034*	Noise
Steering/Handling	3035*	Steering Column
Steering/Handling	303600	Fluid Concerns
Steering/Handling	303999	Not Listed
Steering/Handling	303A00	Steering Wheel

#### New Codes

Symptom Category	Symptom Code	Symptom Description
Stop/Steer/Ride	662000	Steering/Steering Wheel, OTHER, OTHER
Stop/Steer/Ride	662100	Steering/Steering Wheel, Tilt/Telescope, OTHER
Stop/Steer/Ride	662138	Steering/Steering Wheel, Tilt/Telescope, Inoperative
Stop/Steer/Ride	662142	Steering/Steering Wheel, Tilt/Telescope, Loose/Attachment
Stop/Steer/Ride	6622*	Steering/Steering Wheel, Appearance/Clear Vision
Stop/Steer/Ride	6623*	Steering/Steering Wheel, Feel/Wander/Pull
Stop/Steer/Ride	6624*	Steering/Steering Wheel, Performance
Stop/Steer/Ride	662Z00	Steering/Steering Wheel, Not Listed, OTHER
Stop/Steer/Ride	6682*	Noise, Steering
Stop/Steer/Ride	6692*	Vibration, Steering

Stop/Steer/Ride	6693*	Vibration, Front
Stop/Steer/Ride	666100	Fluids, Steering, OTHER

OASIS 2 and Global OASIS are not capable of performing electronic word searches, so the search results are reviewed manually to determine their applicability to the alleged defect in the subject vehicles.

The OASIS database also contains Broadcast Messages. Typically, these messages are directed to all dealerships and either are notifications of new SSMs/TSBs, or announcements with non-technical information (for example, "the Dealer Hotline will be closed today"). Broadcast Messages cannot be searched by OASIS service codes, and can be retrieved only while active (approximately 2 to 4 days). Ford has not undertaken to search for Broadcast Messages because Ford expects that any responsive information obtained with such a search generally would be non-substantive in nature or duplicative of the information obtained with the TSB title and SSM search described above.

### **INTERNAL SERVICE MESSAGES**

FCSD, as part of its technical support activities, maintains fleet and technical telephone "hotlines." During the early stages of Ford's efforts to identify and resolve potential vehicle concerns, hotline personnel may draft Internal Service Messages (ISMs) on CQIS for their internal use. The ISMs are assigned a CQIS "symptom code" or category that generally reflects the nature of the concern. An ISM can form the basis for an oral response over the technical hotline to an inquiry from an individual dealer or fleet technician. The ISMs, however, are not made available electronically to fleets and dealers. Therefore, although ISMs are not "issued" to dealers like OASIS messages, Ford is construing this request broadly to include ISMs that may be related to the alleged defect in the subject vehicles.

In responding to this information request, Ford searched CQIS for active ISMs using the following search criteria:

Model Year: 2005 through 2008

Subject Vehicle: Ford Crown Victoria Police Interceptor manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Date Parameters: January 1, 2004 through September 21, 2012

CQIS Symptom Code(s):

Symptom Category	Symptom Code	Symptom Description
Stop/Steer/Ride	662000	Steering/Steering Wheel, OTHER, OTHER
Stop/Steer/Ride	662100	Steering/Steering Wheel, Tilt/Telescope, OTHER
Stop/Steer/Ride	662138	Steering/Steering Wheel, Tilt/Telescope, Inoperative
Stop/Steer/Ride	662142	Steering/Steering Wheel, Tilt/Telescope, Loose/Attachment
Stop/Steer/Ride	6622*	Steering/Steering Wheel, Appearance/Clear Vision
Stop/Steer/Ride	6623*	Steering/Steering Wheel, Feel/Wander/Pull
Stop/Steer/Ride	6624*	Steering/Steering Wheel, Performance
Stop/Steer/Ride	662Z00	Steering/Steering Wheel, Not Listed, OTHER

Stop/Steer/Ride	6682*	Noise, Steering
Stop/Steer/Ride	6692*	Vibration, Steering
Stop/Steer/Ride	6693*	Vibration, Front
Stop/Steer/Ride	666100	Fluids, Steering, OTHER

The CQIS database in which the ISMs reside is not capable of performing word searches, so the search results were reviewed manually to determine their applicability to the alleged defect in the subject vehicles.

### **FIELD REVIEW COMMITTEE**

Ford's Field Review Committee reviews all potential field service actions, including safety recalls and customer satisfaction programs, and recommends appropriate actions to corporate management. A Vehicle Service & Programs representative serves as Secretary to the Field Review Committee. Following approval of a field service action, the Vehicle Service & Programs Office prepares and launches the action. A representative copy of the communication to Ford's dealers, fleets, and regional offices announcing the field service action is maintained in the Field Review Committee files.

### **WARRANTY**

Ford's Analytical Warranty System (AWS) contains warranty claims and vehicle information for model years 1991 and forward for North America, and model years 1992 and forward for Europe.

Ford performed a search of AWS for potentially responsive reports using the following search criteria:

Model Year: 2005 through 2008

Subject Vehicle: Ford Crown Victoria Police Interceptor manufactured for sale or lease in the United States, District of Columbia, Puerto Rico, Northern Mariana Islands, Guam, American Samoa and the Virgin Islands.

Part Number(s):

3C529 – Steering Column  
 3B676-AA – Lower Intermediate Shaft (service)  
 3B676-AB – Upper Intermediate Shaft (service)  
 3F728 – Upper Intermediate Shaft (engineering)  
 3C662 – Lower Intermediate Shaft (engineering)  
 3E735 – Boot Assembly – Steering Column  
 3C611 – Bearing at Dash Panel

### **Peer Vehicles**

All of the search criteria for the 2005 through 2011 model year Ford Crown Victoria vehicles, excluding the subject vehicles, and the 2005 through 2011 model year Mercury Grand Marquis vehicles is identical to the search criteria for the subject 2005 through 2008 model year Ford Crown Victoria Police Interceptor vehicles. For purposes of brevity, it is not repeated.

###

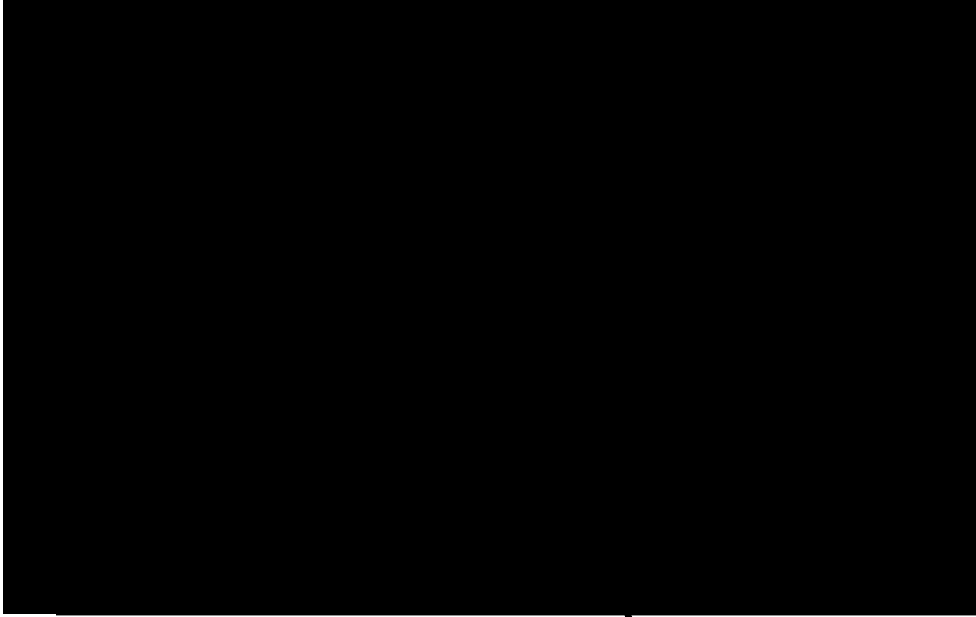
PE12-025

FORD

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APPENDIX D





1

**Malaney, Linda (L.)**

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**From:** [REDACTED]  
**Sent:** Tuesday, September 11, 2012 1:17 PM  
**To:** Taylor, Alma (A.)  
**Cc:** [REDACTED]  
**Subject:** FW: Dealer/Fleet Request for OGC Review

FORD MOTOR COMPANY  
RECEIVED  
CLAIMS UNIT  
SEP 11 2012  
OFFICE OF THE  
GENERAL COUNSEL

PRIVILEGED & CONFIDENTIAL

This e-mail may contain privileged communications. If you have received it in error, please delete it immediately and notify the sender.

This has been assigned to Alma.

**\*\*\*Note to Dealer\*\*\***

**\*\*\*DO NOT PUT THE VEHICLE IN STORAGE OR PROVIDE LOANERS WITHOUT THE APPROVAL OF THE OFFICE OF THE GENERAL COUNSEL\*\*\***

**\*\*\*NOTE: SEND AUTHORIZATION REQUEST TO FORDCALP@FORD.COM\*\*\***

**\*\*\*ONCE WE ARE IN RECEIPT OF ALL THE REQUESTED INFORMATION, IT WILL BE THOROUGHLY REVIEWED AND THE CUSTOMER WILL BE NOTIFIED OF OUR DECISION\*\*\***

**\*\*\*EVALUATIONS MAY TAKE UP TO 90 DAYS \*\*\***

**From:** dcpform@ford.com [mailto:dcpform@ford.com]  
**Sent:** Friday, September 07, 2012 3:34 PM  
**To:** [REDACTED]  
**Cc:** [REDACTED]  
**Subject:** Dealer/Fleet Request for OGC Review

**Dealer/Fleet Request for OGC Review**

**Email Subject:** Dealer/Fleet Request for OGC Review

**DEALER INFORMATION:**

**Dealership Fleet Name:** [REDACTED]

**Requesting Dealer Fleet:** [REDACTED]

**PA Code:** NA

**Contact:** [REDACTED]

**Title:** [REDACTED]

**Phone:** [REDACTED]

**Fax:** [REDACTED]

**Email:** [kscott33@ford.com](mailto:kscott33@ford.com)

**Region:** Washington

**Address:** 14104 Newbrook Drive

**City:** Chantilly

**State:** Virginia

**Zip Code:** 20151

**CUSTOMER VEHICLE INFORMATION:**

**WSD:** May 8, 2006

**Vehicle Year:** 2006

**Vehicle Model:** Crown Victoria

**Vehicle VIN:** 2FAFP71W26X [REDACTED]

**Mileage:** 76672

**customer Fleet N** [REDACTED]

**Street Address:** [REDACTED]

**City :** Rockville

**State :** Maryland

**Zip Code :** [REDACTED]

**Home Phon** [REDACTED]

**Work Phon** [REDACTED]

**Customer Region:** Washington

**DETAILS OF INCIDENT:**

Accident

**Date of Incident:** 2012-09-05

**County incident occurred:** [REDACTED]

Is customer alleging a component defect CAUSED the incident? YES

**Details:** Exact words from customer: the officer claimed the steering went soft and he had no steering control at all. We have performed a preliminary inspection of the vehicle to find the upper steering shaft in the column had broken. When the shaft broke the officer had no way to steer the vehicle. Talking with my maintenance shop I was informed we had a similar incident on stock 060540 I need to know why this is happening, is it happening elsewhere is it only effecting a particular model year Vic and is there a permanent fix. I am concerned we have a major issue and I need a response from Ford ASAP on this issue

Was a police report filed? YES

**Details :** This is a police vehicle for [REDACTED]

Has the insurance company been contacted? NO

**Insurance company advised:**

**Insurance company contact information:**

**Coach builder:**

**City :**

**State :**

**Zip Code :**

**Vehicle Location:** With customer [REDACTED]

**Attorney information:**

**CVO Contact:** [REDACTED]

**Resolution Customer is seeking:** Customer states considering downing entire fleet of crown vics and questioning if this should be a recall. Customer wants on-site inspection and explanation on why the steering column came apart.

**Comments:** Customer has a second unit that they allege has the same issue but was not in an accident.

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APPENDIX E

**PE12-025  
PRIVILEGE LOG**

**APPENDIX E**

<b>Bates Range</b>	<b>Document Type</b>	<b>Document Author(s)</b>	<b>Document Recipient(s)</b>	<b>Document cc's</b>	<b>Document Date</b>	<b>Document Description</b>	<b>Privilege (Basis of Claim)</b>
PE12-025 000142	Email	Alma Taylor, Office of the General Counsel Product Claims Analyst	Allen Robinson, Ford Employee		9/12/2012	Email correspondence between the Office of the General Counsel and a Ford employee regarding a litigation claim.	Attorney Client Privilege/Attorney Work Product
PE12-025 000143-145	Email	(1) Alison Nelson, Office of the General Counsel Attorney; (2) Alma Taylor, Office of the General Counsel Product Claims Analyst; (3) Eric Kalis, Ford Employee; (4) Alma Taylor, Office of the General Counsel Product Claims Analyst	(1) Steve Matthews, Ford Employee; (2) Eric Kalis, Ford Employee; (3) Alma Taylor, Office of the General Counsel Product Claims Analyst; (4) Eric Kalis, Ford Employee	(1) Raymond Nevi, Ford Employee; Michelle Hull, Office of the General Counsel Product Claims Analyst; Alma Taylor, Office of the General Counsel Product Claims Analyst; Thomas Falahee, Office of the General Counsel Attorney	(1) 9/12/2012; (2) 9/12/2012; (3) 9/12/2012; (4) 9/12/2012	Email correspondence between Ford employees and Ford's Office of the General Counsel regarding a litigation claim.	Attorney Client Privilege/Attorney Work Product
PE12-025 000146-334	Photographs	Eric Kalis, Ford Employee			9/14/2012	Vehicle inspection photographs taken by request of Ford's Office of the General Counsel.	Attorney Work Product
PE12-025 000596-599	Email	(1) Alma Taylor, Office of the General Counsel Product Claims Analyst; (2) Alma Taylor, Office of the General Counsel Product Claims Analyst	(1) Katrina Murphy, Ford Employee; (2) Eric Kalis, Ford Employee; Alison Nelson, Office of the General Counsel Attorney	(2) Michelle Hull, Office of the General Counsel Product Claims Analyst	(1) 9/12/2012; (2) 9/12/2012	Email correspondence between Ford employees and the Office of the General Counsel relating to a vehicle inspection requested by the Office of the General Counsel. Produced in redacted form.	Attorney Work Product
PE12-025 000600-602	Email	(1) Kris Christensen, Ford Employee; (2) Michelle Hull, Office of the General Counsel Product Claims Analyst	(1) Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Kris Christensen, Ford Employee	(1) Randy Freiburger, Ford Employee; Francis Wickenheiser, Ford Employee; (2) Randy Freiburger, Ford Employee; Francis Wickenheiser, Ford Employee; Alma Taylor, Office of the General Counsel Product Claims Analyst	(1) 9/14/2012; (2) 9/14/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege
PE12-025 000603-605	Email with attachment	Susan Krusel, Ford Employee	Steve Kenner, Ford Employee; Raymond Nevi, Ford Employee; Thomas Falahee, Office of the General Counsel Attorney; Todd Fronckowiak, Ford Employee	Emily Frascaroli, Office of the General Counsel Attorney	9/14/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege

PE12-025  
PRIVILEGE LOG

<p>PE12-025 000606-612</p>	<p>Email</p>	<p>(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Drita McNamara, Ford Employee; (4) Dave Dodds, Ford Employee; (5) Alison Nelson, Office of the General Counsel Attorney; (6) Katrina Murphy, Ford Employee; (7) Felicia Miles, Office of the General Counsel Product Claims Analyst; (8) Katrina Murphy, Ford Employee; (9) Dave Dodds, Ford Employee; (10) Randy Freiburger, Ford Employee</p>	<p>(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; Dave Dodds, Ford Employee; (4) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (5) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (7) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (8) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (9) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; (10) Michelle Hull, Office of the General Counsel Product Claims Analyst</p>	<p>(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (8) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Lisa O'Connor, Ford Employee; Leo Hughes, Ford Employee; Tom Bazil, Ford Employee</p>	<p>(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/7/2012; (7) 9/7/2012; (8) 9/11/2012; (9) 9/11/2012; (10) 9/12/2012</p>	<p>Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.</p>	<p>Attorney Client Privilege</p>
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**PE12-025  
PRIVILEGE LOG**

<p>PE12-025 000613-620</p>	<p>Email</p>	<p>(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Drita McNamara, Ford Employee; (4) Dave Dodds, Ford Employee; (5) Alison Nelson, Office of the General Counsel Attorney; (6) Katrina Murphy, Ford Employee; (7) Felicia Miles, Office of the General Counsel Product Claims Analyst; (8) Katrina Murphy, Ford Employee; (9) Dave Dodds, Ford Employee</p>	<p>(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; Dave Dodds, Ford Employee; (4) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (5) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (7) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (8) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (9) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney</p>	<p>(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (8) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (9) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Lisa O'Connor, Ford Employee; Leo Hughes, Ford Employee; Tom Bazil, Ford Employee</p>	<p>(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/7/2012; (7) 9/7/2012; (8) 9/11/2012; (9) 9/11/2012</p>	<p>Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.</p>	<p>Attorney Client Privilege</p>
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**PE12-025  
PRIVILEGE LOG**

<p>PE12-025 000621-627</p>	<p>Email</p>	<p>(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Drita McNamara, Ford Employee; (4) Dave Dodds, Ford Employee; (5) Alison Nelson, Office of the General Counsel Attorney; (6) Katrina Murphy, Ford Employee; (7) Felicia Miles, Office of the General Counsel Product Claims Analyst; (8) Katrina Murphy, Ford Employee; (9) Dave Dodds, Ford Employee</p>	<p>(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; Dave Dodds, Ford Employee; (4) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (5) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (7) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (8) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (9) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney</p>	<p>(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (8) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Lisa O'Connor, Ford Employee; Leo Hughes, Ford Employee; Tom Bazil, Ford Employee</p>	<p>(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/7/2012; (7) 9/7/2012; (8) 9/11/2012; (9) 9/11/2012</p>	<p>Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.</p>	<p>Attorney Client Privilege</p>
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PE12-025  
PRIVILEGE LOG

<p>PE12-025 000658-665</p>	<p>Email</p>	<p>(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Drita McNamara, Ford Employee; (4) Dave Dodds, Ford Employee; (5) Alison Nelson, Office of the General Counsel Attorney; (6) Katrina Murphy, Ford Employee; (7) Felicia Miles, Office of the General Counsel Product Claims Analyst; (8) Katrina Murphy, Ford Employee; (9) Dave Dodds, Ford Employee</p>	<p>(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; Dave Dodds, Ford Employee; (4) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (5) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (7) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (8) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (9) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney</p>	<p>(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (8) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Lisa O'Connor, Ford Employee; Leo Hughes, Ford Employee; Tom Bazil, Ford Employee</p>	<p>(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/7/2012; (7) 9/7/2012; (8) 9/11/2012; (9) 9/11/2012</p>	<p>Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.</p>	<p>Attorney Client Privilege</p>
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PE12-025  
PRIVILEGE LOG

<p>PE12-025 000679-690</p>	<p>Email</p>	<p>(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Drita McNamara, Ford Employee; (4) Dave Dodds, Ford Employee; (5) Alison Nelson, Office of the General Counsel Attorney; (6) Katrina Murphy, Ford Employee; (7) Felicia Miles, Office of the General Counsel Product Claims Analyst; (8) Katrina Murphy, Ford Employee</p>	<p>(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; Dave Dodds, Ford Employee; (4) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (5) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (7) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (8) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee</p>	<p>(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (8) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst</p>	<p>(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/7/2012; (7) 9/7/2012; (8) 9/11/2012</p>	<p>Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.</p>	<p>Attorney Client Privilege</p>
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PE12-025  
PRIVILEGE LOG

PE12-025 000691-699	Email	(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Drita McNamara, Ford Employee; (4) Dave Dodds, Ford Employee; (5) Alison Nelson, Office of the General Counsel Attorney; (6) Katrina Murphy, Ford Employee; (7) Felicia Miles, Office of the General Counsel Product Claims Analyst; (8) Katrina Murphy, Ford Employee	(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; Dave Dodds, Ford Employee; (4) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (5) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (7) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (8) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee	(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (8) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst	(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/7/2012; (7) 9/7/2012; (8) 9/11/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege
PE12-025 000700-703	Email	Dave Dodds, Ford Employee	Katrina Murphy, Ford Employee	Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst	9/7/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege

**PE12-025  
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PE12-025 000704-707	Email	(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee	(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee	(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst	(1) 9/7/2012; (2) 9/7/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege
PE12-025 000708-716	Email	(1) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Dave Dodds, Ford Employee; (4) Alison Nelson, Office of the General Counsel Attorney; (5) Felicia Miles, Office of the General Counsel Product Claims Analyst; (6) Katrina Murphy, Ford Employee; (7) Chris Gurney, Ford Employee	(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; (4) Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Felicia Miles, Office of the General Counsel Product Claims Analyst; (5) Katrina Murphy, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (6) Felicia Miles, Office of the General Counsel Product Claims Analyst; Alison Nelson, Office of the General Counsel Attorney; Dave Dodds, Ford Employee; Drita McNamara, Ford Employee; (7) Steve Matthews, Ford Employee	(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (5) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (6) Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (7) Alison Nelson, Office of the General Counsel Attorney; Rick Jones, Ford Employee; Francis Wickenheiser, Ford Employee; Dennis Johnston, Ford Employee	(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012; (5) 9/7/2012; (6) 9/11/2012; (7) 9/12/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege
PE12-025 000717-721	Email with attachment	(1) Susan Krusel, Ford Employee; (2) Susan Krusel, Ford Employee	(1) Todd Fronckowiak, Ford Employee; Emily Frascaroli, Office of the General Counsel Attorney; (2) Steve Kenner, Ford Employee; Raymond Nevi, Ford Employee; Thomas Falahee, Office of the General Counsel Attorney	(1) David Ott, Ford Employee; Francis Wickenheiser, Ford Employee; Thomas Falahee, Office of the General Counsel Attorney; Steve Kenner, Ford Employee; Raymond Nevi, Ford Employee; Katrina Murphy, Ford Employee; (2) Todd Fronckowiak, Ford Employee; Emily Frascaroli, Office of the General Counsel Attorney	(1) 9/12/2012; (2) 9/13/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege

**PE12-025  
PRIVILEGE LOG**

PE12-025 000722-726	Email	(1) ) Dave Dodds, Ford Employee; (2) Katrina Murphy, Ford Employee; (3) Jody Banciu, Office of the General Counsel Legal Assistant; (4) Dave Dodds, Ford Employee	(1) Katrina Murphy, Ford Employee; (2) Dave Dodds, Ford Employee; (3) Katrina Murphy, Ford Employee; (4) Tom Bazil, Ford Employee	(1) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (2) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (3) Drita McNamara, Ford Employee; Randy Freiburger, Ford Employee; Patrick McCormick, Ford Employee; Alison Nelson, Office of the General Counsel Attorney; Jody Banciu, Office of the General Counsel Legal Assistant; Michelle Hull, Office of the General Counsel Product Claims Analyst; (4) Patrick McCormick, Ford Employee; Drita McNamara, Ford Employee; Katrina Murphy, Ford Employee; Jody Banciu, Office of the General Counsel Legal Assistant	(1) 9/7/2012; (2) 9/7/2012; (3) 9/7/2012; (4) 9/7/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege
PE12-025 000727-730	Email	Alma Taylor, Office of the General Counsel Product Claims Analyst	Katrina Murphy, Ford Employee		(1) 9/12/2012	Email correspondence between Ford employees and the Office of the General Counsel relating to a vehicle inspection requested by the Office of the General Counsel. Produced in redacted form.	Attorney Work Product
PE12-025 000731-732	Email	(1) Susan Krusel, Ford Employee; (2) Todd Fronckowiak, Ford Employee	(1) Steve Kenner, Ford Employee; Raymond Nevi, Ford Employee; Thomas Falahee, Office of the General Counsel Attorney; Todd Fronckowiak, Ford Employee; (2) David Ott, Ford Employee	(1) Emily Frascaroli, Office of the General Counsel Attorney; (2) Amanda Prescott, Ford Employee	(1) 9/14/2012; (2) 9/14/2012	Email correspondence between Ford employees and the Office of the General Counsel requesting legal advice. Produced in redacted form.	Attorney Client Privilege

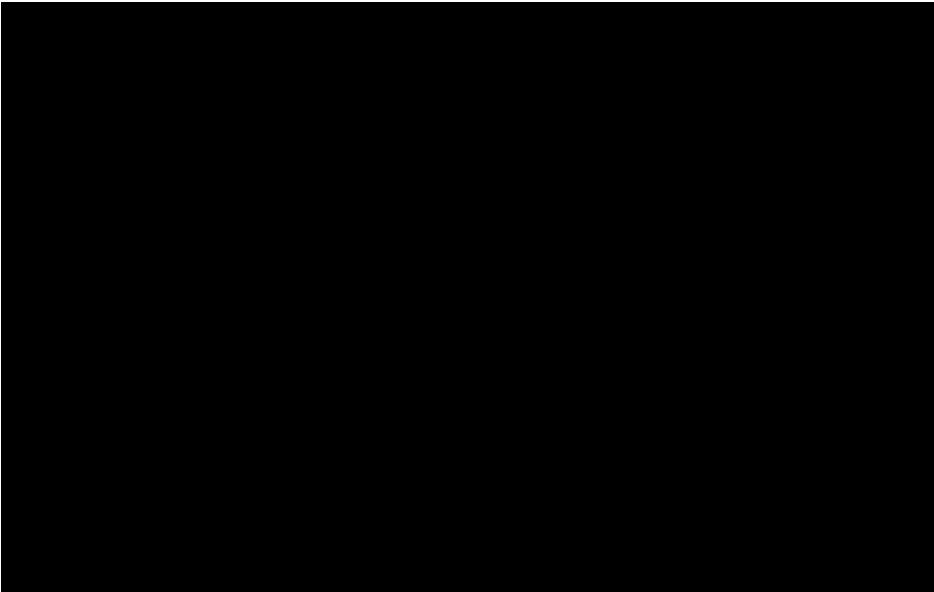


PE12-025

FORD

11/9/2012

APPENDIX F



**Sent Via US Mail**

June 8, 2006

[REDACTED]  
Coconut Creek, FL [REDACTED]

**RE: 2006 Grand Marquis**  
**VIN: 2MEFM75W86X** [REDACTED]

Dear Mr. [REDACTED]

Thank you for contacting us regarding the above-mentioned vehicle.

Customer satisfaction is one of the primary objectives of Ford Motor Company and we try to make every attempt to ensure that our owners are satisfied. We recognize the importance of retaining your confidence in us after the purchase. We understand that you have turned this matter over to your insurance company. Your insurance carrier may file a claim in subrogation against Ford Motor Company if they choose to do so. Ford proposes no further action at this time.

Thank you for giving us the opportunity to review your concern.

Sincerely,



Marcel Miclea  
Consumer Affairs

## Action Detail

**VIN:** 2MEFM75W86X [REDACTED]      **Year:** 2006      **Model:** GRAND MARQUIS      **Case:** 483021576  
**Name:** M&M [REDACTED]      **Owner Status:** Original      **WSD:** 2006-04-25  
**Symptom Desc:** STRG/HANDLING FUNCTION LOSS OF STRG      **Primary Phone:** [REDACTED]  
**Reason Desc:** LEGAL - ACCIDENT / FIRE      **Secondary Phone:**  
**Issue Type:** 07 LEGAL      **Issue Status:** OPEN      **Dealer:** MARGATE LINCOLN MERCURY, INC.  
**Origin Desc:** US CONCERN CASE BASE      **P & A Code:** 11638  
**Action Desc:** ADVISE CUST INFORMATION WILL BE SENT TO CONSUMER AFFAIRS  
**Odometer:** 1000 MI      **Comm Type:** PHONE  
**Action Date:** 06/06/2006      **Action Time:** 13:25:02:910      **Action Data:** Yes  
**Analyst Name:** RADIGAN KRISTIN      **Analyst:** KRADIGAN

**COMMENTS:** CUSTOMER SAID: -BOUGHT FIVE CARS IN BETWEEN 91 AND TODAY -ACCIDENT HAPPENED 6/2 AT ABOUT 1100 PM -THE VEH WOULD NOT TURN -STEERING DID NOT RESPOND -ACCIDENT HAPPENED IN CITY OF COCONUT CREEK, BROWARD COUNTY -POLICE REPORT WAS NOT FILED -CLAIM WAS FILED WITH THE INSURANCE CO -DO NOT KNOW THE STATUS OF THE INSURANCE CLAIM -NO ONE WAS HURT -THERE WAS NOTHING REALLY DAMAGED EXCEPT THE CAR - WANTS FORD TO COVER THE COST OF THE REPAIRSDEALER SAID: --CALL HIS INSURANCE CO --MARGATE LINCOLN MERCURY -2250 NORTH STATE ROAD 7 -MARGATE, FL 33063 -TEL: (954) 978-2277CRC ADVISED: - I WILL FORWARD THIS INFORMATION TO OUR CONSUMER AFFAIRS GROUP. SOMEBODY FROM CONSUMER AFFAIRS WILL CONTACT YOU WITHIN 7-10 BUSINESS DAYS. PLEASE NOTIFY YOUR INSURANCE CARRIER AND REPORT THIS INCIDENT.----ADVISED CUST AS TO ABOVE

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**Customer Info**

<b>Customer:</b>	[REDACTED]	<b>Secondary Phone:</b>	[REDACTED]
<b>Address</b>	[REDACTED]	COCONUT CREEK	FL [REDACTED]
<b>Country:</b>	USA	<b>Language:</b>	EN
<b>Cell Phone:</b>	[REDACTED]	<b>Pager:</b>	[REDACTED]
<b>Preferred Contact method:</b>	[REDACTED]	<b>Fax:</b>	[REDACTED]
<b>Preferred Contact Time:</b>	[REDACTED]	<b>Email:</b>	[REDACTED]

Ford Confidential

## Dealer Information

<b>FCSD Region</b>	<b>Sales Region</b>	<b>Sales Zone</b>	<b>Market</b>	<b>P&amp;A Code</b>	<b>Sales Code</b>
FL-FLORIDA	25-ORLANDO	J	A2	11638	L25256

**Dealer Name:** MARGATE LINCOLN MERCURY, INC.  
**Dealer Address:** 2250 NORTH STATE ROAD 7  
 MARGATE FL 33063  
**Dealer Main Phone:** 305-978-2277

Position	Employee Name
GENERAL MANAGER	DEWAYNE FAIRCHILD
PARTS MANAGER	FRED MOROSINI
SALES MANAGER	CARLOS SANTOS
SALES MANAGER	KELLY J MEGGS
SERVICE MANAGER	KENNETH L VANN
SERVICE MANAGER	DANIEL C HUGHES
SERVICE MANAGER	MARK NICHOLS

**Service Hours** 7:30 AM TO 5:30 PM MONDAY THRU FRIDAY MERKUR

**Directions**

**Trained** Y

**Additional Information** TOWING: 305-768-1690 WILLIAMS TOWING

Ford Confidential

ESP / Recall Information

VIN: 2MEFM75W86X [REDACTED]

Contract: 1 of 1

-----ESP Purchase Details-----

Purchaser: [REDACTED]  
 Plan Type: USA 2006 NEW 24/25000 PREM MAINTENANCE(M&W)5K  
 Selling Dealer: MARGATE LINCOLN MERCURY, INC.  
 Deductible:  
 Rental:  
 Towing Allowance:

Status: Active  
 Expiration Date: 2008-04-25  
 Expiration Miles: 26,000  
 Plan Year: 2006  
 Purchase Type: N  
 Options:

-----ESP Cancellation Details-----

Cancel Date: Process Date:  
 Refund Percent: Dealer Received Date:  
 Dealer Credited:

-----Recall Information-----

-----Field Service Action-----

Number	Type	Description	Status	Status Date	Dealer Code
06B39	CUSTOMER SAT/OWNER NOTIF PGM	TRANSMISSION OIL COOLER BYPASS VALVE INSPECTION	OPEN - LAUNCHED		

**OASIS RESULT:**06/07/2006  
09:41:10

2MEFM75W86X [REDACTED]

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**VEHICLE INFORMATION**

<b>VEHICLE DESCRIPTION</b>	<b>BODY STYLE</b>	<b>ENGINE</b>
2006 GRAND MARQUIS	4 DR SEDAN LS	4.6L SOHC (ROMEO)
<b>TRANSMISSION</b>	<b>AXLE CODE</b>	<b>ENGINE CALIBRATION</b>
	C8	6FB1SB0A

**GENERAL WARRANTY INFORMATION**

<b>WARRANTY START DATE</b>	<b>BUILD DATE</b>	<b>SALE MILEAGE</b>
04/25/2006	03/21/2006	

**ARN MESSAGES**

**ATTENTION TECHNICIANS AND SERVICE MANAGERS:**  
**BEFORE ADDRESSING AIR SUSPENSION COMPRESSOR NOISE, PLEASE SEE TSB 06-02-14**

**WARNING MESSAGES**

CUDL - THIS VEHICLE HAS AN OPEN CUDL CONTACT

VERIFY STATE REGISTRATION, VIN MAY BE ELIGIBLE FOR CALIFORNIA EMISSIONS WTY

**OUTSTANDING FIELD SERVICE ACTIONS**

06B39  
 TRANSMISSION OIL COOLER BYPASS VALVE INSPECTION

**EXTENDED COVERAGES**

0996 - USA 2006 NEW 24/25000 PREM MAINTENANCE(M&W)5K  
 STANDARD DEDUCTIBLE: 0 USD  
 OWNER NAME: [REDACTED]  
 OPTIONS:  
 EXPIRATION DATE: 04/25/2008  
 DISTANCE: 26,000  
 RENTAL: 0 UP TO 0 DAYS  
 TOWING: 0 USD  
 CONTRACT SOLD BY: USA 11638  
 ESP CONTRACT START DATE: 04/25/2006

**REPAIR HISTORY**

NO REPAIR HISTORY ON VEHICLE

**[Click Here for Full Warranty History](#)**

END OF OASIS REPORT FOR 2MEFM75W86X [REDACTED]  
 Report Applies to Country Code: USA



PE12-025

FORD

11/9/2012

APPENDIX H

**Prescott, Amanda (A.B.)**

---

**From:** Gratson, Tony (A.J.)  
**Sent:** Friday, November 02, 2012 8:56 AM  
**To:** Christie, Michelle (M.L.)  
**Cc:** Keady, Christopher (C.M.); Bondoni, Mark (M.J.); Gratson, Tony (A.J.); Prescott, Amanda (A.B.); Freiburger, Randy (R.M.)  
**Subject:** Part availability and repairs on 2005-2008 Crown Victoria Police Interceptors – Steering Column and Upper Intermediate Shaft  
  
**Importance:** High

Michelle,

Please forward to all PAB members and copy Chris, Mark and Randy.

Thanks,

Tony Gratson

---

To: All Ford Police Advisory Board Members

From: Ford Commercial Vehicle Team

It has come to our attention that the service steering column (7W1Z-3C529-B) and upper intermediate shaft (5W1Z-3B676-AB) were on backorder, increasing the down time for vehicles that have been identified as requiring repair. Our suppliers have responded, are shipping parts, and the backorders are cleared. We have increased our requirements for parts from our suppliers in an effort to avoid any future backorders on these parts.

Reminder, the only recommended repairs for an improperly functioning steering column are those described in the Ford Service Manual. Attempting to repair a vehicle by a different method such as, drilling holes in the steering column jacket and inserting screws or other fasteners in an effort to retain the lower steering column (green) bearing, could interfere with the internal steering column collapse feature in a frontal crash, increasing the risk of injury to the driver. Additionally, debris from drilling through the steering column jacket and into the bearing could result in noise and/or roughness when turning the steering wheel.

Ford and NHTSA continue to work together on their investigation of allegations of full or partial separation of the upper intermediate shaft from the steering column in model year (MY) 2005 through 2008 Ford Crown Victoria Police Interceptor (CVPI) vehicles. We apologize for the parts availability situation, and assure you that we will continue to work to address this situation.

Thank you for your attention to this matter.

**Tony Gratson**  
Government Sales Manager  
Ford Motor Company  
W: 313-390-1041  
C: 313-205-8610  
[tgratson@ford.com](mailto:tgratson@ford.com)



PE12-025

FORD

11/9/2012

APPENDIX J

PE12-025

FORD

11/9/2012

APPENDIX J

13745



**FINAL TEST REPORT**

**CONFIDENTIAL**

**Vehicle Evaluation and Verification  
Research and Vehicle Technology**

<b>TO:</b>	B. Frank	Test Order No.	J-C4804
		Work Task W. O. No.	E18
		Test Date	7/9/03
		Date Reported	9/5/03
		Sheet	1 of 4

**SUBJECT:** Crash Test 13745 (90° Front 40% Offset Left Side Barrier Impact at  $10.9 \pm 0.4$  mph,  $17.5 \pm 0.6$  km/h) – 2006 Grand Marquis (EN114) 4-Door Sedan

**REQUESTED BY:** Vehicle Crash Safety Department, Research and Vehicle Technology – B. Frank

**OBJECT:** To obtain development data relative to air bag system sensors.

**SUMMARY OF TEST RESULTS:** See Section 1.0 for air bag system sensor data.

M. Foster  
Test Development Engineer

Concur: J. Ng  
Section Supervisor  
Operations Engineering Section

**VEHICLE DATA:**

Make and Model 2006 Grand Marquis (EN114) 4-Door Sedan (Attribute Prototype 0)

ID Numbers 2MEFM75W73X [REDACTED], 318-H-073

Power Train 4.6L, EFI, Automatic (4R70W) Transmission

Fuel Tank(s) Usable Capacity: 19.0 gal. (71.9L) – Aft of Axle  
Test Condition: Empty.

Front Seat(s) Type: Split Bench  
Cover: Leather  
Tracks/Position: Power/Mechanical Mid and Down  
Seat Backs/Position: Adjustable/Not Measured  
Head Restraints/Position: Adjustable/Up

Restraint System LF & RF: 3-Point Continuous Loop Active Belt  
All seatbelts remain latched during impact.

Occupants LF & RF: 50<sup>th</sup> Percentile Male, Hybrid III,  
Uninstrumented

Test Weight Front: 2407 lb (1092 kg)  
Rear: 2197 lb (997 kg)  
Total: 4604 lb (2088 kg)

Tires Front: P225/60R16 32 psi (221 kPa)  
Rear: P225/60R16 35 psi (241 kPa)  
Spare: Removed

Significant Content or Accessories: Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel

**GENERAL TEST COMMENTS:**1. Test Procedure

The test was performed according to the following regulations, test protocols and the Corporate test procedure(s):

Non-regulator crash test procedure, CBP-3 dated April 16, 1998.

1.1 Vehicle Alignment

The Thatcham fixture was attached to the normal fixed barrier face and aligned to contact the front of the test vehicle, overlapping the left (driver) side by 40% of the overall vehicle width.

2. Remarks

Crash movies, pre- and post- crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, VEV. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 13745001 through 13745077.



**TEST RESULTS:**1.0 Sensor Development

Time histories of the air bag/sensor(s) are archived on a storage media under the crash number/and or the test authorization number.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.

2.0 Vehicle Crush, Film Analysis and/or Instrumentation Data

Time histories of the vehicle accelerations and other instrumentation are archived on a storage media under the  
the  
crash number/and or the test authorization number.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.



JC 4804

JC 4804

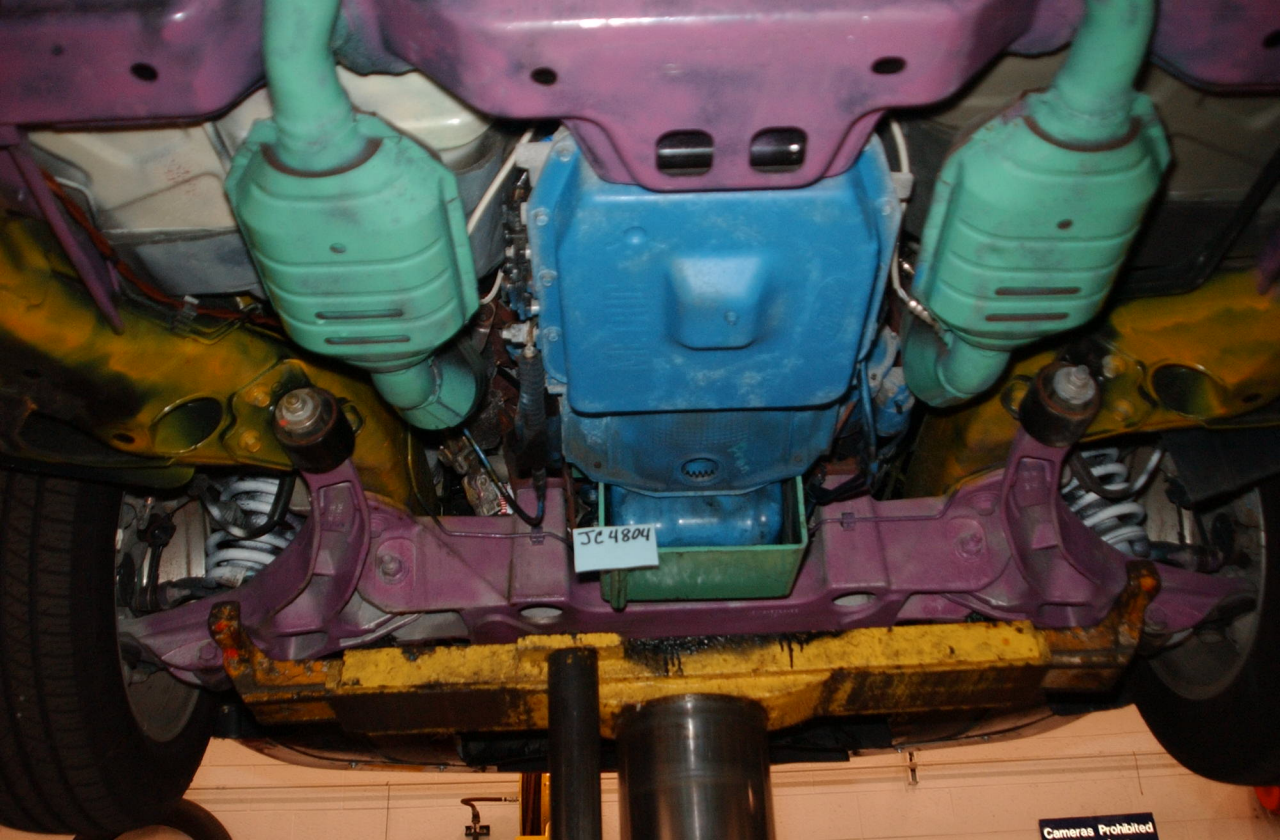


JC 4804





JC4804



5C4804

Cameras Prohibited



5  
Ford  
Safety Testing  
Dearborn, MI

13745

13745



5  
**Ford**  
Safety Testing  
Dearborn, MI

13745

13745





Ford

13745

JC  
13745

Ford  
Safety Testing  
Dearborn, MI



13745

JC4809

13745

  
Safety Testing  
Dearborn, MI



13745

313 H073

F 2507  
R 2517  
T 0804  
M 251

  
Safety Testing  
Dearborn, MI



313 H073

AMEFM75W23X619414

13745

T 2197  
M 4684  
1444

JC4804

JC4804



FROM THE WALL





137

54804  
13745

DUMAY

Drain

Drain



JC 4804  
13745



JC 4804  
13745

1073

VC 4104  
277

1951 Ford Mustang



313

M PH THATCHAM

FRANK B. FRANK  
FRANK B. FRANK

JOHN CIVILIAN  
FRANK B. CIVILIAN

Development

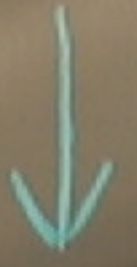


VC 4021  
313



300

S4L7A1  
18745



GRAND MARQUIS LS  
PRESTIGE

JC 4804  
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300



320

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JC 4804  
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13745  
C.M.H.



Ford  
Safety Testing  
Dearborn, MI

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Ford  
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Dearborn, MI



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Safety Testing  
Dearborn, MI





1/2 MPH TURN OFF  
W. B. FRANK  
724673  
JAMES COLEMAN  
53375  
SENSOR DEVELOPMENT

JC 4804  
723  
137 45  
SARSI

137 45

Safe  
Dear



313 H073

11 MPH THATCHAM

Mr. B. Fitch

W 73683

Project: Offshore

1400 Third Avenue

53375

Project: Crystal

Storage Development

ALFFM/5W73A61914

JC4804

TC  
Comp  
2003

F 2197  
R 4604  
R 1470

13745

JC4804



FROM THE WALL







JC 4804  
13745

← 7.32 →

JC 4804  
13745

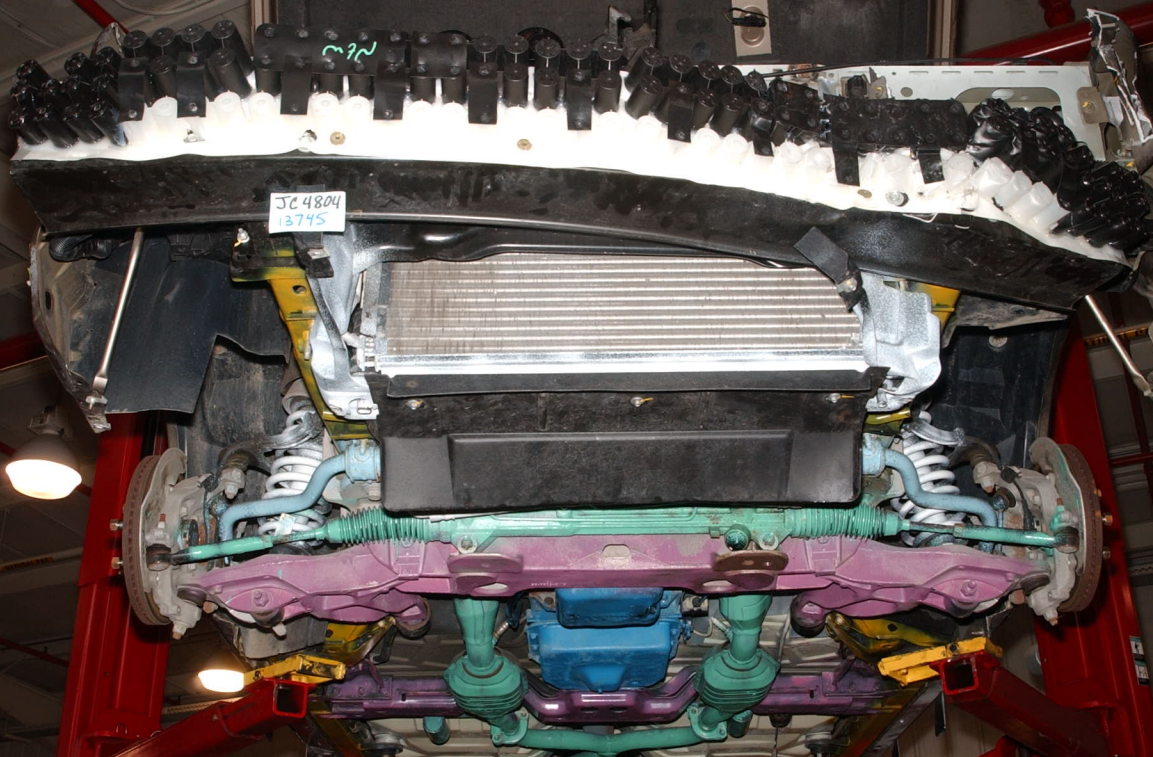
JC 4804  
13745



JC 4804  
13745



JC 4804  
13745



JC 4804  
13745

372

JC 4804  
13745

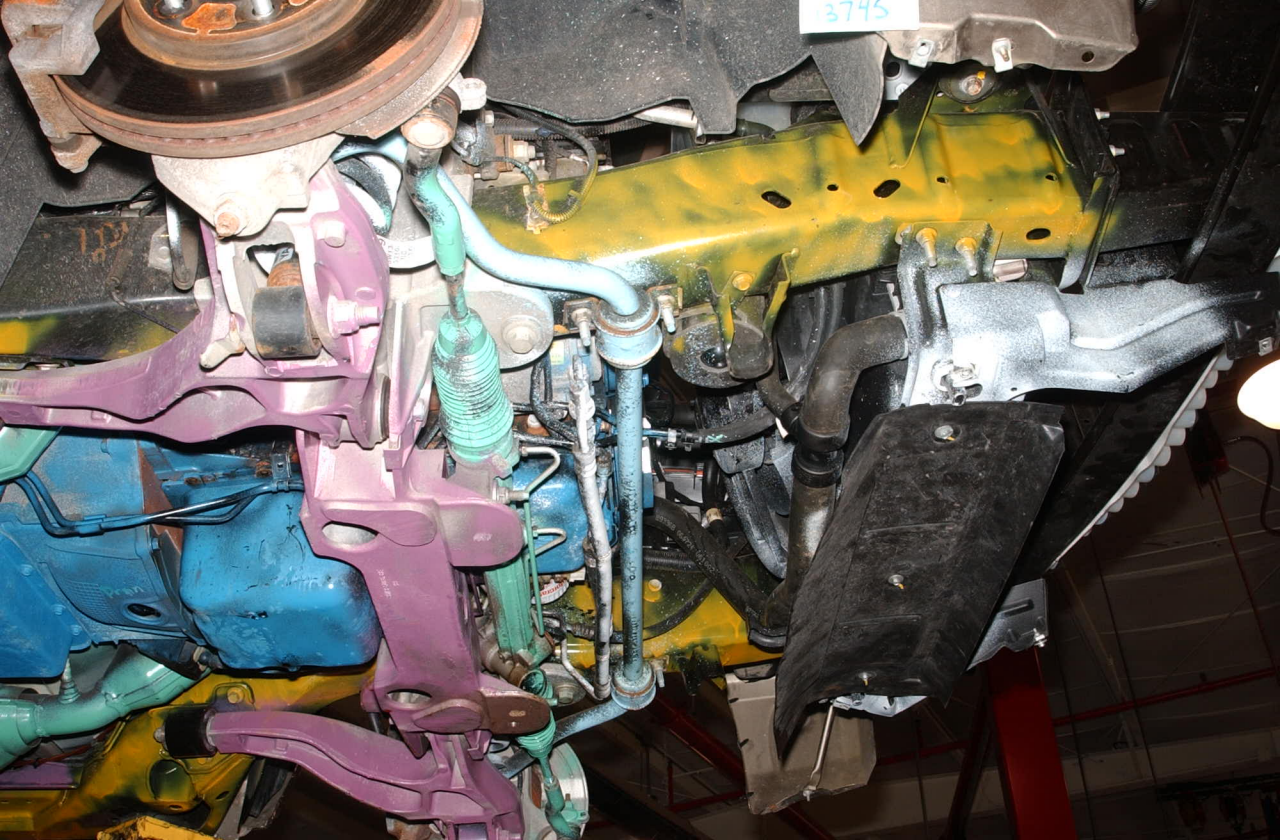




JC 4804  
13745



3745





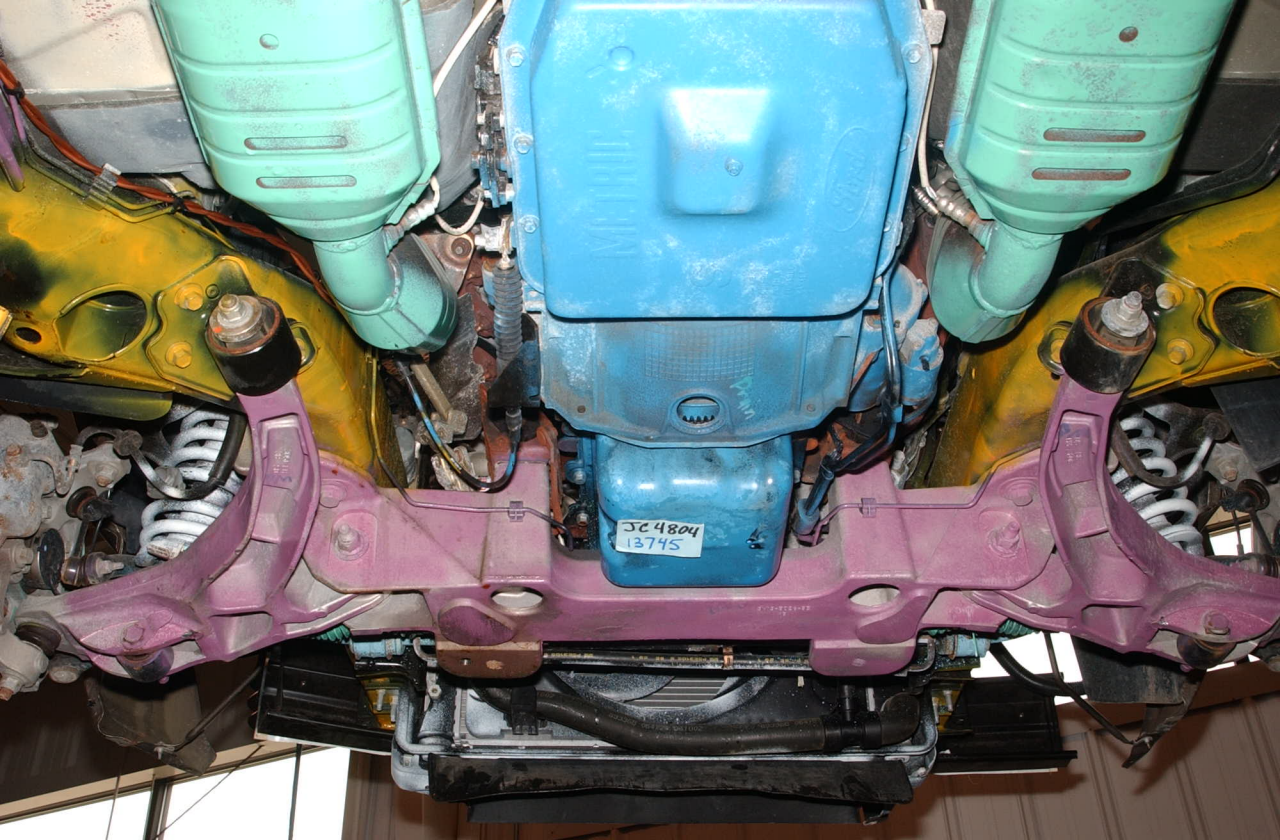
13775

NY

WVA



JC 4804  
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JC4804  
13745



JC 4804  
13745

JC 4804  
13745



PE12-025

FORD

11/9/2012

APPENDIX J

13823



**Vehicle Evaluation and Verification  
Research and Vehicle Technology****TO:** B. Frank

Test Order No.	J-C4916
Work Task W. O. No.	E11
Test Date	8/20/03
Date Reported	2/12/04
Sheet	1 of 8

**SUBJECT:** Crash Test 13823 (90° Front Fixed Barrier Impact at  $14.0 \pm 0.4$  mph,  $22.5 \pm 0.6$  km/h) – 2005 Crown Victoria (EN114) 4-Door Sedan – 2005 Certification Program**REQUESTED BY:** Vehicle Crash Safety Department, Research and Vehicle Technology – B. Frank**OBJECT:** To provide occupant protection data relative to the front barrier impact test requirements of the current FMVSS No. 208 dated 1/6/03 and CMVSS No. 208 dated 2/13/02.

To provide windshield mounting retention data relative to the front barrier impact test requirements of the current FMVSS No. 212 dated 3/14/95 and CMVSS No. 212 dated 8/28/97.

To provide windshield protected zone data relative to the front barrier impact test requirements of the current FMVSS No. 219 dated 5/27/98 and CMVSS No. 219 dated 8/28/97.

To provide fuel system integrity data relative to the barrier crash test requirements of the current FMVSS No. 301 dated 5/27/98 and CMVSS No. 301 dated 4/26/01.

**SUMMARY OF  
TEST RESULTS:**

- See Attachment 1 for injury criteria data.
- See Attachment 2 for windshield mounting retention data.
- See Attachment 3 for windshield protected zone intrusion and windshield penetration data.
- See Attachment 4 for fuel spillage data.
- See Attachment 5 for vehicle observations and non-FMVSS data.

The Test Authorization for this crash indicated that the vehicle is representative of a design level suitable for a certification test. To the best of my knowledge, the crash testing was performed on the same vehicle as identified in the Test Authorization; the results reported herein represent the performance of this specific vehicle, and the testing was performed in accordance with the listed procedures. Any procedure deviations significant to the test objectives above are identified in this report.

R. Oda  
Engineering Technologist

Concur: J. Ng  
Section Supervisor  
Operations Engineering Section

**VEHICLE DATA:**

Make and Model 2005 Crown Victoria (EN114) 4-Door Sedan (Confirmation Prototype)

ID Numbers 2FAFP73W33X203930, 516-H-867, FB590020

Power Train 4.6L, EFI, Automatic (5R70W) Transmission

Fuel Tank(s) Usable Capacity: 19.0 gal. (71.9L) - Aft of Axle  
Test Condition: The "run dry" tank was filled with red-dyed Stoddard solvent to 95% of its rated usable capacity.

Front Seat(s) Type: Split Bench  
  
Cover: Cloth  
  
Tracks/Position: LF: Power/1.6" Rear of Full Forward  
RF: Manual/Mechanical Mid  
  
Seat Backs/Position: Adjustable/LF: 12.9° Rear of Vertical at Headrest, RF: 18.5° Rear of Vertical at Headrest  
  
Head Restraints/Position: Adjustable/LF: Down  
RF: Up

Restraint System LF: 3-Point Continuous Loop Active Belt  
  
RF: 3-Point Continuous Loop Active Belt  
  
All seatbelts remain latched during impact.

Occupants LF: 5th Percentile Female, Hybrid III, Instrumented No. 354  
  
RF: 50th Percentile Male, Hybrid III, Instrumented No. 318

Test Weight Front: 2366 lb (1073 kg)  
Rear: 2188 lb (992 kg)  
Total: 4554 lb (2066 kg)  
  
The test weight includes:

- the "as received" unloaded vehicle curb weight
- Options which are expected to be on more than 33% of production vehicles (simulated)
- 2 occupant(s) (described above)
- 200 lb (90.7 kg) luggage (simulated)

Tires Front: P225/60R16 32 psi (221 kPa)  
Rear: P225/60R16 35 psi (241 kPa)  
Spare: Removed

Bumpers Front: Fascia/Beam  
Rear: Removed

Significant Content or Accessories: Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel

**GENERAL TEST COMMENTS:**1. Test Procedure

The test was performed according to the following regulations, test protocols and the Corporate test procedure(s):

- Barrier Collision Test – Steering Column, Windshield, Fuel System, CETP 00.00-L-811-US (ST-14) dated August 27, 2001.
- EFI Fuel Systems Stoddard Solvent Fill, ST-11 REF. 4.
- Fixed Barrier Collision Test - Occupant Crash Protection, CETP 00.00-L-810-US (ST-25) dated August 27, 2001.

2. Significant Deviations from CETP 00.00-L-811-US (ST-14) and CETP 00.00-L-810-US (ST-25)

- The Left Front Dummy was a 5<sup>th</sup> Percentile Hybrid III dummy. The Right Front Dummy was a 50<sup>th</sup> Percentile Hybrid III dummy.
- There was no fuel system spillage during the subsequent 10 minute period following the first 5 minutes after impact. The requester decided to cancel after the 10 minute mark.

3. Instrumentation: The instrumentation equipment set up for this test was completed following approved procedures which require engineering sign-off after each major step. The instrumentation equipment and systems used meet the SAE J211 June 80 series of recommended practices (Instrumentation for Impact Tests J211, J211a, or J211b) and were calibrated using secondary standards that are traceable to the National Institute of Standards and Technology (NIST).4. Remarks

Crash movies, pre- and post- crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, VEV. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 13823001 through 13823074.

## ATTACHMENT 1

Occupant Injury Data (C/FMVSS 208)

	<u>L. F. Dummy</u>	<u>R. F. Dummy</u>
Head Injury Criteria (HIC) @ 15 ms	166	33
Interval		
t1	111 ms	103 ms
t2	118 ms	118 ms
Head Injury Criteria (HIC) @ 36 ms	166	63
Interval		
t1	111 ms	104 ms
t2	118 ms	140 ms
Dummy Neck Upper Load:		
NTE	0.3525	0.1750
NTF	0.2029	0.2324
NCE	0.003107	0.001448
NCF	0.1358	0.004143
Chest resultant acceleration level at 3 ms cumulative duration	23 g	19 g
Chest Deflection (Hybrid III)	1.0 in	0.8 in
Peak axial compression load:		
Left femur	155 lb	247 lb
Right femur	54 lb	152 lb
Peak axial tension load:		
Left femur	147 lb	52 lb
Right femur	114 lb	75 lb
Dummy contained within the vehicle during the crash	Yes	Yes

The dummy temperature, immediately prior to the test, was within the specified test range of 69°F to 72°F.

Time histories of the dummy instrumentation are archived on a storage media under the crash number/ and or the test authorization number.

**ATTACHMENT 2**Windshield Mounting Retention (C/FMVSS 212)

The total windshield mounting retention at ambient room temperature was 100%.

**ATTACHMENT 3****Windshield Zone Intrusion (C/FMVSS 219)**

Based on a review of the crash movie and post-crash observations it was judged that neither the windshield intrusion zone nor the windshield below the intrusion zone was penetrated by any part of the vehicle during the crash. No intrusion zone template was used.

**ATTACHMENT 4**Fuel System Integrity (C/FMVSS 301)

- . There was no fuel system spillage during impact.
- . There was no fuel system spillage during the first five minutes after impact.
- . There was no fuel system spillage during the subsequent 10 minute period following the first 5 minutes after impact. The requester decided to cancel after the 10 minute mark.

## ATTACHMENT 5

### 1.0 Vehicle Crush, Film Analysis and/or Instrumentation Data

	Maximum Dynamic Longitudinal Crush	
	in.	(mm)
Left Side	9.9	(251)
Right Side	9.9	(251)

Time histories of the dummy dynamic displacements obtained from Film Analysis are archived on a storage media under the crash number/and or the test authorization number.

Time histories of the dummy dynamic displacements obtained from Film Analysis on the dummy shoulders are not archived on a storage media under the crash number/and or the test authorization number due to the dummy shoulders are below the door and not visible.

Time histories of the air bag/sensor(s) are archived on a storage media under the crash number/and or the test authorization number.

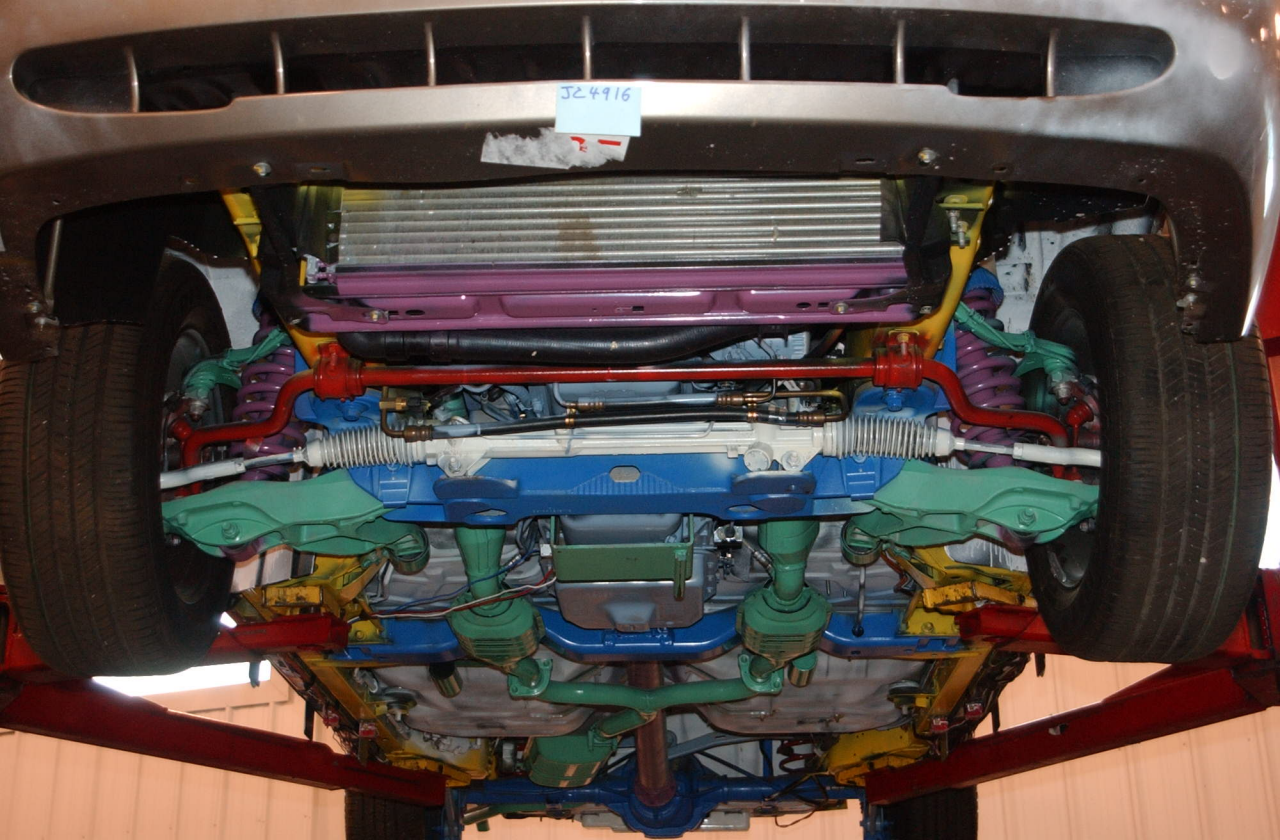
Time histories of the vehicle accelerations and other instrumentation are archived on a storage media under the crash number/and or the test authorization number.

Time histories of vehicle dynamic displacements obtained from Film Analysis are archived on a storage media under the crash number/and or the test authorization number.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.



J24916





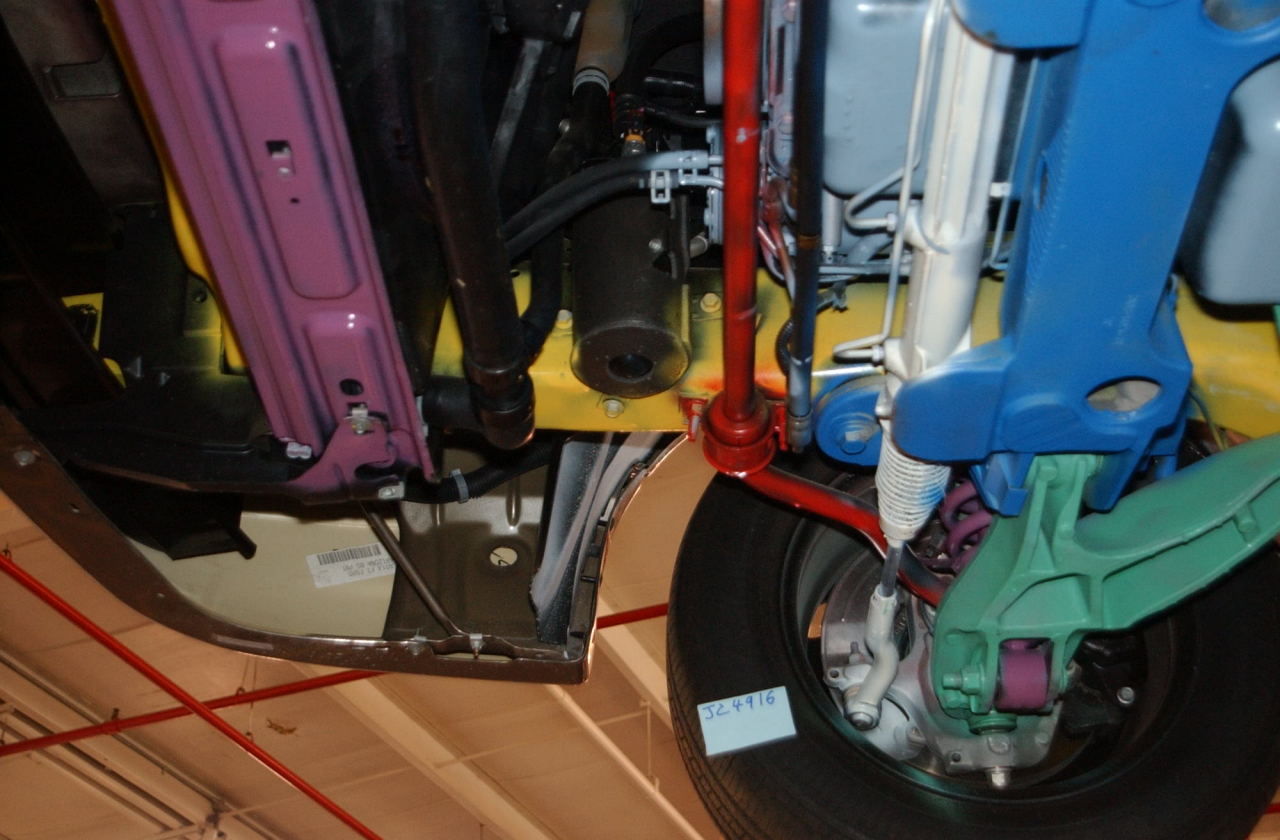
J24916



J24916



J24916



524916

524916



13823

13823

PHOTO NOT OCCUPIED

EXIT





JC 4916  
13823

13823





13823

13823



13823

13823

JC4916

26

33



13823

13823

516W867

1400AH 90% Full BGA  
3% Daimler/Coyle Race  
208 217, 218, 208  
Pa. 5700000  
Rep. B. F. FINE  
7268 17 18  
Cable 2000 17 18  
20000000



20000000000000000000

1.5m  
Coyle  
8.1000

Michael Kelly Coyle 20000000000000000000

16



JC4916  
13823

DUMMY



J24916  
13823

138

J24916  
13823

110mm





J24916  
13823







JC4916  
13823

All By Design  
Can't fight control

J24916  
13823



520

4

LAUNCH READY  
SYSTEM POWER ON



13823

JC4916

13823



13823

13823



540

520

FLAMMABLE  
KEEP FIRE AWAY

13823

13823 TC4916  
2001/11/14

PAPER ONLY  
PAPER ONLY





JC 4916  
13823

13823









13823

13823



13823

JC1916

10/20/06



Air Bag Disconnected  
2 Air Bag Installed

13823  
TC4911

16



13823

516 W 867

14MPH 90° Fict BCh  
5% Dairme/50% ARES  
208 2/E, 2/E, 301

516W/867

IF 887130 3332323232323232

1.8.4  
Comp  
8-18-03

PLEASE DROP COM TO 7-19-03



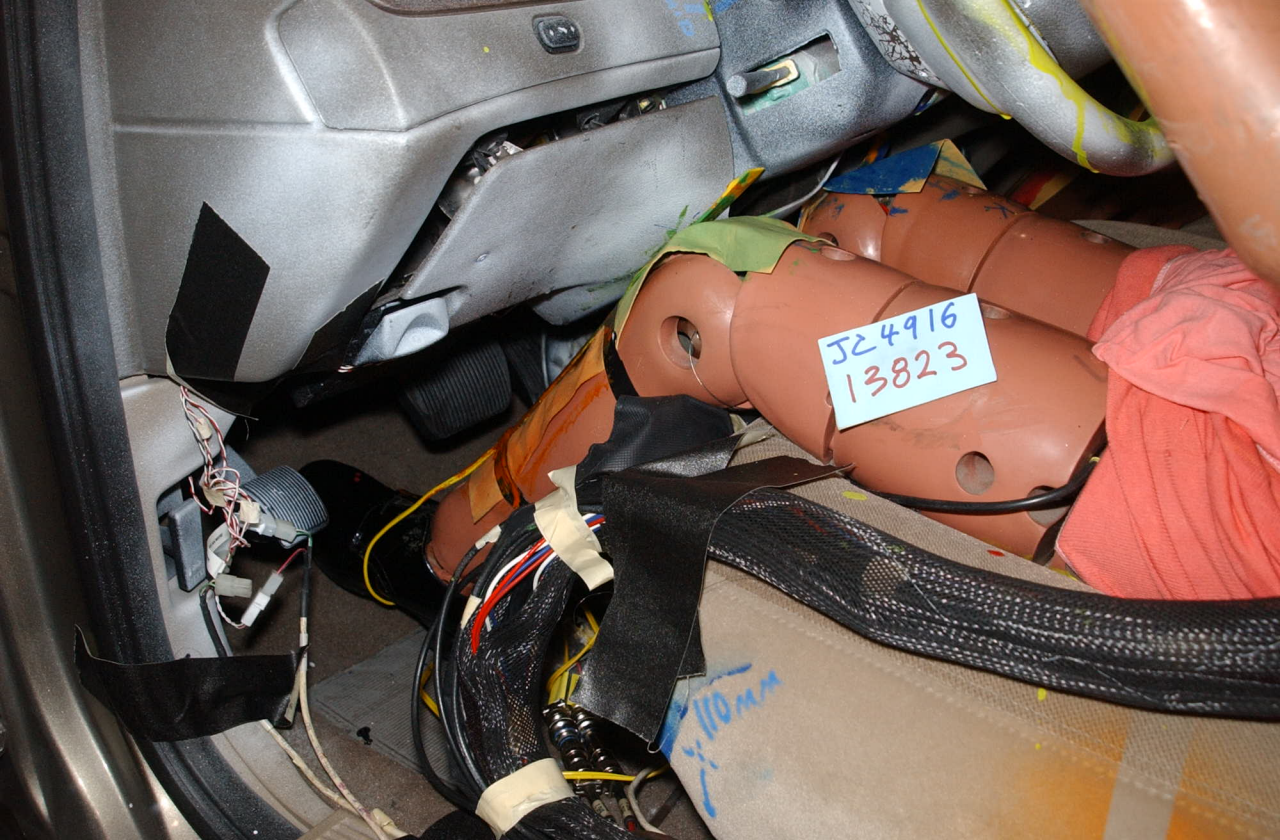
JC4916  
13823

13823



JZ4916  
13823

110mm





JC 4916  
13823

13823

15mm



J24916  
13823

16.8  
16.8  
16.8

Air  
3000  
R25

RH1

J24916  
13823





EMERGENCY  
In the event of an emergency  
press stop switch to shut down engine

5  
4  
9  
1  
6  
1  
3  
8  
2  
3

AM/FM

VENT OFF FOR  
NORM A/C MIX  
MAX A/C



Air Bag D's cover  
2 OHM Resistor IN  
J24916  
13823

EMERGENCY STOP  
Pull this button out at the first sign of  
any trouble with the engine.

Discomar D

OLYMPIA VERZONA

J24916  
13823

AIRBAG

Green  
Red

Orange  
Blue

Blue







NO  
200

16



CAUTION

324916  
3923

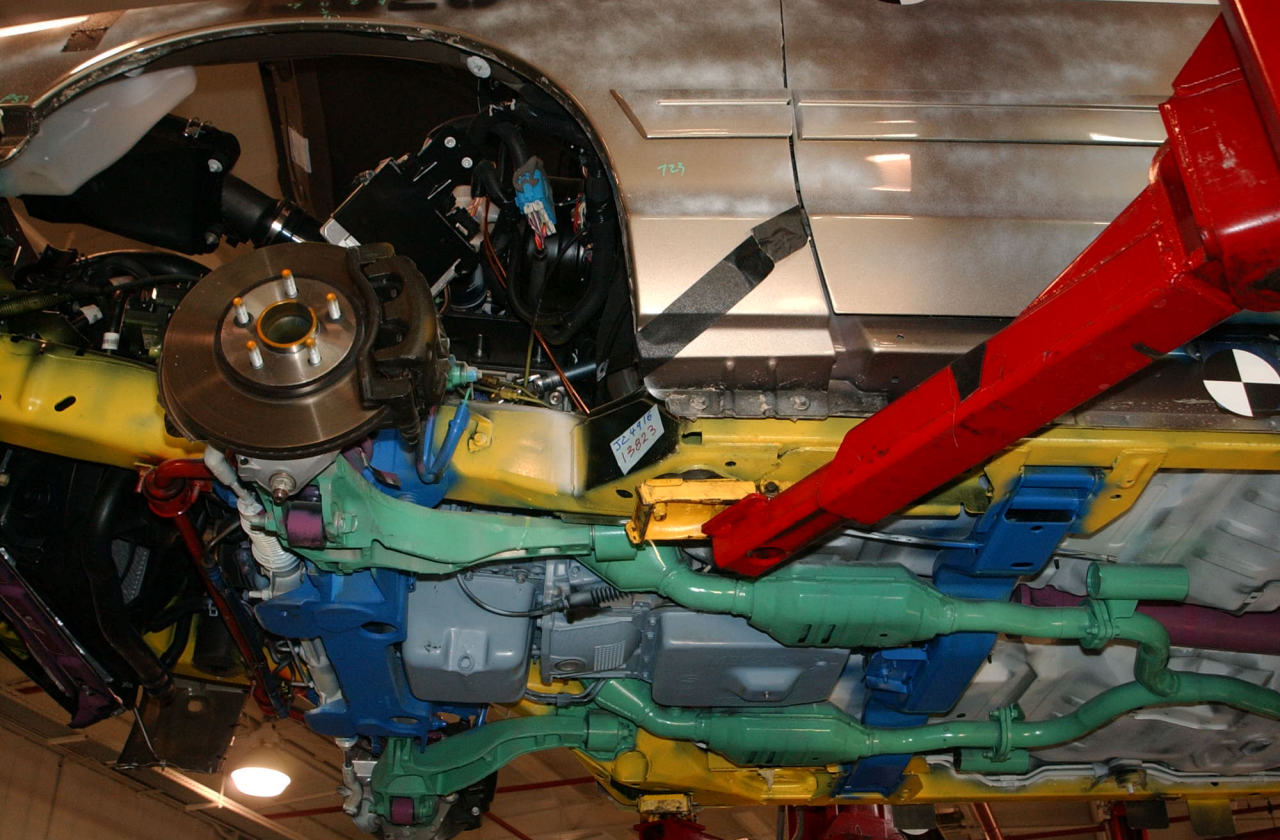
8



J24916  
13823

ROTARY LIFT





JC 4316  
3823



13823  
1mm/28 1/2"

JC 4416  
13823

PE12-025

FORD

11/9/2012

APPENDIX J

14141



FINAL TEST REPORT

CONFIDENTIAL

**Vehicle Evaluation and Verification  
Research and Vehicle Technology**

**TO:** B. Frank

Test Order No.	J-C7618
Work Task W. O. No.	E11
Test Date	12/16/03
Date Reported	4/30/04
Sheet	1 of 7

**SUBJECT:** Crash Test 14141 (90° Front Fixed Barrier Impact at  $16.8 \pm 0.4$  mph,  $27.0 \pm 0.6$  km/h) – 2005 Crown Victoria (EN114) 4-Door Sedan – 2005 Certification Program

**REQUESTED BY:** Vehicle Crash Safety Department, Research and Vehicle Technology – B. Frank

**OBJECT:** To provide occupant protection data relative to the front barrier impact test requirements of the current FMVSS No. 208 dated 11/19/03 and CMVSS No. 208 dated 7/24/03.

To provide windshield mounting retention data relative to the front barrier impact test requirements of the current FMVSS No. 212 dated 3/14/95 and CMVSS No. 212 dated 2/13/03.

To provide windshield protected zone data relative to the front barrier impact test requirements of the current FMVSS No. 219 dated 5/27/98 and CMVSS No. 219 dated 8/28/97.

**SUMMARY OF  
TEST RESULTS:**

- See Attachment 1 for injury criteria data.
- See Attachment 2 for windshield mounting retention data.
- See Attachment 3 for windshield protected zone intrusion and windshield penetration data.
- See Attachment 4 for vehicle observations and non-FMVSS data.

The Test Authorization for this crash indicated that the vehicle is representative of a design level suitable for a certification test. To the best of my knowledge, the crash testing was performed on the same vehicle as identified in the Test Authorization; the results reported herein represent the performance of this specific vehicle, and the testing was performed in accordance with the listed procedures. Any procedure deviations significant to the test objectives above are identified in this report.

J. Bias  
Product Test Engineer

Concur: J. Ng  
Section Supervisor  
Operations Engineering Section



**VEHICLE DATA:**

Make and Model 2005 Crown Victoria (EN114) 4-Door Sedan (Confirmation Prototype)

ID Numbers 2FDFP72943X [REDACTED], 516-H-674, FB530004

Power Train 4.6L, NGV, Automatic (4R70W) Transmission

Fuel Tank(s) Test Condition: Removed

Front Seat(s) Type: Split Bench  
Cover: Cloth  
Tracks/Position: LF: Power/Mechanical Mid and Down  
RF: Manual/Mechanical Mid  
Seat Backs/Position: Adjustable/LF: Not Measured  
RF: 22.7° Rear of Vertical  
Head Restraints/Position: Adjustable/Up

Restraint System LF: Steering Wheel Air Bag  
RF: 3-Point Continuous Loop Active Belt and Pyrotechnic Retractor  
Seatbelt remain latched during impact.

Occupants LF: 50th Percentile Male, Hybrid III, Uninstrumented No. 323  
RF: 50th Percentile Male, Hybrid III, Instrumented No. 321

Test Weight Front: 2371 lb (1075 kg)  
Rear: 2230 lb (1012 kg)  
Total: 4601 lb (2087 kg)  
The test weight includes:

- the "as received" unloaded vehicle curb weight
- Options which are expected to be on more than 33% of production vehicles (simulated)
- 2 occupant(s) (described above)
- 200 lb (90.7 kg) luggage (simulated)

Tires Front: P225/60R16 32 psi (221 kPa)  
Rear: P225/60R16 35 psi (241 kPa)  
Spare: Removed

Bumpers Front: Fascia/Beam  
Rear: Removed

Significant Content or Accessories: Air Conditioning, Power Steering, Power Brakes, Tilt Steering Wheel

**GENERAL TEST COMMENTS:**1. Test Procedure

The test was performed according to the following regulations, test protocols and the Corporate test procedure(s):

- Barrier Collision Test – Steering Column, Windshield, Fuel System, CETP 00.00-L-811-US (ST-14) dated August 27, 2001.
- Fixed Barrier Collision Test - Occupant Crash Protection, CETP 00.00-L-810-US (ST-25) dated August 27, 2001.

2. Significant Deviations from CETP 00.00-L-811-US (ST-14) and CETP 00.00-L-810-US (ST-25)

The fuel system did not contain stoddard.

3. Instrumentation: The instrumentation equipment set up for this test was completed following approved procedures which require engineering sign-off after each major step. The instrumentation equipment and systems used meet the SAE J211 June 80 series of recommended practices (Instrumentation for Impact Tests J211, J211a, or J211b) and were calibrated using secondary standards that are traceable to the National Institute of Standards and Technology (NIST).

4. Remarks

Crash movies, pre- and post- crash still images of the test vehicle and copies of this report are available through the Operations Engineering Section, Safety Laboratories Department, VEV. The crash still images are stored and archived on CD ROMs. The file names of the still images are listed under crash number and a three digit sequence number which are 14141001 through 14141072.

## ATTACHMENT 1

Occupant Injury Data (C/FMVSS 208)

	* <u>L. F. Dummy</u>	<u>R. F. Dummy</u>
Head Injury Criteria (HIC) @ 15 ms		35
Interval	t1	119 ms
	t2	134 ms
Head Injury Criteria (HIC) @ 36 ms		79
Interval	t1	102 ms
	t2	138 ms
Dummy Neck Upper Load:		
NTE		0.1616
NTF		0.2617
NCE		0.007233
NCF		0.0000
Chest resultant acceleration level at 3 ms cumulative duration		26 g
Chest Deflection (Hybrid III)		0.8 in
Peak axial compression load:		
Left femur		573 lb
Right femur		250 lb
Peak axial tension load:		
Left femur		54 lb
Right femur		43 lb
Dummy contained within the vehicle during the crash		Yes

## \* Uninstrumented Dummy

The dummy temperature, immediately prior to the test, was within the specified test range of 69°F to 72°F.

Time histories of the dummy instrumentation are archived on a storage media under the crash number/ and or the test authorization number.

**ATTACHMENT 2**Windshield Mounting Retention (C/FMVSS 212)

The total windshield mounting retention at ambient room temperature was 100%.

**ATTACHMENT 3****Windshield Zone Intrusion (C/FMVSS 219)**

Based on a review of the crash movie and post-crash observations it was judged that neither the windshield intrusion zone nor the windshield below the intrusion zone was penetrated by any part of the vehicle during the crash. No intrusion zone template was used.

## ATTACHMENT 4

### 1.0 Vehicle Crush, Film Analysis and/or Instrumentation Data

	Maximum Dynamic Longitudinal Crush	
	in.	(mm)
Left Side	11.5	(292)
Right Side	11.3	(287)

Time histories of the dummy dynamic displacements obtained from Film Analysis are archived on a storage media under the crash number/and or the test authorization number.

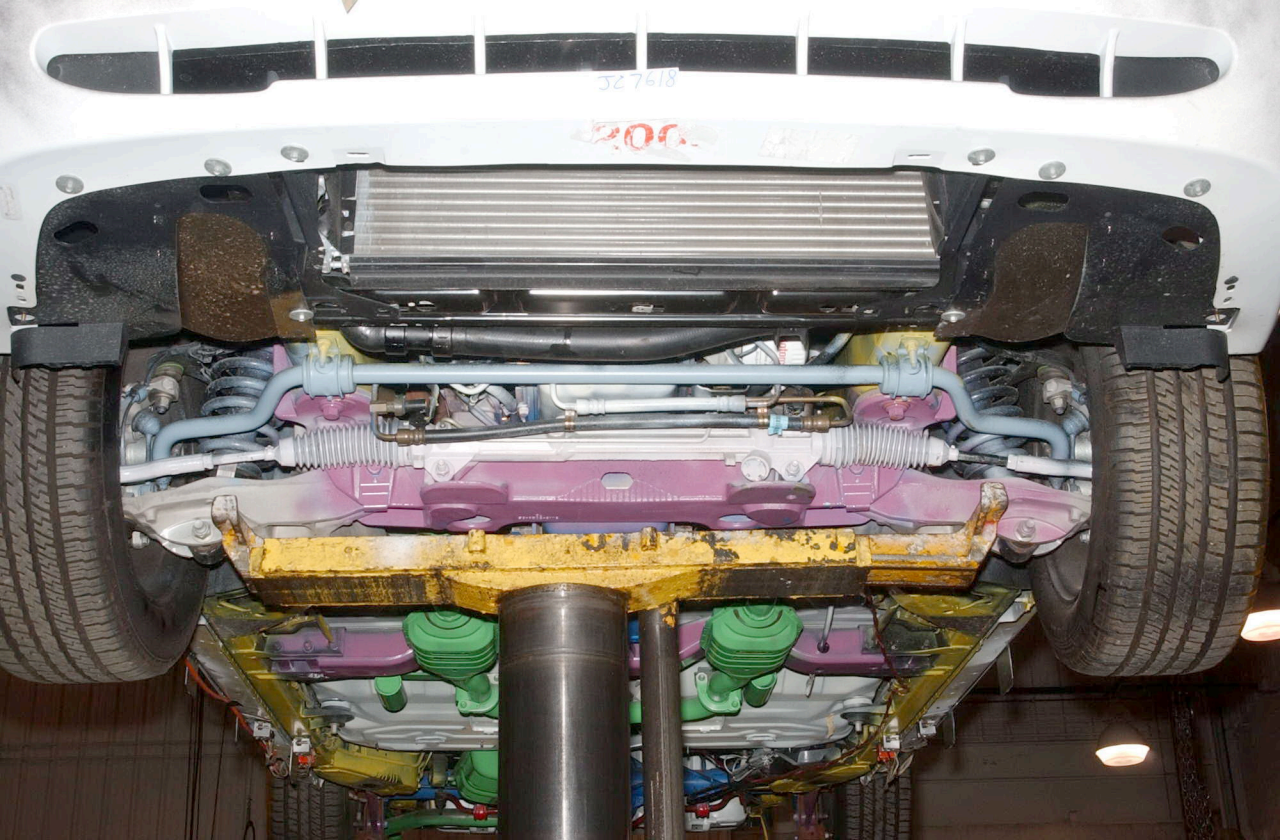
Time histories of the dummy dynamic displacements obtained from Film Analysis on the dummy shoulders are not archived on a storage media under the crash number/and or the test authorization number due to the dummy shoulders were below the door and not visible.

Time histories of the air bag/sensor(s) are archived on a storage media under the crash number/and or the test authorization number.

Time histories of the vehicle accelerations and other instrumentation are archived on a storage media under the crash number/and or the test authorization number.

Time histories of vehicle dynamic displacements obtained from Film Analysis are archived on a storage media under the crash number/and or the test authorization number.

Time histories of any requested derived data (i.e. integrations, etc.) were given to the requesting activity and are not included in this report.



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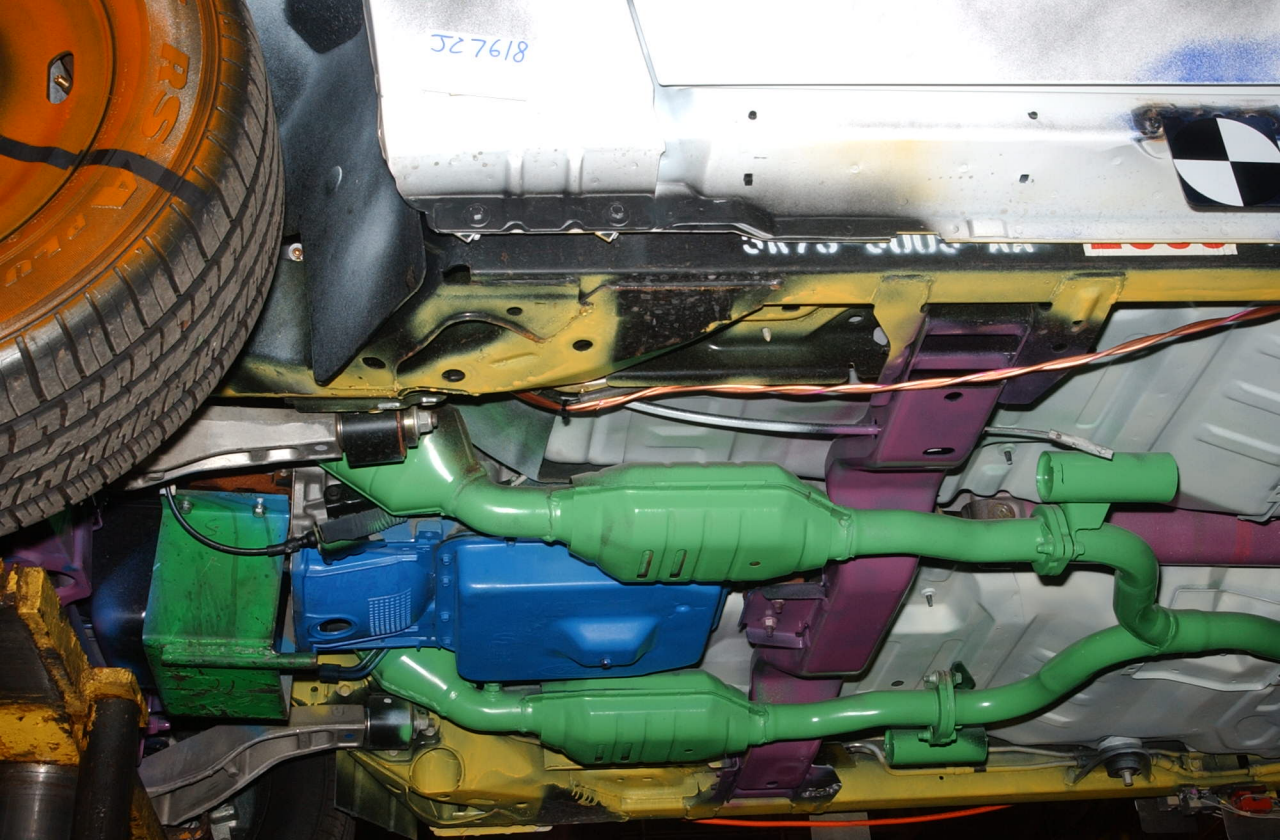
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Motorcraft



819225





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JC 7618

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14141

EXIT

PHOTO PIT  
OCCUPIED



EXIT

JC 7618

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GOODYEAR

E-150/AMBI



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5TG-674

Yellow and red tag with illegible text

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37618  
11/17/02  
819

Shayla Winters  
11/17/02



















NO POST DA

JC 76

32.852  
28/721

28/721  
32.852

PASS/6001A



7618  
724mm





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516-1574

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JC768

14141

PLEASE, DO NOT  
DAMAGE DOOR.  
VEHICLE WILL BE  
RENTED.

A.A. Data

JC768  
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171171  
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FLY TO LIVERMONT





AIR BAG NOT CONNECTED  
2 OHM TURBOINTER.  
DEO 1/21

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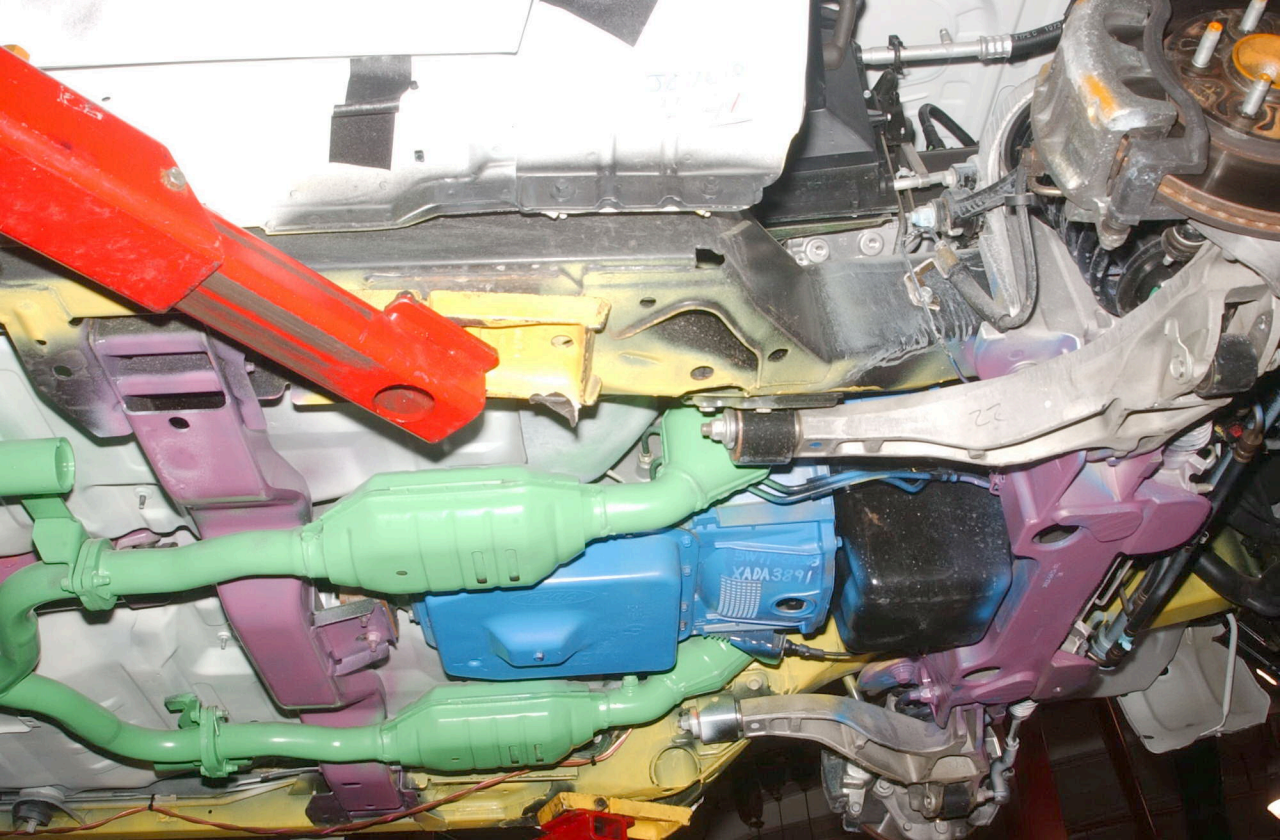




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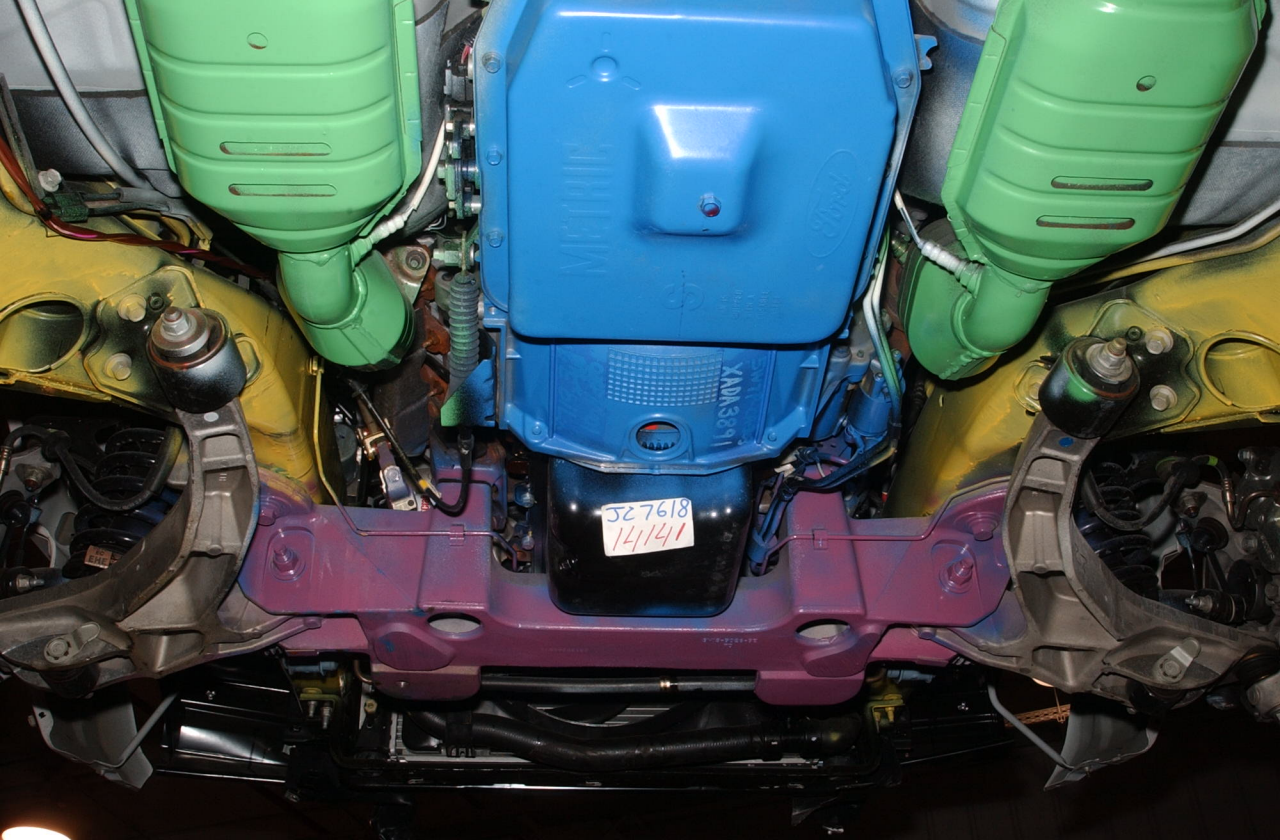




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YAMAHA  
YAMAHA MOTOR CO. LTD.

METRIC

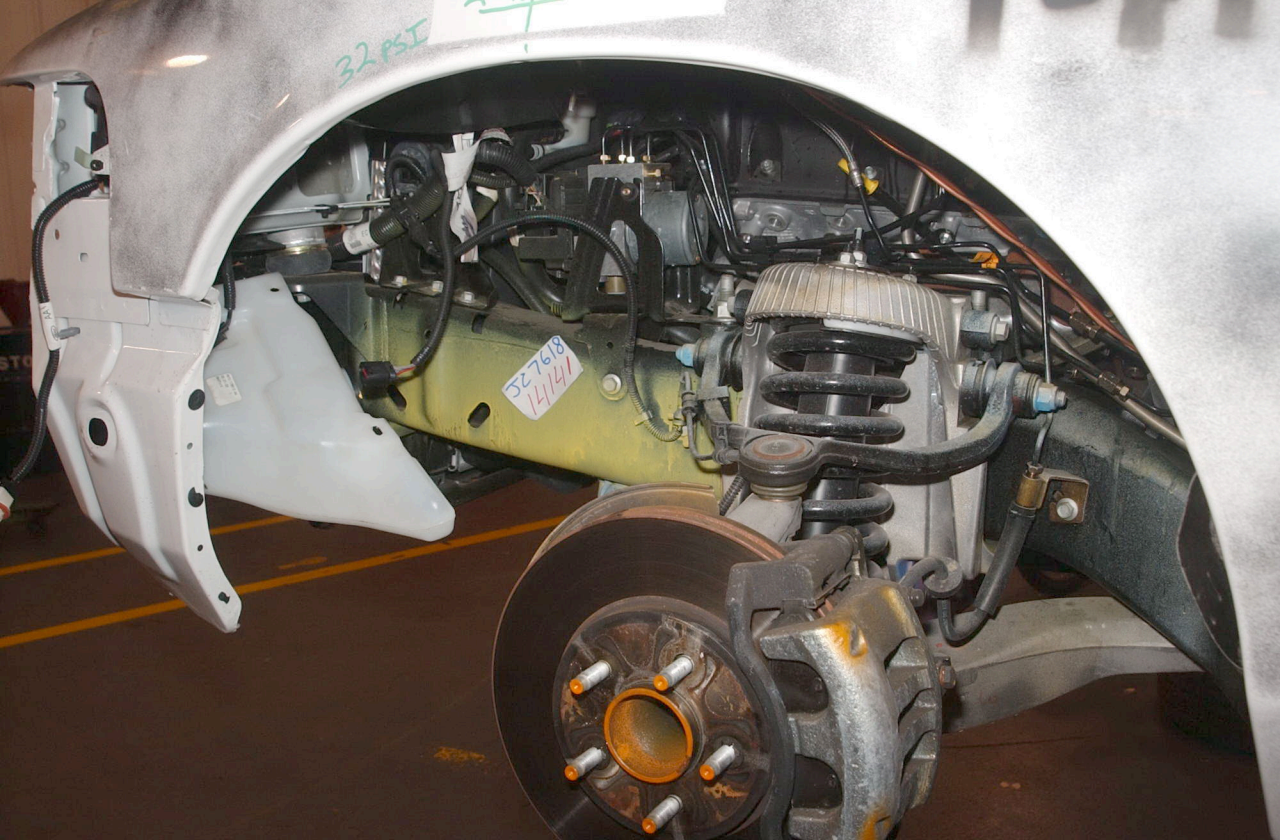
32 PSI

28 1/8" / 721mm

14141

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81235





32 PSI

52768  
1/1/14



141141

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32 PSI

11111  
819725



SC 1918  
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PE12-025

FORD

11/9/2012

APPENDIX K

PE12-025

FORD

11/9/2012

APPENDIX K

Process Number FRC 03330



ASSM STNG COLUMN COLLAR TO DASH PANEL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2005/03/16	PC	1994/10/08	2005/03/16	L	

Reference Manuals  
 F AC-110401-01 F AC-110401-02

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110401	STEERING COLUMN				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against Replaces Replaced By	CFB	2005.50	F R C 3330	1	0			

Associated Plants	Staff Assigned	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	ALL Chassis	F	1994/10/08	2005/03/16

Remark  
OK-PVT

Ele # 10 OBTAIN (1) STEERING COLUMN COLLAR FROM STOCK. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM				
1W73 3F567 AA NC00 110401 000 C COLLAR ASY-STRG COL INSULATOR				1.00	EA	1W73 3F567 AA NC00 110401 000 C COLLAR ASY-STRG COL INSULATOR				1.00	EA				
1W73 3F567 AA NC00 110401 000 C COLLAR ASY-STRG COL INSULATOR					VQ										

Ele # 20 INSERT STEERING COLUMN COLLAR OVER (2) EXISTING DASH PANEL STUDS (AT HOLE FOR STEERING COLUMN SHAFT). Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
Revision Log		Date		Description / Addenda		Current Ele #		Previous Ele #							
		2005/01/03 20:44		GC Process Owner Revised, Prior Owner Was KTHOMSO2											

**ASSM STNG COLUMN COLLAR TO DASH PANEL**

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	A 2005/03/16	PC	2005/03/16		L	

Reference Manuals  
 F AC-110401-01 F AC-110401-02

Process CPSC's			Responsible PMT's			
Primary	Code	Description	PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	Steering Column and Shaft				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	1995.00	F R C 3330	1	0			
Varianted Against	CFB	1995.00	F R C 3330	1	0			
Replaces	CFB	1995.00	F R C 3330	1	0			
Replaced By								

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2005/03/16	

Remark  
OK-PVT

Ele #	Remark	Plants
10	OBTAIN (1) STEERING COLUMN COLLAR FROM STOCK. Remark	STH

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
2W73 3F567 AA NC00 110401 000 C COLLAR ASY-STRG COL INSULATOR				1.00	EA						

Ele #	Remark	Plants
20	INSERT STEERING COLUMN COLLAR OVER (2) EXISTING DASH PANEL STUDS (AT HOLE FOR STEERING COLUMN SHAFT). Remark	STH

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																



ASSM STNG COLUMN COLLAR TO DASH PANEL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	A 2005/03/16	PC	2005/03/16		L	

Reference Manuals  
 F AC-110401-01 F AC-110401-02

Primary	Code	ALL Description	Responsible PMT's			
			PMT	Program	Model Year	ALL Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	RESERVED				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	1995.00	F R C 3330	1	0			
Varianced Against	CFB	1995.00	F R C 3330	1	0			
Replaces	CFB	1995.00	F R C 3330	1	0			
Replaced By								

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2005/03/16	

Remark  
OK-PVT

Ele # 10 OBTAIN (1) STEERING COLUMN COLLAR FROM STOCK. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
2W73 3F567 AA NC00 110401 000 C				1.00	EA						
COLLAR ASY-STRG COL INSULATOR											

Ele # 20 INSERT STEERING COLUMN COLLAR OVER (2) EXISTING DASH PANEL STUDS (AT HOLE FOR STEERING COLUMN SHAFT). Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

No Secure Templates associated with Tools of this Process

Revision Log

Date	Description / Addenda	Current Ele #	Previous Ele #
2008/08/06 10:06	GC Process Owner Revised, Prior Owner Was SROZANSK		
2008/08/15 13:05	GC Process Owner Revised, Prior Owner Was JMCALP1		

PE12-025

FORD

11/9/2012

APPENDIX K

Process Number FRC 03440

ASSM. STRNG. COLUMN TO CROSS CAR BEAM

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2006/03/15	DE	2004/07/19	2006/03/15	L	

Reference Manuals  
 F AC-110401-01 F AC-110401-02

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2000.00	F R C 3440	1	0			
Varianced Against	CFB	2004.00	F R C 3440	1	0			
Replaces	CFB	2004.00	F R C 3440	1	0			
Replaced By	CFB	2006.50	F R C 3440	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2004/07/19	2006/03/15

Remark  
 REV FOR 2005

Ele # 5 ALIGN (4) STEERING COLUMN ATTACHING SLOTS WITH (4) STUDS ON I/P CROSS BEAM. Plants : STH  
 Remark

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

Ele # 10 PUSH COLUMN ONTO STUDS. Plants : STH  
 Remark

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

Ele # 17 OBTAIN (3) NUTS FROM STOCK. Plants : STH  
 Remark  
 \* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION \*

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806423 S424 N000 110401 000 C				4.00	EA						
NUT & WASHER - M8 X 1.25 HEX P/T											



<b>ASSM. STRNG. COLUMN TO CROSS CAR BEAM</b>							
Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA	
N	D 2006/03/15	DE	2004/07/19	2006/03/15	L		

Reference Manuals	F AC-110401-01	F AC-110401-02
-------------------	----------------	----------------

<b>Process CPSC's</b>		<b>Responsible PMT's</b>				
Primary	Code	Description	PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	Steering Column and Shaft				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2000.00	F R C 3440	1	0			
Varianted Against	CFB	2004.00	F R C 3440	1	0			
Replaces	CFB	2004.00	F R C 3440	1	0			
Replaced By	CFB	2006.50	F R C 3440	1	0			

<b>Associated Plants</b>	<b>Staff Assigned ALL</b>	<b>Effectivity Type</b>	<b>Eff In Date</b>	<b>Eff Out Date</b>
STH ST. THOMAS ASSEMBLY	Chassis	J	2004/07/19	2006/03/15

Remark  
REV FOR 2005

<b>Ele #</b>	<b>ALIGN (4) STEERING COLUMN ATTACHING SLOTS WITH (4) STUDS ON I/P CROSS BEAM.</b>	<b>Plants</b>	: STH
5	Remark		
<b>Element UCC's</b>	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

<b>Ele #</b>	<b>PUSH COLUMN ONTO STUDS.</b>	<b>Plants</b>	: STH
10	Remark		
<b>Element UCC's</b>	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

<b>Ele #</b>	<b>OBTAIN (3) NUTS FROM STOCK.</b>	<b>Plants</b>	: STH
17	Remark * CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION *		
<b>Element UCC's</b>	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

<b>C/S Part/Description</b>	<b>Status</b>	<b>Side Quantity</b>	<b>UOM</b>	<b>Side Quantity</b>	<b>UOM</b>	<b>C/S Part/Description</b>	<b>Status</b>	<b>Side Quantity</b>	<b>UOM</b>	<b>Side Quantity</b>	<b>UOM</b>
N806423 S424 NC00 110401 000 C				4.00	EA						
NUT & WASHER - M8 X 1.25 HEX P/T											

<b>Ele #</b>	<b>HANDSTART (1) (BOTTOM) NUT ONTO I/P CAR BEAM STUDS.</b>	<b>Plants</b>	: STH
20	Remark * NOTE: 1 NUT IS USED TO TILT COLUMN TOWARD OPERATOR IN ORDER TO INSTALL PRNDL BRACKET * NOTE: THE 4TH NUT IS ATTACHED ON PROCESS CX3750.		
<b>Element UCC's</b>	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			



Element UCC's  
CFB-----  
CFP-----

Ele # HANDSTART (2) (REMAINING) NUTS ONTO I/P CAR BEAM STUDS

Plants : STH

25 Remark  
NOTE: 4TH NUT IS ATTCHED DURING INSTALL OF PARK BRAKE BRACE.

C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N

Element UCC's  
CFB-----  
CFP-----

Ele # SECURE (3) NUTS TO SPECIFIED TORQUE USING POWER TOOL.

Plants : STH

30 Remark  
\* CONTROL ITEM: TORQUE CONTROL \*  
\* NOTE: TIGHTEN (2) AFT NUTS FIRST THEN FRONT NUT.

C/S C Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
CFB-----  
CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N10T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	30.00	4.50							
						3H13M19H19B38 SKT,3/8SQDR,13MM 6PT,38.1MM OAL	1	0.00	0.00		

ASSM. STRNG. COLUMN TO CROSS CAR BEAM

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2007/05/01	PC	2006/03/15	2007/05/01	L	

Reference Manuals  
 F AC-110401-01 F AC-110401-02

Process CPSC's	Primary	Code	ALL Description	Responsible PMT's			ALL Description
				PMT	Program	Model Year	
Y		110400	Steering Column Subsystem				
N		110401	STEERING COLUMN				
N		110402	RESERVED				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2005.00	F R C 3440	1	0			
Varianced Against	CFB	2005.00	F R C 3440	1	0			
Replaces	CFB	2005.00	F R C 3440	1	0			
Replaced By	CFB	2008.00	F R C 3440	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2006/03/15	2007/05/01

Remark  
 REV FOR 2005

Ele # 5 ALIGN (4) STEERING COLUMN ATTACHING SLOTS WITH (4) STUDS ON I/P CROSS BEAM. Plants : STH  
 Remark

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

Ele # 10 PUSH COLUMN ONTO STUDS. Plants : STH  
 Remark

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

Ele # 17 OBTAIN (3) NUTS FROM STOCK. Plants : STH  
 Remark  
 \* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION \*

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806423 S424 NC00 110401 000 C NUT & WASHER - M8 X 1.25 HEX P/T		4.00	EA	N806423 S424 NC00 110401 004 C NUT & WASHER - M8 X 1.25 HEX P/T		4.00	EA				

Ele # 20 HANDSTART (1) (BOTTOM) NUT ONTO I/P CAR BEAM STUDS. Plants : STH  
 Remark  
 \* NOTE: 1 NUT IS USED TO TILT COLUMN TOWARD OPERATOR IN ORDER TO INSTALL PRNDL BRACKET  
 \* NOTE: THE 4TH NUT IS ATTACHED ON PROCESS CX3750.  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 Element UCC's  
 CFB-----  
 CFP-----

Ele # 25 HANDSTART (2) (REMAINING) NUTS ONTO I/P CAR BEAM STUDS. Plants : STH  
 Remark  
 NOTE: 4TH NUT IS ATTACHED DURING INSTALL OF PARK BRAKE BRACE.  
 C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N  
 Element UCC's  
 CFB-----  
 CFP-----

Ele # 30 SECURE (3) NUTS TO SPECIFIED TORQUE USING POWER TOOL. Plants : STH  
 Remark  
 \* CONTROL ITEM: TORQUE CONTROL \*  
 \* NOTE: TIGHTEN (2) AFT NUTS FIRST THEN FRONT NUT.  
 C/S C Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 Element UCC's  
 CFB-----  
 CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N10 -1T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	30.00	4.50			3H13M19H19B38 SKT,3/8SQDR,13MM 6PT,38.1MM OAL	1	0.00	0.00	

No Secure Templates associated with Tools of this Process

Revision Log		Date	Description / Addenda	Current Ele #	Previous Ele #
		2007/02/14 12:07	Part Added to the Element N806423 S424 NC00 110401 4 NC00 E 11830558 20	17	

Revision Log Comments		Date	Recorded by	Comments
		2007/05/11 18:09	OPSSGSOP	PT-3 TOOLING CONVERSION: REASSIGNED PROCESS OWNER FROM PREVIOUS REVISION

ASSM. STRNG. COLUMN TO CROSS CAR BEAM

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	A 2007/02/14	PC	2007/05/01		L	

Reference Manuals  
 F AC-110401-01 F AC-110401-02

Primary	Code	ALL Description	Responsible PMT's			
			PMT	Program	Model Year	ALL Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	RESERVED				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2006.50	F R C 3440	1	0			
Varianced Against	CFB	2006.50	F R C 3440	1	0			
Replaces	CFB	2006.50	F R C 3440	1	0			
Replaced By								

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2007/05/01	

Remark  
 MERGED LINCOLN USAGE INTO THIS PROCESS FOR 2008

Ele #	ALIGN (4) STEERING COLUMN ATTACHING SLOTS WITH (4) STUDS ON I/P CROSS BEAM	Plants
5	Remark	: STH
	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N	
Element UCC's		
CFB-----		
CFP-----		
CVC-----		

Ele #	PUSH COLUMN ONTO STUDS	Plants
10	Remark	: STH
	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N	
Element UCC's		
CFB-----		
CFP-----		
CVC-----		

Ele #	OBTAIN (3) NUTS FROM STOCK	Plants
17	Remark	: STH
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION *	
	C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N	
Element UCC's		
CFB-----		
CFP-----		
CVC-----		

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806423 S424	NC00	110401	000	C	3.00	EA					
NUT & WASHER - M8 X 1.25 HEX P/T											



PE12-025

FORD

11/9/2012

APPENDIX K

Process Number FRC 03580

LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2004/09/17	PC	2004/08/17	2004/09/17	L	

Reference Manuals  
F VC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2005.00	F R C 3580	1	0			
Varianced Against	CFB	2005.00	F R C 3580	1	0			
Replaces	CFB	2005.00	F R C 3580	1	0			
Replaced By	CFB	2005.00	F R C 3580	3	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/08/17	2004/09/17

Remark  
REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS

Ele # 10 OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK. Plants : STH

Remark  
\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.  
INSTALL AS SHOWN

Element UCC's	C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
C 5W13 3F728 AC NC00 110401 000 C EXT ASY-STNG COL SHFT				1.00	EA						

Ele # 20 OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK. Plants : STH

Remark

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT. Plants : STH

Remark

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP-----																





6 IN. EXTENSION

Ele # 90 ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 100 INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 110 OBTAIN (1) BOLT FROM STOCK. Plants : STH  
 Remark

\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 120 INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 130 TIGHTEN BOLT WITH POWERTOOL. Plants : STH  
 Remark

\* CONTROL ITEM: TORQUE CONTROL

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	3H15M20H20M38	1				C	CA N10T	1	30.00	5.00	
	SKT,3/8SQDR,15MM 6PT,38.1MM OAL,MAGNETIC						RT ANGLE NUTRUNNER TORQUE SHUT OFF				

Revision Log

Date	Description / Addenda	Current Ele #	Previous Ele #
2004/08/17 00:00	Causal Code Given As Reason for the Revision PROCESSCLARIFICATION		
2004/08/17 00:00	Process Was Completed By BGJORGJE		
2004/08/17 00:00	Element Remark Revised = NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY. WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY. < NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY.	85	
2004/08/17 00:00	Part Deleted from the Element N806385 S424 WPTS 031801 0 WPTS E 11491391 0	70	
2004/08/17 00:00	Part Deleted from the Element	70	

N806385 S424 WPTS 031801 0 WPTS E 11356462 11

Notice Number				Station	Critical Elements	Significant Elements	Primary CPSC	110400	Illustrations	0	Process Number
Family	Model Year	Revision	Copy	Concern Number	Study / Alternative	C/N	Status				F R C 03580
CFB	2005.00	2	0				D				Page 4 (Last)
								LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL			

LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2005/07/29	PC	2004/10/01	2005/07/29	L	

Reference Manuals  
F VC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2005.00	F R C 3580	3	0			
Varianced Against	CFB	2005.00	F R C 3580	3	0			
Replaces	CFB	2005.00	F R C 3580	3	0			
Replaced By	CFB	2005.50	F R C 3580	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/10/01	2005/07/29

Remark  
REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS

Ele # 10 OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK. Plants : STH

Remark  
\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.  
INSTALL AS SHOWN

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
3W13 3F728 AB NC00 110401 000 C EXT ASY-STNG COL SHFT				1.00	EA	5W13 3F728 AC NC00 110401 000 C EXT ASY-STNG COL SHFT				1.00	EA

Ele # 20 OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

Ele # 40 POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT. Plants : STH  
 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 50 INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL. Plants : STH  
 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 60 INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS. Plants : STH  
 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 70 OBTAIN (2) NUTS FROM STOCK. Plants : STH  
 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 80 HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS. Plants : STH  
 Remark  
 \* NOTE: NUTS SECURED IN PROCESS CI3280.

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 85 TIGHTEN (2) {LOOSE ASSEMBLED} NUTS {ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL}. Plants : STH  
 Remark  
 NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY. WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY.

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	2H10M10H16B28	1				CA N 5T		1	10.50		1.60
	SKT,1/4SQDR, 10MM, HEX, 16MM O.D., STD LENGTH					RT ANGLE NUTRUNNER TORQUE SHUT OFF					
	CMPPS00052485	1									
	6 IN. EXTENSION										



2004/10/01 00:00	KTHOMSO2 Part Deleted from the Element N806385 S424 WPTS 031801 0 WPTS E 11427227 12	70
2004/10/19 20:37	Part Added to the Element 3W13 3F728 AB NC00 110401 0 NC00 E 11427227 62	10
2004/10/19 20:37	Part Added to the Element 5W13 3F728 AC NC00 110401 0 NC00 E 11427227 70	10
2004/10/19 20:37	Part Added to the Element 5W13 3F728 AC NC00 110401 0 NC00 E 11427227 91	10

LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2006/03/20	DE	2005/08/02	2006/03/20	L	

Reference Manuals  
F VC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2005.00	F R C 3580	4	0			
Varianced Against	CFB	2005.00	F R C 3580	4	0			
Replaces	CFB	2005.50	F R C 3580	1	0			
Replaced By	CFB	2006.50	F R C 3580	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2005/08/02	2006/03/20

Remark  
REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS  
2006 - ADD HEX FREE FASTENERS

Ele # 10 OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK. Plants : STH

Remark  
\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.  
INSTALL AS SHOWN

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM				
C 5W13 3F728 AC EXT ASY-STNG COL SHIFT	NC00	110401	000	C	1.00	EA									

Ele # 20 OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

Ele # 40 POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT. Plants : STH  
 Remark  
 Element UCC's C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 50 INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL. Plants : STH  
 Remark  
 Element UCC's C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 60 INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS. Plants : STH  
 Remark  
 Element UCC's C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 70 OBTAIN (2) NUTS FROM STOCK. Plants : STH  
 Remark  
 Element UCC's C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806385 S424 NC00 110401	000 C			2.00	EA						
NUT&WASHER-M6X1.0 HEX (PAINT SCRIP)											

Ele # 80 HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS. Plants : STH  
 Remark  
 \* NOTE: NUTS SECURED IN PROCESS CI3280.  
 Element UCC's C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 85 TIGHTEN (2) {LOOSE ASSEMBLED} NUTS {ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL}. Plants : STH  
 Remark  
 NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY. WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY.  
 Element UCC's C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
2H10M10H16B28	1				CA N 5T	1	10.50		1.60
SKT,1/4SQDR, 10MM, HEX, 16MM O.D., STD LENGTH					RT ANGLE NUTRUNNER TORQUE SHUT OFF				
CMPPS00052485	1								



6 IN. EXTENSION

Ele # 90 ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 100 INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 110 OBTAIN (1) BOLT FROM STOCK. Plants : STH  
 Remark

\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 120 INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE. Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 125 HANDSTART (1) BOLT Plants : STH  
 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

Ele # 130 TIGHTEN BOLT WITH POWERTOOL. Plants : STH  
 Remark

\* CONTROL ITEM: TORQUE CONTROL

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's															
CFB-----															
CFP-----															

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	3H15M20H20M38	1				C	CA N10T	1	30.00	5.00	
	SKT,3/8SQDR,15MM 6PT,.38.1MM OAL,MAGNETIC						RT ANGLE NUTRUNNER TORQUE SHUT OFF				

Revision Log

Date	Description / Addenda	Current Ele #	Previous Ele #
2005/07/29 00:00	Causal Code Given As Reason for the Revision		

2005/07/29 00:00	DESIGN CHANGE NC00 E 11427227 301	
	Process Was Completed By	
	DKOSTIC	
2005/07/29 00:00	Critical/Significant Code Revised	110
	From : " To : 'C'	
2005/07/29 00:00	Part Deleted from the Element	10
	3W13 3F728 AB NC00 110401 0 NC00 E 11427227 62	
2005/07/29 00:00	Part Deleted from the Element	10
	5W13 3F728 AC NC00 110401 0 NC00 E 11427227 52	
2005/07/29 00:00	Part Deleted from the Element	10
	5W13 3F728 AC NC00 110401 0 NC00 E 11427227 70	
2005/07/29 00:00	Part Deleted from the Element	70
	N806385 S58 NC00 110401 0 NC00 E 11307832 6	
2005/07/29 00:00	Part Deleted from the Element	70
	N806385 S58 NC00 110401 0 NC00 E 11427227 301	
2005/07/29 00:00	Part Deleted from the Element	110
	N803942 S101 NC00 110401 2 NC00 E 11622207 0	
2005/07/29 00:00	Part Added to the Element	110
	W710820 S306 NC00 110401 2 NC00 E 11579527 59	
2005/07/29 00:00	A process revision was inserted prior to this rev. CFB,2005.5,FRC03580,1,0,,,,,, was inserted	

LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2006/03/20	DE	2005/08/02	2006/03/20	L	

Reference Manuals  
F VC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110400	Steering Column Subsystem				
N	110401	Steering Column and Shaft				
N	110402	Steering Column Shift Lever and Shift Lever Boot				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianted Against	CFB	2005.00	F R C 3580	4	0			
Replaces	CFB	2005.50	F R C 3580	1	0			
Replaced By	CFB	2006.50	F R C 3580	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2005/08/02	2006/03/20

Remark  
REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS  
2006 - ADD HEX FREE FASTENERS

Ele # 10 OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK. Plants : STH

Remark  
\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.  
INSTALL AS SHOWN

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	Side Quantity	UOM	Side Quantity	UOM
C 5W13 3F728 AC NC00 110401 000 C				1.00	EA										
EXT ASY-STNG COL SHFT															

Ele # 20 OBTAIN (1) EXTENSION SHAFT BOOT {AND RETAINER} FROM STOCK. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	Side Quantity	UOM	Side Quantity	UOM
2W73 3E735 AA NC00 110401 000 C				1.00	EA										
BOOT ASY-STNG COL															

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB-----															

CFP-----  
 Ele # POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT. Plants : STH  
 40 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL. Plants : STH  
 50 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS. Plants : STH  
 60 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # OBTAIN (2) NUTS FROM STOCK. Plants : STH  
 70 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806385 S424 NC00 110401	000 C			2.00	EA	NUT&WASHER-M6X1.0 HEX (PAINT SCRIP)					

Ele # HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS. Plants : STH  
 80 Remark  
 \* NOTE: NUTS SECURED IN PROCESS CI3280.  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # TIGHTEN (2) (LOOSE ASSEMBLED) NUTS (ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL). Plants : STH  
 85 Remark  
 NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY. WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY.  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N

C/S Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
2H10M10H16B28 SKT,1/4SQDR, 10MM, HEX, 16MM O.D., STD LENGTH	1				CA N 5T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	10.50	1.60	
CMPPS00052485 6 IN. EXTENSION	1								

Ele # 90 ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT. Plants : STH  
 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 100 INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT. Plants : STH  
 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 110 OBTAIN (1) BOLT FROM STOCK. Plants : STH  
 Remark  
 \* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION  
 Element UCC's  
 C/S C Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM	C/S Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM
C W710820 S306 NC00 110401 002 C						1.00									
BOLT M10X35 HF ADH 10															

Ele # 120 INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE. Plants : STH  
 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 125 HANDSTART (1) BOLT Plants : STH  
 Remark  
 Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # 130 TIGHTEN BOLT WITH POWERTOOL. Plants : STH  
 Remark  
 \* CONTROL ITEM: TORQUE CONTROL  
 Element UCC's  
 C/S C Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
3H15M20H20M38	1				C CA N10T	1	30.00	5.00	
SKT,3/8SQDR,15MM 6PT,38.1MM OAL,MAGNETIC					RT ANGLE NUTRUNNER TORQUE SHUT OFF				

Revision Log		Date	Description / Addenda	Current Ele #	Previous Ele #
		2006/02/25 10:20	Part Added to the Element N806385 S424 NC00 110401 0 NC00 E 11631322 62	70	



LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2008/01/04	PC	2006/03/20	2008/01/04	L	

Reference Manuals  
F VC-110401-01

Primary	Code	ALL Description	Responsible PMT's			
			PMT	Program	Model Year	ALL Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	RESERVED				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2006.00	F R C 3580	1	0			
Varianced Against	CFB	2006.00	F R C 3580	1	0			
Replaces	CFB	2006.00	F R C 3580	1	0			
Replaced By	CFB	2008.00	F R C 3580	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2006/03/20	2008/01/04

Remark  
REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS  
2006 - ADD HEX FREE FASTENERS

Ele # 10 OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK. Plants : STH

Remark  
\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.  
INSTALL AS SHOWN

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM				
C 5W13 3F728 AC EXT ASY-STNG COL SHIFT	NC00	110401	000	C	1.00	EA									

Ele # 20 OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM				
2W73 3E735 AA BOOT ASY-STNG COL	NC00	110401	000	C	1.00	EA									

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT. Plants : STH

Remark





C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	2H10M10H16B28 SKT,1/4SQDR, 10MM, HEX, 16MM O.D., STD LENGTH	1					CA N 6 -2T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	10.50	1.60	
	CMPPS00052485 6 IN. EXTENSION	1									

Ele # 90 ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT. Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Ele # 100 INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT. Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Ele # 110 OBTAIN (1) BOLT FROM STOCK. Remark Plants : STH

\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION

Element UCC's  
CFB-----  
CFP-----

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
C W710820 S306 NC00 110401 002 C BOLT M10X35 HF ADH 10				1.00							

Ele # 120 INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE. Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Ele # 125 HANDSTART (1) BOLT Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N

Ele # 130 TIGHTEN BOLT WITH POWERTOOL. Remark Plants : STH

\* CONTROL ITEM: TORQUE CONTROL

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Element UCC's

CFB-----  
CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	3H15M20H20M38	1				C	CA N10 -IT	1	30.00	5.00	
	SKT,3/8SQDR,15MM 6PT,.38.1MM OAL,MAGNETIC						RT ANGLE NUTRUNNER TORQUE SHUT OFF				

No Secure Templates associated with Tools of this Process

Revision Log			Current Ele #	Previous Ele #
Date	Description / Addenda			
2007/02/14 12:06	Part Added to the Element N806385 S424 NC00 110401 0 NC00 E 11830558 20		70	
2007/02/14 12:07	Part Added to the Element W710820 S306 NC00 110401 2 NC00 E 11830558 20		110	
2007/02/14 12:09	Part Added to the Element 5W13 3F728 AC NC00 110401 0 NC00 E 11830558 21		10	
2007/02/14 12:09	Part Claimed for New WERS Release 5W13 3F728 AC NC00 110401 0 NC00 E 11830558 21		10	
2007/02/17 10:34	Part Added to the Element 2W73 3E735 AA NC00 110401 0 NC00 E 11830558 22		20	

Revision Log Comments

Date	Recorded by	Comments
2007/05/11 18:09	OPSS\$G\$OP	PT-3 TOOLING CONVERSION: REASSIGNED PROCESS OWNER FROM PREVIOUS REVISION

LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2008/01/04	PC	2006/03/20	2008/01/04	L	

Reference Manuals  
F VC-110401-01

Primary	Code	ALL Description	Responsible PMT's			
			PMT	Program	Model Year	ALL Description
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				
N	110402	RESERVED				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2006.00	F R C 3580	1	0			
Varianced Against	CFB	2006.00	F R C 3580	1	0			
Replaces	CFB	2006.00	F R C 3580	1	0			
Replaced By	CFB	2008.00	F R C 3580	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2006/03/20	2008/01/04

Remark  
REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS  
2006 - ADD HEX FREE FASTENERS

Ele # 10 OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK. Plants : STH

Remark  
\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.  
INSTALL AS SHOWN

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM				
C 5W13 3F728 AC EXT ASY-STNG COL SHIFT	NC00	110401	000	C	1.00	EA									

Ele # 20 OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK. Plants : STH

Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM				
2W73 3E735 AA BOOT ASY-STNG COL	NC00	110401	000	C	1.00	EA									

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT. Plants : STH

Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----  
 Ele # POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT. Plants : STH  
 40 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----  
 Ele # INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL. Plants : STH  
 50 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----  
 Ele # INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS. Plants : STH  
 60 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----  
 Ele # OBTAIN (2) NUTS FROM STOCK. Plants : STH  
 70 Remark

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806385 S424 NC00 110401 000 C NUT&WASHER-M6X1.0 HEX (PAINT SCRIP)				2.00	EA						

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----  
 Ele # HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS. Plants : STH  
 80 Remark  
 \* NOTE: NUTS SECURED IN PROCESS CI3280.

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N  
 CFB-----  
 CFP-----  
 Ele # TIGHTEN (2) {LOOSE ASSEMBLED} NUTS (ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL). Plants : STH  
 85 Remark  
 NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY. WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY.

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	2H10M10H16B28 SKT, 1/4SQDR, 10MM, HEX, 16MM O.D., STD LENGTH	1					CA N 6 -2T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	10.50	1.60	
	CMPPS00052485 6 IN. EXTENSION	1									

Ele # 90 ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT. Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Ele # 100 INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT. Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Ele # 110 OBTAIN (1) BOLT FROM STOCK. Remark Plants : STH

\* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION

Element UCC's  
CFB-----  
CFP-----

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
C W710820 S306 NC00 110401 002 C BOLT M10X35 HF ADH 10				1.00							

Ele # 120 INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE. Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Ele # 125 HANDSTART (1) BOLT Remark Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N

Ele # 130 TIGHTEN BOLT WITH POWERTOOL. Remark Plants : STH

\* CONTROL ITEM: TORQUE CONTROL

C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N

Element UCC's

CFB-----  
CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	3H15M20H20M38 SKT,3/8SQDR,15MM 6PT,38.1MM OAL,MAGNETIC	1				C	CA N10 -1T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	30.00	5.00	

No Secure Templates associated with Tools of this Process

Revision Log

Date	Description / Addenda	Current Ele #	Previous Ele #
2008/07/01 10:33	GC Process Owner Revised, Prior Owner Was BGJORGJE		

Revision Log Comments

Date	Recorded by	Comments
2007/05/11 18:09	OPSSGSOP	PT-3 TOOLING CONVERSION: REASSIGNED PROCESS OWNER FROM PREVIOUS REVISION

ASSEMBLE COLUMN EXT SHAFT TO COLUMN BOOT AND SECURE TO STEERING COLUMN

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	A 2008/01/04	PC	2008/01/04		L	

Reference Manuals  
F VC-110401-01

Primary	Code	ALL Description	Responsible PMT's			ALL Description
			PMT	Program	Model Year	
Y	110400	Steering Column Subsystem				
N	110401	STEERING COLUMN				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2006.50	F R C 3580	1	0			
Replaces	CFB	2006.50	F R C 3580	1	0			
Replaced By								

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2008/01/04	

Remark  
 \*DEACTIVATE FRZ 3580 TO THIS SHEET. ADD CVC - REV 2. 01/04/08  
 \*REVISE FOR 2005 MY. NEW M10 FASTENER FOR EXT SHAFT TO COLUMN  
 \*ADD - FLAG VEHICLE FOR NON SECURED BOOT NUTS  
 \*2006 - ADD HEX FREE FASTENERS

Ele #	Remark	Plants
10	OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK *NO PART OMISSION OR SUBSTITUTION. *INSTALL AS SHOWN.	STH

Element UCC's	C/S	C	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP----- CVC-----																

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
C 5W13 3F728 AC NC00 110401 000 C EXT ASY-STNG COL SHFT				1.00	EA						

Ele #	Remark	Plants
20	OBTAIN (1) EXTENSION SHAFT BOOT {AND RETAINER} FROM STOCK	STH

Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB----- CFP----- CVC-----																

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
2W73 3E735 AA NC00 110401 000 C BOOT ASY-STNG COL				1.00	EA						

Ele # 30 INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT Plants : STH  
 Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # 40 POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT Plants : STH  
 Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # 50 INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL Plants : STH  
 Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # 60 INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS Plants : STH  
 Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # 70 OBTAIN (2) NUTS FROM STOCK Plants : STH  
 Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
N806385 S58 NC00 110401 001 C NUT&WASHER-M6X1.0 HEX (PAINT SCRIP)			2.00	EA		N806385 S424 NC00 110401 000 C NUT&WASHER-M6X1.0 HEX (PAINT SCRIP)			2.00	EA	

Ele # 80 HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS Plants : STH  
 Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----



Ele # 85 TIGHTEN (2) {LOOSE ASSEMBLED} NUTS {ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL} USING POWERTOOL Plants : STH

Remark  
 \*TIGHTEN NUTS ALTERNATELY AND EVENLY.  
 \*WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY.

C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N

Element UCC's

CFB-----  
 CFP-----  
 CVC-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	2H10M10H16B28 SKT,1/4SQDR, 10MM, HEX, 16MM O.D., STD LENGTH	1					CA N 6 -2T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	10.50	1.60	
	CMPPS00052485 6 IN. EXTENSION	1									

Ele # 90 ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT Plants : STH

Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's

CFB-----  
 CFP-----  
 CVC-----

Ele # 100 INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT Plants : STH

Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's

CFB-----  
 CFP-----  
 CVC-----

Ele # 110 OBTAIN (1) BOLT FROM STOCK Plants : STH

Remark

\*NO PART OMISSION OR SUBSTITUTION.

C/S C Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's

CFB-----  
 CFP-----  
 CVC-----

C/S	Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM	C/S	Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM
C	W710820 S306 BOLT M10X35 HF ADH 10	NC00	110401	002	C	1.00	EA										

Ele # 120 INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE Plants : STH

Remark

C/S N Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's

CFB-----  
 CFP-----  
 CVC-----

Ele # HANDSTART (1) BOLT Plants : STH  
 125 Remark

C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # TIGHTEN BOLT USING POWERTOOL Plants : STH  
 130 Remark  
 \*TORQUE CONTROL.

C/S C Ins N Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
	3H15M20H20M38	1				C	CA N10 -1T	1	30.00	4.50	
	SKT,3/8SQDR,15MM 6PT,.38.1MM OAL,MAGNETIC						RT ANGLE NUTRUNNER TORQUE SHUT OFF TORQUE CONTROL				

No Secure Templates associated with Tools of this Process

Revision Log	Description / Addenda	Current Ele #	Previous Ele #
2008/01/04 00:00	Process Title Revised From: LOOSE ASSM COL EXT SHAFT TO COL BOOT & SECURE TO STNG COL To: ASSEMBLE COLUMN EXT SHAFT TO COLUMN BOOT AND SECURE TO STEERING COLUMN		
2008/01/04 00:00	CPSC Code(s) Deleted 110402		
2008/01/04 00:00	Part Deleted from the Element W710820 S306 NC00 110401 2 NC00 E 11579527 59	110	
2008/01/04 00:00	Part Deleted from the Element N806385 S424 NC00 110401 0 NC00 E 11631322 62	70	
2008/01/04 00:00	Part Deleted from the Element 2W73 3E735 AA NC00 110401 0 NC00 E 11267980 0	20	
2008/01/04 00:00	Causal Code Given As Reason for the Revision PROCESSCLARIFICATION		
2008/01/04 00:00	Process Was Completed By DHSIEH1		
2008/01/04 00:00	Common Usage Assigned to the Process CVC-----		
2008/01/04 00:00	Element Text Revised = OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK < OBTAIN (1) STEERING COLUMN EXTENSION SHAFT FROM STOCK.	10	
2008/01/04 00:00	Element Remark Revised = *NO PART OMISSION OR SUBSTITUTION. *INSTALL AS SHOWN. < * CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION. INSTALL AS SHOWN	10	
2008/01/04 00:00	Element Text Revised = OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK < OBTAIN (1) EXTENSION SHAFT BOOT (AND RETAINER) FROM STOCK.	20	
2008/01/04 00:00	Element Text Revised = INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT < INSERT BOOT AND RETAINER ONTO COLUMN EXTENSION SHAFT.	30	
2008/01/04 00:00	Element Text Revised = POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT < POSITION BOOT AND RETAINER TO PROPER LOCATION ON EXTENSION SHAFT.	40	
2008/01/04 00:00	Element Text Revised = INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL < INSERT EXTENSION SHAFT UNIVERSAL JOINT THRU HOLE IN DASH PANEL.	50	

Process Owner	: Messervey, B. C. (Brandon)	Phone:	1-519-6375405	Report Date:	2008/12/30 02:25	UNCONTROLLED DOCUMENT
2008/01/04 00:00	Element Text Revised = INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS < INSERT BOOT RETAINER FLANGE HOLES OVER EXISTING DASH PANEL STUDS.					60
2008/01/04 00:00	Element Text Revised = OBTAIN (2) NUTS FROM STOCK < OBTAIN (2) NUTS FROM STOCK.					70
2008/01/04 00:00	Element Text Revised = HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS < HANDSTART (2) NUTS ONTO (2) DASH PANEL STUDS.					80
2008/01/04 00:00	Element Remark Deleted < * NOTE: NUTS SECURED IN PROCESS CI3280.					80
2008/01/04 00:00	Element Text Revised = ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT < ALIGN EXTENSION SHAFT WITH STEERING COLUMN UNIVERSAL JOINT.					90
2008/01/04 00:00	Element Text Revised = INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT < INSERT EXTENSION SHAFT INTO STEERING COLUMN UNIVERSAL JOINT.					100
2008/01/04 00:00	Element Text Revised = OBTAIN (1) BOLT FROM STOCK < OBTAIN (1) BOLT FROM STOCK.					110
2008/01/04 00:00	Element Remark Revised = *NO PART OMISSION OR SUBSTITUTION. < * CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION					110
2008/01/04 00:00	Element Text Revised = INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE < INSERT BOLT THRU STEERING UNIVERSAL JOINT AND EXTENSION SHAFT GROOVE.					120
2008/01/04 00:00	Element Text Revised = TIGHTEN BOLT USING POWERTOOL < TIGHTEN BOLT WITH POWERTOOL.					130
2008/01/04 00:00	Element Remark Revised = *TORQUE CONTROL. < * CONTROL ITEM: TORQUE CONTROL					130
2008/01/04 00:00	Element Text Revised = TIGHTEN (2) (LOOSE ASSEMBLED) NUTS (ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL) USING POWERTOOL < TIGHTEN (2) (LOOSE ASSEMBLED) NUTS (ON DASH PANEL STUDS ATTACHING SHAFT BOOT AND RETAINER TO DASH PANEL).					85
2008/01/04 00:00	Element Remark Revised = *TIGHTEN NUTS ALTERNATELY AND EVENLY. *WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY. < NOTE: TIGHTEN NUTS ALTERNATELY AND EVENLY. WHEN BOTH NUTS CANNOT BE SECURED BY OPERATOR, VEHICLE MUST BE TAGGED BY PLACING A STICKER ON THE BODY.					85
2008/01/04 00:00	Installation Torque Variance Revised For tool: CA N10 -1T from: 5 to 4.5					130
2008/01/04 00:00	Tool Remark Revised For Tool : CA N10 -1T From : To: TORQUE CONTROL					130
2008/01/04 00:00	Part Unit Of Measure Revised For part: W710820 S306 NC00 110401 2 NC00 E 11830558 20 from: EA to: NULL					110
2008/01/04 00:00	Part Deleted from the Element 5W13 3F728 AC NC00 110401 0 NC00 E 11427227 91					10
2008/01/04 00:00	Part Deleted from the Element 5W13 3F728 AC NC00 110401 0 NC00 I 11889982 11					10
2008/01/04 00:00	Part Deleted from the Element 5W13 3F728 AC NC00 110401 0 NC00 E 11924770 0					10
2008/01/04 00:00	Part Deleted from the Element 9W73 3F728 AA NC00 110401 0 NC00 I 11889982 11					10
2008/01/04 00:00	Part Deleted from the Element 9W73 3F728 AA NC00 110401 0 NC00 E 11924770 0					10
2008/02/20 13:20	GC Process Owner Revised, Prior Owner Was DHSIEH1					
2008/03/22 08:25	Part Added to the Element N806385 S58 NC00 110401 1 NC00 E 10337716 0					70
2008/08/06 10:08	GC Process Owner Revised, Prior Owner Was SROZANSK					
2008/08/15 13:10	GC Process Owner Revised, Prior Owner Was JMCALPH1					

Notice Number					Station	Critical Elements	Significant Elements	Primary CPSC	110400	Illustrations	0	Process Number
Family	Model Year	Revision	Copy	Concern Number	Study / Alternative	C/N	Status	ASSEMBLE COLUMN EXT SHAFT TO COLUMN BOOT AND SECURE TO STEERING COLUMN				F R C 03580
CFB	2008.00	1	0				A	Y	N			
												Page 5 (Last)

PE12-025

FORD

11/9/2012

APPENDIX K

Process Number FRZ 03240

ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2004/08/13	DE	2004/07/19	2004/08/13	L	

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2005.00	F R Z 3240	1	0			
Replaces	CFB	2005.00	F R Z 3240	1	0			
Replaced By	CFB	2005.00	F R Z 3240	3	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2004/07/19	2004/08/13

Remark  
OK-PVT

Ele #	{PIT OPERATOR} PULL INTERMEDIATE SHAFT TO EXTEND.	Plants	: STH
10	Remark		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT UNIVERSAL YOKE (PROTRUDING THRU DASH).	Plants	: STH
20	Remark		
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	OBTAIN (1) BOLT FROM STOCK.	Plants	: STH
30	Remark		
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.		
Element UCC's	C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			
C/S Part/Description	Status Side Quantity UOM	Side Quantity UOM	C/S Part/Description Status Side Quantity UOM Side Quantity UOM



2004/05/20 00:00	Part Added to the Element W710820 S306 NC00 110401 2 NC00 E 11579527 59	30
2004/05/25 15:37	Part Added to the Element W710820 S306 NC00 110401 0 NC00 E 11579527 47	30

**ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT**

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2004/09/07	PC	2004/08/13	2004/09/07	L	

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2005.00	F R Z 3240	2	0			
Replaces	CFB	2005.00	F R Z 3240	2	0			
Replaced By	CFB	2005.00	F R Z 3240	4	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/08/13	2004/09/07

Remark  
OK-PVT

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT	UNIVERSAL YOKE (PROTRUDING THRU DASH).	Plants
20	Remark		: STH
* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED			
Element UCC's	C/S	N	Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N
CFB-----			
CFP-----			

Ele #	OBTAIN (1) BOLT FROM STOCK.	Plants
30	Remark	: STH
* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.		
Element UCC's	C/S	C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N
CFB-----		
CFP-----		

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
C N803942 S101 NC00 110401 000 C			VQ			C N803942 S101 NC00 110401 002 C				1.00	EA
BOLT M10X1.5X35 HEX FLNG HD 10						BOLT M10X1.5X35 HEX FLNG HD 10					
C W710820 S306 NC00 110401 000 C			1.00	EA							
BOLT M10X35 HF ADH 10											



Ele # 40 HANDSTART (1) BOLT THRU YOKE. Plants : STH

Remark

C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
CFB-----  
CFP-----

Ele # 50 TIGHTEN BOLT. Plants : STH

Remark

\* CONTROL ITEM: TORQUE CONTROL

C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
CFB-----  
CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N10T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	30.00	4.50			CMPPS00058669 EXTENSION- 6 INCH LONG	1	0.00	0.00	
	CMPPS00058670 HEX SOCKET {13MM A.F.}	1	0.00	0.00							

Ele # 60 {INSIDE CAR} REMOVE RESTRICTOR TOOL FROM BOTTOM END OF STEERING COLUMN. Plants : STH

Remark

\* CONTROL ITEM: REQUIRED INSTALLATION STEP

C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N

Element UCC's  
CFB-----  
CFP-----

Ele # 70 DISCARD RESTRICTOR TOOL. Plants : STH

Remark

C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N

Element UCC's  
CFB-----  
CFP-----

Revision Log	Date	Description / Addenda	Current Ele #	Previous Ele #
	2004/08/13 00:00	Causal Code Given As Reason for the Revision		
	2004/08/13 00:00	PROCESSCLARIFICATION		
	2004/08/13 00:00	Process Was Completed By KTHOMS02		
	2004/08/13 00:00	Element Deleted	10	
	2004/08/13 00:00	< {PIT OPERATOR} PULL INTERMEDIATE SHAFT TO EXTEND. Part Deleted from the Element	30	
		N803942 S101 NC00 110401 0 NC00 E 11031004 82		

ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2004/09/09	PC	2004/09/07	2004/09/09	L	

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
	CFB	2005.00	F R Z 3240	1	0			
Varianced Against	CFB	2005.00	F R Z 3240	3	0			
Replaces	CFB	2005.00	F R Z 3240	3	0			
Replaced By	CFB	2005.00	F R Z 3240	5	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/09/07	2004/09/09

Remark  
OK-PVT

Ele #	{PIT OPERATOR} PULL INTERMEDIATE SHAFT TO EXTEND.	Plants	: STH
10	Remark		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT UNIVERSAL YOKE (PROTRUDING THRU DASH).	Plants	: STH
20	Remark		
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	OBTAIN (1) BOLT FROM STOCK.	Plants	: STH
30	Remark		
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.		
Element UCC's	C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			
C/S Part/Description	Status Side Quantity UOM Side Quantity UOM C/S Part/Description	Status Side Quantity UOM	Side Quantity UOM

C N803942 S101 NC00 110401 000 C VQ C N803942 S101 NC00 110401 002 C 1.00 EA  
 BOLT M10X1.5X35 HEX FLNG HD 10 BOLT M10X1.5X35 HEX FLNG HD 10

Ele # HANDSTART (1) BOLT THRU YOKE. Plants : STH  
 40 Remark

Element UCC's  
 C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # TIGHTEN BOLT. Plants : STH  
 50 Remark

\* CONTROL ITEM: TORQUE CONTROL

Element UCC's  
 C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N12T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	47.50	7.20				1	0.00	0.00	
	CMPPS00058670 HEX SOCKET {13MM A.F.}	1	0.00	0.00			CMPPS00058669 EXTENSION- 6 INCH LONG				

Ele # {INSIDE CAR} REMOVE RESTRICTOR TOOL FROM BOTTOM END OF STEERING COLUMN. Plants : STH  
 60 Remark

\* CONTROL ITEM: REQUIRED INSTALLATION STEP

Element UCC's  
 C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N  
 CFB-----  
 CFP-----

Ele # DISCARD RESTRICTOR TOOL Plants : STH  
 70 Remark

Element UCC's  
 C/S N Ins N Key N Typ M Val Y MCT Freq 1 ROS N  
 CFB-----  
 CFP-----

Revision Log	Date	Description / Addenda	Current Ele #	Previous Ele #
	2004/09/07 00:00	Causal Code Given As Reason for the Revision PROCESSCLARIFICATION		
	2004/09/07 00:00	Process Was Completed By KTHOMSO2		
	2004/09/07 00:00	Element Added = {PIT OPERATOR} PULL INTERMEDIATE SHAFT TO EXTEND.	10	
	2004/09/07 00:00	Tool Deleted From the Element CA N10T	50	
	2004/09/07 00:00	Tool Added to the Element CA N12T	50	
	2004/09/07 00:00	Part Deleted from the Element W710820 S306 NC00 110401 0 NC00 E 11579527 47	30	
	2004/09/07 00:00	Part Deleted from the Element W710820 S306 NC00 110401 2 NC00 E 11579527 59	30	

Process Owner : Moulder, J. P. (Jack)

Phone: 1-519-6375057

Report Date: 2007/07/29 03:01

UNCONTROLLED DOCUMENT

2004/09/07 00:00 Part Added to the Element  
N803942 S101 NC00 110401 0 NC00 E 11031004 82

30

Notice Number				Station	Critical Elements	Significant Elements	Primary CPSC	110000	Illustrations	0	Process Number
Family	Model Year	Revision	Copy	Concern Number	Study / Alternative	C/N	Status				F R Z 03240
CFB	2005.00	4	0				D	ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT			Page 3 (Last)

ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2004/09/30	PC	2004/09/09	2004/09/30	L	

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
	CFB	2005.00	F R Z 3240	4	0			
Varianced Against	CFB	2005.00	F R Z 3240	4	0			
Replaces	CFB	2005.00	F R Z 3240	4	0			
Replaced By	CFB	2005.00	F R Z 3240	6	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/09/09	2004/09/30

Remark  
OK-PVT

Ele #	PULL INTERMEDIATE SHAFT TO EXTEND.	Plants	: STH
10	Remark		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT UNIVERSAL YOKE (PROTRUDING THRU DASH).	Plants	: STH
20	Remark		
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	OBTAIN (1) BOLT FROM STOCK.	Plants	: STH
30	Remark		
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.		
Element UCC's	C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			
C/S Part/Description	Status Side Quantity UOM	Side Quantity UOM	C/S Part/Description Status Side Quantity UOM Side Quantity UOM



<b>ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT</b>						
Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2005/01/05	PC	2004/09/30	2005/01/05	L	

Reference Manuals  
F AC-110401-01

Process CPSC's			Responsible PMT's			
Primary	Code	Description	PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2005.00	F R Z 3240	5	0			
Replaces	CFB	2005.00	F R Z 3240	5	0			
Replaced By	CFB	2005.50	F R Z 3240	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/09/30	2005/01/05

Remark  
OK-PVT

Ele #	PULL INTERMEDIATE SHAFT TO EXTEND.														Plants	: STH
10	Remark															
	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's																
CFB-----																
CFP-----																

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT UNIVERSAL YOKE (PROTRUDING THRU DASH).														Plants	: STH
20	Remark															
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED															
	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's																
CFB-----																
CFP-----																

Ele #	OBTAIN (1) BOLT FROM STOCK.														Plants	: STH
30	Remark															
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.															
	C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's																
CFB-----																
CFP-----																
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM					

C	N803942	S101	NC00	110401	000	C	VQ													C	N803942	S101	NC00	110401	002	C	1.00	EA
BOLT M10X1.5X35 HEX FLNG HD 10													BOLT M10X1.5X35 HEX FLNG HD 10															
Ele #	HANDSTART (1) BOLT THRU YOKE.																								Plants	: STH		
40	Remark																											
Element UCC's	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N												
CFB-----																												
CFP-----																												

Ele #	TIGHTEN BOLT.																								Plants	: STH		
50	Remark																											
* CONTROL ITEM: TORQUE CONTROL																												
Element UCC's	C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N												
CFB-----																												
CFP-----																												

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N12T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	47.50	7.20				1	0.00	0.00	
	CMPPS00058670 HEX SOCKET {13MM A.F.}	1	0.00	0.00			CMPPS00058669 EXTENSION- 6 INCH LONG				

Ele #	{INSIDE CAR} REMOVE PIN FROM BOTTOM END OF STEERING COLUMN.																								Plants	: STH		
60	Remark																											
* CONTROL ITEM: REQUIRED INSTALLATION STEP																												
Element UCC's	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N												
CFB-----																												
CFP-----																												

Ele #	DISCARD PIN																								Plants	: STH		
70	Remark																											
Element UCC's	C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N												
CFB-----																												
CFP-----																												

Revision Log	Date	Description / Addenda	Current Ele #	Previous Ele #
	2004/09/30 00:00	Causal Code Given As Reason for the Revision PROCESSCLARIFICATION		
	2004/09/30 00:00	Process Was Completed By KTHOMSO2		
	2004/09/30 00:00	Element Text Revised = {INSIDE CAR} REMOVE PIN FROM BOTTOM END OF STEERING COLUMN. < {INSIDE CAR} REMOVE RESTRICTOR TOOL FROM BOTTOM END OF STEERING COLUMN.	60	
	2004/09/30 00:00	Element Text Revised = DISCARD PIN < DISCARD RESTRICTOR TOOL	70	



ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	D 2005/01/05	PC	2004/09/30	2005/01/05	L	

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2005.00	F R Z 3240	5	0			
Varianced Against	CFB	2005.00	F R Z 3240	5	0			
Replaces	CFB	2005.00	F R Z 3240	5	0			
Replaced By	CFB	2005.50	F R Z 3240	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2004/09/30	2005/01/05

Remark  
OK-PVT

Ele #	PULL INTERMEDIATE SHAFT TO EXTEND.	Plants	: STH
10	Remark		
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N		
CFB-----			
CFP-----			

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT	UNIVERSAL YOKE (PROTRUDING THRU DASH).	Plants	: STH
20	Remark			
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED			
Element UCC's	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N			
CFB-----				
CFP-----				

Ele #	OBTAIN (1) BOLT FROM STOCK.	Plants	: STH								
30	Remark										
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.										
Element UCC's	C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N										
CFB-----											
CFP-----											
C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM



<b>ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT</b>							
Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA	
N	D 2006/03/15	DE	2005/08/15	2006/03/15	L		

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	Steering Column and Shaft				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2005.50	F R Z 3240	1	0			
Varianced Against	CFB	2005.50	F R Z 3240	1	0			
Replaces	CFB	2005.50	F R Z 3240	1	0			
Replaced By	CFB	2006.50	F R Z 3240	1	0			

Associated Plants	Staff Assigned	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	ALL Chassis	F	2005/08/15	2006/03/15

Remark  
THIS PROCESS REQUIRES MANDATORY D.C. POWER TOOL AND CONTROLLER THAT WILL SOUND AN ALARM (THAT CAN BE RESET BUT NOT BY-PASSED BY THE PRODUCTION OPERATORS) AND WILL ACTIVATE A RED FLASHING LIGHT (LARGE TOWER LIGHT SUGGESTED) WHEN OPERATION HAS FAILED. REF: D. HETTEL OUTLOOK MESSAGE DATED 6/09/04.  
2006 UPDATE FASTENER FOR HEX CHROME CHANGE - BGJORGJE

Ele #	PULL INTERMEDIATE SHAFT TO EXTEND.															Plants	: STH
10	Remark																
	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N	
Element UCC's																	
CFB-----																	
CFP-----																	

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT															Plants	: STH
20	UNIVERSAL YOKE (PROTRUDING THRU DASH). Remark * CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED																
	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N	
Element UCC's																	
CFB-----																	
CFP-----																	

Ele #	OBTAIN (1) BOLT FROM STOCK.															Plants	: STH
30	Remark * CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.																
	C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N	
Element UCC's																	
CFB-----																	
CFP-----																	
C/S Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM	C/S Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM		
C W710820 S439 NC00 110401 000 C						1.00											
BOLT M10X35 HF ADH 10																	

Ele # HANDSTART (1) BOLT THRU YOKE.  
40 Remark

Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---------	------	---	-----	---

Ele # TIGHTEN BOLT.  
50 Remark

Plants : STH

\* CONTROL ITEM: TORQUE CONTROL

Element UCC's  
CFB-----  
CFP-----

C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---------	------	---	-----	---

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N12T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	47.50	7.20			CMPPS00058669 EXTENSION- 6 INCH LONG	1	0.00	0.00	
	CMPPS00058670 HEX SOCKET (13MM A.F.)	1	0.00	0.00							

Ele # (INSIDE CAR) REMOVE PIN FROM BOTTOM END OF STEERING COLUMN.  
60 Remark

Plants : STH

\* CONTROL ITEM: REQUIRED INSTALLATION STEP

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---------	------	---	-----	---

Ele # DISCARD PIN  
70 Remark

Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	--	------	---	-----	---

ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT							
Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA	
N	A 2006/03/15	PC	2006/03/15	2007/05/01	L		

Reference Manuals  
F AC-110401-01

Primary	Code	Description	Responsible PMT's			
			PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110401	Steering Column and Shaft				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2006.00	F R Z 3240	1	0			
Varianced Against	CFB	2006.00	F R Z 3240	1	0			
Replaces	CFB	2006.00	F R Z 3240	1	0			
Replaced By	CFB	2008.00	F R Z 3240	1	0			

Associated Plants	Staff Assigned	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	ALL Chassis	F	2006/03/15	2007/05/01

Remark  
THIS PROCESS REQUIRES MANDATORY D.C. POWER TOOL AND CONTROLLER THAT WILL SOUND AN ALARM (THAT CAN BE RESET BUT NOT BY-PASSED BY THE PRODUCTION OPERATORS) AND WILL ACTIVATE A RED FLASHING LIGHT (LARGE TOWER LIGHT SUGGESTED) WHEN OPERATION HAS FAILED. REF: D. HETTEL OUTLOOK MESSAGE DATED 6/09/04.  
2006 UPDATE FASTENER FOR HEX CHROME CHANGE - BGJORGJE

Ele #	PULL INTERMEDIATE SHAFT TO EXTEND.															Plants	: STH
10	Remark																
	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N	
Element UCC's																	
CFB-----																	
CFP-----																	

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT UNIVERSAL YOKE (PROTRUDING THRU DASH).															Plants	: STH
20	Remark																
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED																
	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N	
Element UCC's																	
CFB-----																	
CFP-----																	

Ele #	OBTAIN (1) BOLT FROM STOCK.															Plants	: STH
30	Remark																
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.																
	C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N	
Element UCC's																	
CFB-----																	
CFP-----																	
C/S Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM	C/S Part/Description	Status	Side	Quantity	UOM	Side	Quantity	UOM		
C W710820 S439 NC00 110401 000 C						1.00											
BOLT M10X35 HF ADH 10																	

Ele # HANDSTART (1) BOLT THRU YOKE.  
40 Remark

Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---------	------	---	-----	---

Ele # TIGHTEN BOLT.  
50 Remark

Plants : STH

\* CONTROL ITEM: TORQUE CONTROL

Element UCC's  
CFB-----  
CFP-----

C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---------	------	---	-----	---

C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque Nom	Var	Minimum
C	CA N12 -2T RT ANGLE NUTRUNNER TORQUE SHUT OFF	1	47.50	7.20			CMPPS00058669 EXTENSION- 6 INCH LONG	1	0.00	0.00	
	CMPPS00058670 HEX SOCKET (13MM A.F.)	1	0.00	0.00							

Ele # (INSIDE CAR) REMOVE PIN FROM BOTTOM END OF STEERING COLUMN.  
60 Remark

Plants : STH

\* CONTROL ITEM: REQUIRED INSTALLATION STEP

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	---------	------	---	-----	---

Ele # DISCARD PIN  
70 Remark

Plants : STH

Element UCC's  
CFB-----  
CFP-----

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N
-----	---	-----	---	-----	---	-----	---	-----	---	-----	--	------	---	-----	---

Revision Log

Date	Description / Addenda	Current Ele #	Previous Ele #
2006/03/15 00:00	Causal Code Given As Reason for the Revision PROCESSCLARIFICATION		
2006/03/15 00:00	Process Was Completed By RMEINTS		
2006/03/15 00:00	Tool Deleted From the Element CA N12T	50	
2006/03/15 00:00	Tool Added to the Element CA N12 -2T	50	
2006/03/15 00:00	Part Deleted from the Element N803942 S101 NC00 110401 2 NC00 E 11307293 8	30	
2006/03/15 00:00	Part Deleted from the Element N803942 S101 NC00 110401 2 NC00 E 11579527 59	30	
2006/03/16 15:16	GC Process Owner Revised, Prior Owner Was RMEINTS		

Revision Log Comments

Date	Recorded by	Comments
2006/03/16 15:16	OPSSGSOP	PT-3 TOOLING CONVERSION: REASSIGNED PROCESS OWNER FROM PREVIOUS REVISION

<b>ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT</b>							
Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA	
N	D 2007/05/01	PC	2006/03/15	2007/05/01	L		

Reference Manuals  
F AC-110401-01

Process CPSC's			Responsible PMT's			
Primary	Code	ALL Description	PMT	Program	Model Year	ALL Description
Y	110000	STEERING SYSTEM				
N	110401	STEERING COLUMN				
N	110700	RESERVED				
N	110701	RESERVED				
N	110702	RESERVED				
N	110703	RESERVED				
N	110704	RESERVED				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2006.00	F R Z 3240	1	0			
Replaces	CFB	2006.00	F R Z 3240	1	0			
Replaced By	CFB	2008.00	F R Z 3240	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2006/03/15	2007/05/01

**Remark**  
THIS PROCESS REQUIRES MANDATORY D.C. POWER TOOL AND CONTROLLER THAT WILL SOUND AN ALARM (THAT CAN BE RESET BUT NOT BY-PASSED BY THE PRODUCTION OPERATORS) AND WILL ACTIVATE A RED FLASHING LIGHT (LARGE TOWER LIGHT SUGGESTED) WHEN OPERATION HAS FAILED. REF: D. HETTEL OUTLOOK MESSAGE DATED 6/09/04.  
2006 UPDATE FASTENER FOR HEX CHROME CHANGE - BGJORGJE

<b>Ele #</b> 10	<b>PULL INTERMEDIATE SHAFT TO EXTEND.</b> <b>Remark</b>	<b>Plants</b> : STH
<b>Element UCC's</b> CFB----- CFP-----	C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N	

<b>Ele #</b> 20	<b>INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT</b> <b>Remark</b>	<b>UNIVERSAL YOKE (PROTRUDING THRU DASH).</b> <b>Plants</b> : STH
<b>Element UCC's</b> CFB----- CFP-----	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED C/S N Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N	

<b>Ele #</b> 30	<b>OBTAIN (1) BOLT FROM STOCK.</b> <b>Remark</b>	<b>Plants</b> : STH
<b>Element UCC's</b> CFB-----	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION. C/S C Ins N Key Y Typ M Val Y MCT 0.00000 Freq 1 ROS N	





**ATTACH INTERMEDIATE SHAFT TO COLUMN EXTENSION SHAFT**

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
N	A 2007/02/15	PC	2007/05/01		L	

Reference Manuals  
F AC-110401-01

Primary	Code	ALL Description	Responsible PMT's		
			PMT	Program	Model Year
Y	110000	STEERING SYSTEM			
N	110401	STEERING COLUMN			
N	110700	RESERVED			
N	110701	RESERVED			
N	110702	RESERVED			
N	110703	RESERVED			
N	110704	RESERVED			

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
	CFB	2006.50	F R Z 3240	1	0			
Varianced Against	CFB	2006.50	F R Z 3240	1	0			
Replaces	CFB	2006.50	F R Z 3240	1	0			
Replaced By								

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2007/05/01	

**Remark**  
THIS PROCESS REQUIRES MANDATORY D.C. POWER TOOL AND CONTROLLER THAT WILL SOUND AN ALARM (THAT CAN BE RESET BUT NOT BY-PASSED BY THE PRODUCTION OPERATORS) AND WILL ACTIVATE A RED FLASHING LIGHT (LARGE TOWER LIGHT SUGGESTED) WHEN OPERATION HAS FAILED. REF: D. HETTEL OUTLOOK MESSAGE DATED 6/09/04.  
2006 UPDATE FASTENER FOR HEX CHROME CHANGE - BGJORGJE

Ele #	PULL INTERMEDIATE SHAFT TO EXTEND.														Plants	: STH
10	Remark															
Element UCC's	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB-----																
CFP-----																
CVC-----																

Ele #	INSERT INTERMEDIATE SHAFT INTO COLUMN EXTENSION SHAFT UNIVERSAL YOKE (PROTRUDING THRU DASH).														Plants	: STH
20	Remark															
	* CONTROL ITEM: INSTALL AS SHOWN PLACE REACTION PLAN STICKER IN PROPER PLACE IF THIS PROCESS CANNOT BE COMPLETED															
Element UCC's	C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB-----																
CFP-----																
CVC-----																

Ele #	OBTAIN (1) BOLT FROM STOCK.														Plants	: STH
30	Remark															
	* CONTROL ITEM: NO PART OMISSION OR SUBSTITUTION.															
Element UCC's	C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
CFB-----																
CFP-----																
CVC-----																

Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM	C/S Part/Description	Status	Side Quantity	UOM	Side Quantity	UOM
C W710820 S439 NC00 110401 000 C BOLT M10X35 HF ADH 10				1.00							

Ele # HANDSTART (1) BOLT THRU YOKE. Plants : STH  
 40 Remark

\* CONTROL ITEM: TORQUE CONTROL

C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP----- CVC-----															

Ele # TIGHTEN BOLT. Plants : STH  
 50 Remark

\* CONTROL ITEM: TORQUE CONTROL

C/S	C	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP----- CVC-----															
C/S Tool/Description/Remark 4H13M22H22B57 SKT,1/2SQDR,13MM 6PT,57.1MM OAL STORES F1778 SOCKET EXTENSION BAR-1/2" SQ.DR., 6" OAL	Quantity	Torque Nom	Var	Minimum						C/S Tool/Description/Remark C CA N12-2T RT ANGLE NUTRUNNER TORQUE SHUT OFF	Quantity	Torque Nom	Var	Minimum	
	1	0.00	0.00								1	47.50	7.20		
	1														

Ele # {INSIDE CAR} REMOVE PIN FROM BOTTOM END OF STEERING COLUMN. {CFB/CFP} Plants : STH  
 60 Remark

\* CONTROL ITEM: REQUIRED INSTALLATION STEP

C/S	N	Ins	N	Key	Y	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

Ele # DISCARD PIN {CFB/CFP} Plants : STH  
 70 Remark

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N
Element UCC's CFB----- CFP-----															

Ele # {INSIDE CAR} REMOVE-AND-DISCARD RESTRICTOR TOOL FROM BOTTOM END OF STEERING COLUMN. {CVC} Plants : STH  
 80 Remark

\* CONTROL ITEM: REQUIRED INSTALLATION STEP

C/S	N	Ins	N	Key	N	Typ	M	Val	Y	MCT		Freq	1	ROS	N
Element UCC's															

Element UCC's

CVC-----

No Secure Templates associated with Tools of this Process

Revision Log

Date	Description / Addenda	Current Ele #	Previous Ele #
2008/02/20 13:20	GC Process Owner Revised, Prior Owner Was DHSIEH1		
2008/08/06 10:07	GC Process Owner Revised, Prior Owner Was SROZANSK		
2008/08/15 13:53	GC Process Owner Revised, Prior Owner Was JMCALP11		

PE12-025

FORD

11/9/2012

APPENDIX K

Process Number FRZ 06002

CHECK INTERMEDIATE SHAFT FOR SECURITY

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
Q	D 2007/05/01	PC	2002/06/19	2007/05/01	L	

Process CPSC's			Responsible PMT's			
Primary	Code	Description	PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2003.00	F R Z 6002	1	0			
Varianced Against	CFB	2003.00	F R Z 6002	1	0			
Replaces	CFB	2003.00	F R Z 6002	1	0			
Replaced By	CFB	2008.00	F R Z 6002	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2002/06/19	2007/05/01

Remark  
\* MCIR \*

Ele #	0	READ NOTE																	Plants	: STH
Remark	CHECK FREQUENCY - 100% RELATES TO FMVSS 203																			
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N				
CFB	-----																			
CFP	-----																			

Ele #	20	VERIFY THAT INTERMEDIATE SHAFT IS SECURE																	Plants	: STH
Remark	METHOD OF CHECK: VERIFY PINCH BOLT TO STEERING GEAR IS PRESENT AND SECURE. VERIFY INTERMEDIATE SHAFT TO COLUMN BOLT AND NUT ARE PROPERLY INSTALLED AND SECURE.																			
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N				
CFB	-----																			
CFP	-----																			

Ele #	21	VERIFY THAT COLUMN EXTENSION SHAFT TO COLUMN BOLT IS SECURE																	Plants	: STH
Remark	CRITICAL																			
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N				
CFB	-----																			
CFP	-----																			

Ele #	22	VERIFY THAT COLUMN {BOOT AND RETAINER} NUTS ARE SECURED TO DASH STUDS																	Plants	: STH
Remark	CRITICAL																			
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N				

Element UCC's  
 CFB-----  
 CFP-----

Ele # 23    VERIFY THAT COLUMN RESTRICTOR TOOL (ANTI-ROTATE) IS REMOVED FROM LOWER END OF STEERING COLUMN    THIS MUST BE DONE AFTER COLUMN INSTALLATION IS COMPLETE    Plants : STH

Remark  
 CRITICAL

C/S    C    Ins    Y    Key    N    Typ    M    Val    N    MCT    0.00000    Freq    1    ROS    N

Element UCC's  
 CFB-----  
 CFP-----

Ele # 25    STAMP MCIR OR (QLS) POSITIVE BUY OFF    Plants : STH

Remark  
 MANDATORY

C/S    C    Ins    Y    Key    N    Typ    M    Val    Y    MCT    0.00000    Freq    1    ROS    N

Element UCC's  
 CFB-----  
 CFP-----

Revision Log		Current Ele #	Previous Ele #
Date	Description / Addenda		
2005/01/03 20:46	GC Process Owner Revised, Prior Owner Was KTHOMSO2		

CHECK INTERMEDIATE SHAFT FOR SECURITY									
Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA			
Q	C 2002/06/19	PC	2002/06/19	2007/05/01	L				

Process CPSC's			Responsible PMT's			
Primary	Code	Description	PMT	Program	Model Year	Description
Y	110000	STEERING SYSTEM				
N	110700	Four-Wheel Steering Actuator & Actuator Control Subsystem				
N	110701	Auxiliary Steering Actuator				
N	110702	Sensors				
N	110703	Logic Module				
N	110704	Motor Drive Module				

	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Copied From	CFB	2003.00	F R Z 6002	1	0			
Varianted Against	CFB	2003.00	F R Z 6002	1	0			
Replaces	CFB	2003.00	F R Z 6002	1	0			
Replaced By	CFB	2008.00	F R Z 6002	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2002/06/19	2007/05/01

Remark  
\* MCIR \*

Ele #	READ NOTE	Plants																																
0	Remark CHECK FREQUENCY - 100% RELATES TO FMVSS 203	: STH																																
	<table border="1"> <thead> <tr> <th>C/S</th> <th>C</th> <th>Ins</th> <th>Y</th> <th>Key</th> <th>N</th> <th>Typ</th> <th>M</th> <th>Val</th> <th>Y</th> <th>MCT</th> <th>0.00000</th> <th>Freq</th> <th>1</th> <th>ROS</th> <th>N</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N																	
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	Element UCC's CFB----- CFP-----																																	

Ele #	VERIFY THAT INTERMEDIATE SHAFT IS SECURE	Plants																																
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	Element UCC's CFB----- CFP-----																																	

Ele #	VERIFY THAT COLUMN EXTENSION SHAFT TO COLUMN BOLT IS SECURE	Plants																																
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Ele #	VERIFY THAT COLUMN {BOOT AND RETAINER} NUTS ARE SECURED TO DASH STUDS	Plants																																
22	Remark CRITICAL	: STH																																
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	Element UCC's CFB----- CFP-----																																	

Ele # 23    **VERIFY THAT COLUMN RESTRICTOR TOOL (ANTI-ROTATE) IS REMOVED FROM LOWER END OF STEERING COLUMN**    **THIS MUST BE DONE AFTER COLUMN INSTALLATION IS COMPLETE**    Plants : STH  
 Remark  
 CRITICAL  
  
 C/S    C    Ins    Y    Key    N    Typ    M    Val    N    MCT    0.00000    Freq    1    ROS    N  
 Element UCC's  
 CFB-----  
 CFP-----

Ele # 25    **STAMP MCIR OR (QLS) POSITIVE BUY OFF**    Plants : STH  
 Remark  
 MANDATORY  
  
 C/S    C    Ins    Y    Key    N    Typ    M    Val    Y    MCT    0.00000    Freq    1    ROS    N  
 Element UCC's  
 CFB-----  
 CFP-----

Revision Log		Current Ele #	Previous Ele #
Date	Description / Addenda		
2006/05/03 18:22	GC Process Owner Revised, Prior Owner Was DKOSTIC		



CHECK INTERMEDIATE SHAFT FOR SECURITY

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
Q	D 2007/05/01	PC	2002/06/19	2007/05/01	L	

Process CPSC's			Responsible PMT's			
Primary	Code	ALL Description	PMT	Program	Model Year	ALL Description
Y	110000	STEERING SYSTEM				
N	110700	RESERVED				
N	110701	RESERVED				
N	110702	RESERVED				
N	110703	RESERVED				
N	110704	RESERVED				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2003.00	F R Z 6002	1	0			
Replaces	CFB	2003.00	F R Z 6002	1	0			
Replaced By	CFB	2008.00	F R Z 6002	1	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	F	2002/06/19	2007/05/01

Remark  
\* MCIR \*

Ele #	0	READ NOTE																Plants : STH
Remark	CHECK FREQUENCY - 100% RELATES TO FMVSS 203																	
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N		
CFB	-----																	
CFP	-----																	

Ele #	20	VERIFY THAT INTERMEDIATE SHAFT IS SECURE																Plants : STH
Remark	METHOD OF CHECK: VERIFY PINCH BOLT TO STEERING GEAR IS PRESENT AND SECURE. VERIFY INTERMEDIATE SHAFT TO COLUMN BOLT AND NUT ARE PROPERLY INSTALLED AND SECURE.																	
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N		
CFB	-----																	
CFP	-----																	

Ele #	21	VERIFY THAT COLUMN EXTENSION SHAFT TO COLUMN BOLT IS SECURE																Plants : STH
Remark	CRITICAL																	
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N		
CFB	-----																	
CFP	-----																	

Ele #	22	VERIFY THAT COLUMN {BOOT AND RETAINER} NUTS ARE SECURED TO DASH STUDS																Plants : STH
Remark	CRITICAL																	
Element UCC's	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N		
CFB	-----																	
CFP	-----																	

Element UCC's CFB----- CFP-----																
Ele #	VERIFY THAT COLUMN RESTRICTOR TOOL (ANTI-ROTATE) IS REMOVED FROM LOWER END OF STEERING COLUMN										THIS MUST BE DONE AFTER COLUMN INSTALLATION IS COMPLETE		Plants	: STH		
23	Remark CRITICAL															
	C/S	C	Ins	Y	Key	N	Typ	M	Val	N	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----																

Ele #	STAMP MCIR OR (QLS) POSITIVE BUY OFF												Plants	: STH		
25	Remark MANDATORY															
	C/S	C	Ins	Y	Key	N	Typ	M	Val	Y	MCT	0.00000	Freq	1	ROS	N
Element UCC's CFB----- CFP-----																

No Secure Templates associated with Tools of this Process

CHECK INTERMEDIATE SHAFT FOR SECURITY

Type	Status / Date	Causal Code	Earliest In Date	Latest Out Date	L/S Ind.	PFMEA
Q	C 2007/02/15	PC	2007/05/01		L	

Process CPSC's			Responsible PMT's			
Primary	Code	ALL Description	PMT	Program	Model Year	ALL Description
Y	110000	STEERING SYSTEM				
N	110700	RESERVED				
N	110701	RESERVED				
N	110702	RESERVED				
N	110703	RESERVED				
N	110704	RESERVED				

Copied From	Family	Model Year	Process Number	Revision	Copy	Concern Number	Study / Alternative	C/N
Varianced Against	CFB	2006.50	F R Z 6002	0	1			
Replaces	CFB	2003.00	F R Z 6002	2	0			
Replaced By	CFB	2003.00	F R Z 6002	2	0			

Associated Plants	Staff Assigned ALL	Effectivity Type	Eff In Date	Eff Out Date
STH ST. THOMAS ASSEMBLY	Chassis	J	2007/05/01	

Remark  
\* MCIR \*

Ele # 0	READ NOTE Remark CHECK FREQUENCY - 100% RELATES TO FMVSS 203	Plants : STH
Element UCC's CFB----- CFP----- CVC-----	C/S C Ins Y Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N	

Ele # 20	VERIFY THAT INTERMEDIATE SHAFT IS SECURE Remark METHOD OF CHECK: VERIFY PINCH BOLT TO STEERING GEAR IS PRESENT AND SECURE. VERIFY INTERMEDIATE SHAFT TO COLUMN BOLT AND NUT ARE PROPERLY INSTALLED AND SECURE.	Plants : STH
Element UCC's CFB----- CFP----- CVC-----	C/S C Ins Y Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N	

Ele # 21	VERIFY THAT COLUMN EXTENSION SHAFT TO COLUMN BOLT IS SECURE Remark CRITICAL	Plants : STH
Element UCC's CFB----- CFP----- CVC-----	C/S C Ins Y Key N Typ M Val Y MCT 0.00000 Freq 1 ROS N	

Ele # 22    VERIFY THAT COLUMN {BOOT AND RETAINER} NUTS ARE SECURED TO DASH STUDS    Plants : STH  
 Remark CRITICAL  
 C/S    C    Ins    Y    Key    N    Typ    M    Val    Y    MCT    0.00000    Freq    1    ROS    N  
 Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # 23    VERIFY THAT COLUMN RESTRICTOR TOOL {ANTI-ROTATE} IS REMOVED FROM LOWER END OF STEERING COLUMN    {THIS MUST BE DONE AFTER COLUMN INSTALLATION IS COMPLETE}    Plants : STH  
 Remark CRITICAL  
 C/S    C    Ins    Y    Key    N    Typ    M    Val    Y    MCT    0.00000    Freq    1    ROS    N  
 Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

Ele # 25    STAMP MCIR OR {QLS} POSITIVE BUY OFF    Plants : STH  
 Remark MANDATORY  
 C/S    C    Ins    Y    Key    N    Typ    M    Val    Y    MCT    0.00000    Freq    1    ROS    N  
 Element UCC's  
 CFB-----  
 CFP-----  
 CVC-----

C/S	Tool/Description/Remark	Quantity	Torque	Nom	Var	Minimum	C/S	Tool/Description/Remark	Quantity	Torque	Nom	Var	Minimum
	STORESF21038 STAMP	1											

No Secure Templates associated with Tools of this Process

Revision Log		Current Ele #	Previous Ele #
Date	Description / Addenda		
2008/02/20 13:20	GC Process Owner Revised, Prior Owner Was DHSIEH1		
2008/08/06 10:07	GC Process Owner Revised, Prior Owner Was SROZANSK		
2008/08/15 13:53	GC Process Owner Revised, Prior Owner Was JMCALP11		

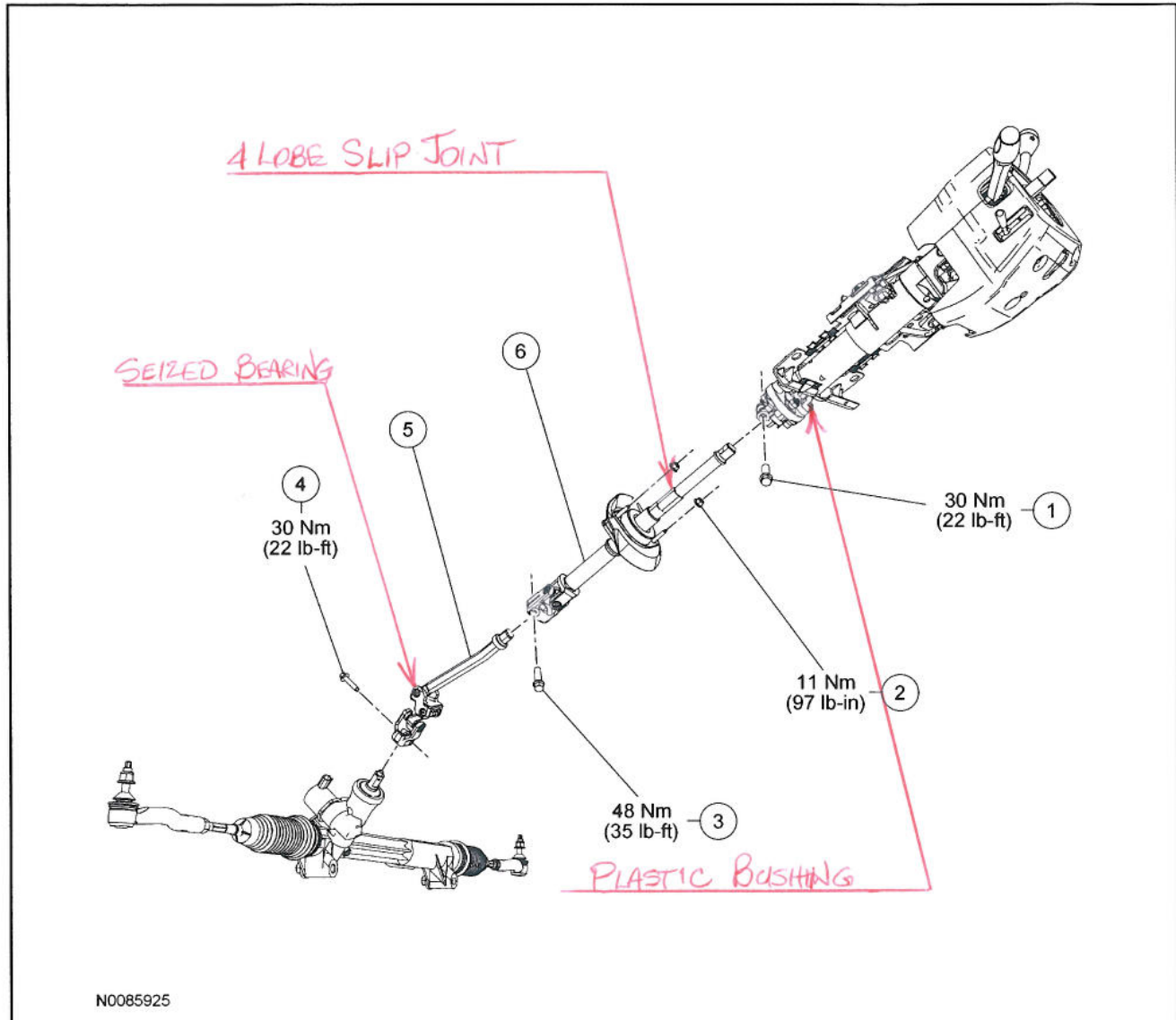
PE12-025

FORD

11/9/2012

APPENDIX L

## Steering Column Shaft



Item	Part Number	Description
1	W710820	Upper steering column shaft-to-steering column bolt
2	N806385	Upper steering column shaft bearing nut (2 required)
3	W710820	Upper steering column shaft-to-lower intermediate shaft bolt
4	W710821	Lower steering column shaft-to-steering gear bolt
5	3B676B	Lower steering column shaft
6	3B676A	Upper steering column shaft

## Removal and Installation

1. Depower the Supplemental Restraint System (SRS). For additional information, refer to Section 501-20B.

2. **NOTE:**  
Use a steering wheel holding device (such as Hunter® 28-75-1 or equivalent).

Using a suitable holding device, hold the steering wheel in the straight-ahead position.



DEPARTMENT OF GENERAL SERVICES

Isiah Leggett  
County Executive

David E. Dise  
Director

MEMORANDUM

September 14, 2012

TO: Katrina Murphy, Ford Motor Company *KM*  
Eric Kalis, Ford Motor Company  
Robert Cooney, Ford Motor Company

FROM: Michael Atkinson, Equipment Services Coordinator  
Division of Fleet Management Services

SUBJECT: Receipt of Steering Shafts for Montgomery County Government owned  
vehicles 091230 and 050545

---

This memo acknowledges the transfer of said parts from the county to Ford Motor Company regarding the following vehicles:

<u>County ID</u>	<u>VIN</u>
091230	2FAHP71V79X136597
050545	2FAFP71W45X102692

Regards,

*MA*  
Michael Atkinson  
Equipment Services Coordinator  
Division of Fleet Management Services

---

Division of Fleet Management Services • Automotive Equipment Services Section

1283 Seven Locks Road, Building F • Rockville, Maryland 20854 • 240-773-0500 • 240-773-0501 FAX  
www.montgomerycountymd.gov

PE12-025 000421

---

**Subject:** Review Montgomery Co. Trip and overview of system function  
**Location:** ESE FPS 500 EAST (12)

**Start:** Mon 9/17/2012 12:00 PM  
**End:** Mon 9/17/2012 1:00 PM

**Recurrence:** (none)

**Meeting Status:** Accepted

**Organizer:** Prescott, Amanda (A.B.)  
**Required Attendees:** Miller, Todd (T.R.); Cooney, Robert (R.J.); Perri, Ron (R.J.); Kalis, Eric (E.L.); Fronckowiak, Todd (T.M.); Ott, David (D.J.); Matthews, Steve (S.D.); Freiburger, Randy (R.M.); Christensen, Kris (K.S.)  
**Optional Attendees:** Nevi, Raymond (R.A.)

Review photos/parts from Friday's review at Montgomery Co. – Eric and Rob  
General overview of system function – Todd M.



## 2005 EN/FN Steering Shaft Issue

Global 8 D Report No:

Report Date: June 8, 2004

### **D1 - Establish the Team**

Robert Cooney SUV/BoF Engineer, Tad Ohtake, SUV/BoF Chassis OPD D&R Supervisor, Matt Howard ord SUV/BoF Steering Manager, Stephen Skillman Delphi Column Engineer, Joe Kruska Delphi Column Supervisor, Henry Hutter, Delphi Plant 12 Manager

### **D2 - Describe the Problem**

Warranty claim 239816 with customer comments stating vehicle has no steering. Dealer Technician reports that the steering column shaft is broken and column is replaced and road tests ok.

### **D3 - Develop Interim Containment Action**

Delphi Plant 12 to 100% Inspect lower shaft/yoke press on loads. (start 1/21/05)

### **D4 - Root Cause Detail**

Need Details from Delphi

### **D5 - Define and Verify Permanent Corrective Actions**

Need Details from Delphi

### **D6 - Implement and Validate Permanent Corrective Actions**

Need Details from Delphi

### **D7 - Prevent Recurrence**

Need Details from Delphi

### **D8 - Recognize Team and Individual Contributions**