PE14-028

FORD

11/7/2014

APPENDIX G

Engineering Review

6. Recycling Hostaform

Hostaform can be recycled in various ways – some of which have limitations.

Material recycling

Sprues, rejects etc. can be processed as regrind in blends with virgin material. This includes the common practice of feeding sprues directly back into the injection moulding machine. It is important to ensure, however, that regrind is dry, clean and dust-free since otherwise processing stability is reduced. The addition of regrind can also impair feed behaviour.

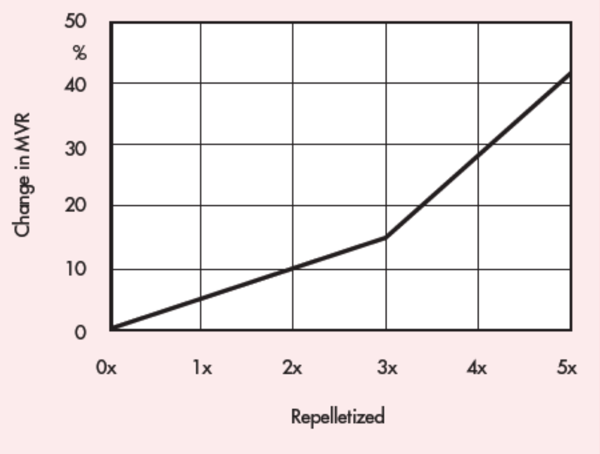
The use of regrind is not recommended for high-quality engineering parts.

Hostaform waste can also be remelted and repelletized but attention must be paid in this case to some specific requirements resulting from its chemical structure. Polymer-type purity and cleanliness of the waste material are particularly important in this process. In practice, this places some limitations on the use of recompounding as a recycling option.

When a material has passed through the recycling loop several times, some deterioration in properties may occur due to degradation and consequently there are restrictions on the possible uses for recycled material. This applies particularly to material produced wholly or partly from post-consumer waste. Quality assurance conforming to ISO 9001, which can be achieved in the production of virgin material, is not really possible with these POM recyclates.

Multiple processing can lead to material degradation. This is shown by an increase in the volume flow rate MVR which is an index for reduction in molecular weight, fig. 92. An increase in MVR is accompanied by a loss in thermal stability and frequently in toughness as well.

Fig. 92 · Change in the volume flow rate (MVR) of polyacetals as a function of multiple processing



Feedstock recycling

Another recycling option is feedstock recycling, in which waste plastics are broken down into their constituent monomers for reuse as feedstock in new polymerization processes. Virgin material results from this process and so there is no loss in quality, unlike with recyclates. Although Hostaform has a structure which makes it particularly suitable for this option, the process is not at present being exploited industrially owing to an absence of the necessary logistics for collecting the used parts and for economic reasons.

7. Literature

[1] Racké, H.: Welche mechanischen Eigenschaften liefern geeignete Grundlagen für das Konstruieren mit Kunststoffen?
Kunststoffe, Vol. 55, 1965, pp. 346-350.

[2] Menges, G.: Abschätzen der Tragfähigkeit mäßig beanspruchter Kunststoff-Formteile.
Kunststoffe, Vol. 57, 1967, pp. 476-484.

[3] Gaube, E. and Menges, G.: Knicken und Beulen von thermoplastischen Kunststoffen am Beispiel des Hartpolyäthylens.
Kunststoffe, Vol. 58, 1968, pp. 153-158 and 642-648.

[4] Wolters, E. and Racké, H.: Wärmealterung, Spannungsrelaxation und Schwingfestigkeit von Acetalcopolymerisat.
Kunststoffe, Vol. 63, 1973, pp. 608-612.

[5] Veselý, R. and Kalenda, M.: Das Bewitterungsverhalten von Polyacetal.
Kunststoffe, Vol. 59, 1969, pp. 107-110.

[6] Schmidt, H. and Wolters, E.: Verhalten von Acetalcopolymerisaten bei natürlicher Bewitterung und künstlicher Belichtung.
Kunststoffe, Vol. 61, 1971, pp. 261-265.

[7] Wolters, E. and Rösinger, S.: Strahlenbeständigkeit von Acetalcopolymerisat.
Kunststoffe, Vol. 63, 1973, pp. 605-608.

[8] Herzog, W.: Grundlagen der technischen Statistik und ihre Anwendung bei der Messung von Spritzgußteilen.
VDI-Bildungswerk, BW 489.

[9] Voigt, K.-D., Raddatz, E. and Schlüter, R.: Das Spritzblas-Verfahren und spritzgeblasene Kunststoff-Packmittel.
Verpackungsrundschau, 2, 1973, pp. 112-118; 3, 1973, pp. 192-203.

[10] Vowinkel, H.: Das Verbinden von Teilen aus Acetalharz und thermoplastischen Polyestern mit Lösungsmitteln.
Kunststoff-Rundschau, Vol. 20, 1973, pp. 76-78.

[11] Kloos, F. and Wolters, E.: Morphologie und Eigenschaften schlagzäh modifizierter Acetalcopolymerer.
Kunststoffe, Vol. 75, 1985, pp. 735-739.

[12] Schmidt, H. and Meinhard, J.: Morphologie und mechanische Eigenschaften dünnwandiger Spritzgußteile aus Hostaform.
Plastverarbeiter, Vol. 29, 1978, No. 9.

[13] Schulz, D. B.: Untersuchungen zum Präzisionsspritzgießen mit Acetal-Copolymerisat auf einer prozeßgesteuerten Spritzgießmaschine.
Plastverarbeiter, Vol. 29, 1978, No. 11 and Vol. 30, 1979, No. 1.

[14] Ticona GmbH: C.3.3 Design of mouldings made from engineering plastics.

[15] Ticona GmbH: C.3.4 Guidelines for the design of mouldings in engineering plastics.

[16] Ticona GmbH: C.2.1 Hot runner system – Indirectly heated, thermally conductive torpedo.

[17] Ticona GmbH: C.2.2 Hot runner system – Indirectly heated, thermally conductive torpedo. Design principles and examples of moulds for processing Hostaform®.

[18] Ticona GmbH: C.3.1 Machining Hostaform®.

[19] Ticona GmbH: C.3.5 Outsert moulding with Hostaform®.

[20] Ticona GmbH: B.1.1 Spur gears with gearwheels made from Hostaform®, Celanex® and GUR®.

[21] Fleischer, D., Mück, K.-F. and Reuschel, G.: Recycling von Polyacetal.
Kunststoffe, Vol. 82, 1992, pp. 763-766.

[22] Witan, K. et. al.: Non-Contact Marking by Laser Beam.
Kunststoffe German Plastics, 1993, No. 11

8. Photo supplement showing typical applications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Basic grades

Proven standard grades for injection moulding, extrusion and blow moulding

Photos 1-4:
Modern, heavy-duty kitchen tap components consist of three materials: metal, ceramics and Hostaform C 9021

Photo 5:
Dial switch disk for current meter made from Hostaform C 9021 with engaging springs, snapfit hooks and dial bar

Photo 6:
More than 20 components made from Hostaform C 9021 and C 9021 GV 3/20 for a modern gas meter

Photo 7:
Directional control valve blocks made from Hostaform C 9021 with integrally moulded snapfit hooks for straightforward assembly

Photo 8:
Perfume container – inner parts with integrally moulded spring, engaging and snapfit elements made from Hostaform C 9021

Photo 9:
Truck door handles made from UV-stabilized Hostaform C 2521 are of robust design appropriate to the application

Photo 10:
Drive wheels with internal toothing made from Hostaform C 2521 for a motor mower

Photo 11:
Automotive clip made from Hostaform C 2521 with various spring and snapfit elements designed to hold cables and pipelines and fix the clip to the car


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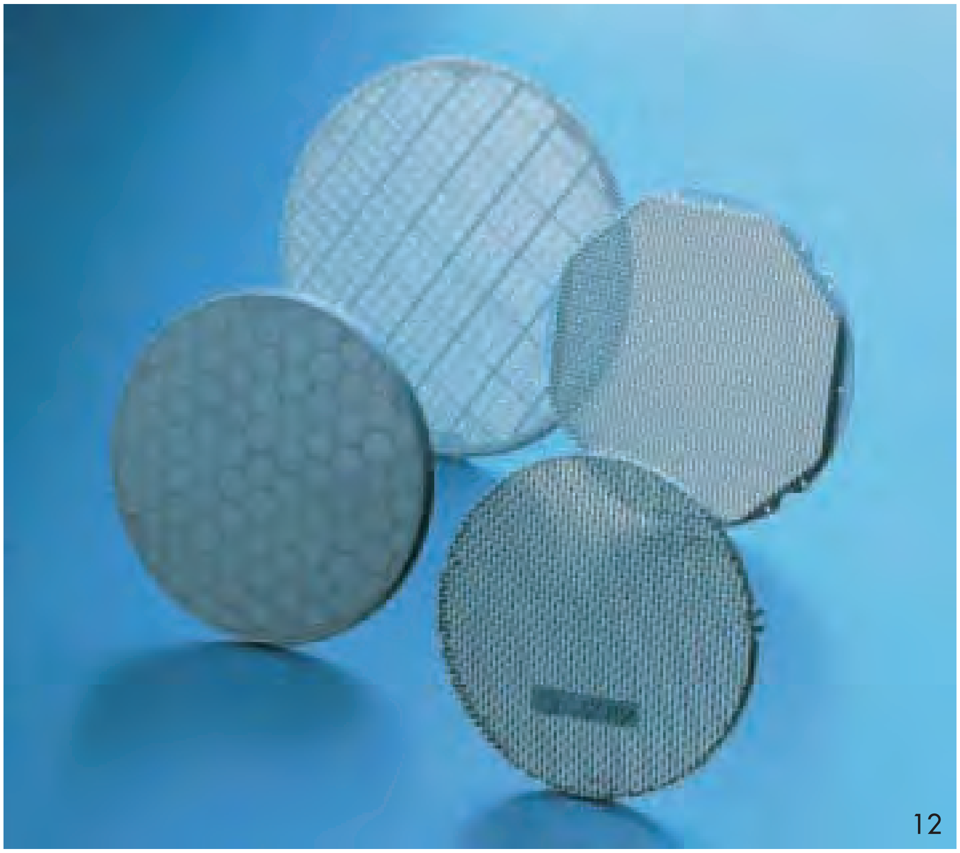
12

Easyflowing grades

These are distinguished mainly by their high melt flow rates and meet all requirements of modern injection moulding technology.

Photo 12:
Speaker grille with complicated moulding geometry made from extremely easyflowing Hostaform C 27021 and Hostaform C 52021

Photo 13:
Fuel supply system with parts made from easyflowing Hostaform C 13031

Photo 14:
Key guides made from easyflowing Hostaform for the keyboard of a PC system

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Photo 15:
Base plate with more than 100 parts made from Hostaform C 13021, produced by outsert moulding for a video recorder

Photo 16:
Clips made from easyflowing Hostaform C 13021 for fastening pipelines and cables in automotive manufacture

Photo 17:
Spring plate made from very easyflowing Hostaform C 27021

Photo 18:
Rotating and sliding elements made from UV-stabilized, easyflowing Hostaform C 13031 for vertical blinds


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Grades with improved slip properties

These are modified with additives which improve slip properties and/or abrasion resistance.

Photo 19:
Bevel wheels made from molybdenum-disulphide-modified Hostaform C 9021 M in an automotive ventilation/heating system

Photo 20:
Circuit breaker (modular design) with gearwheels precision moulded from slip-modified Hostaform C 9021 K

Photo 21:
Gearwheel assembly made from Hostaform C 9021 G for a towel dispenser

Photo 22:
Zip fastener with injection moulded plastic teeth made from the special grade Hostaform C 13021 RM

Glass-fibre/glass-sphere-reinforced grades

In these grades, glass fibres or glass spheres are used as reinforcing materials.

Photo 23:
Toothed rack measuring 190 x 9 x 11 mm, injection moulded from 30%-glass-sphere-reinforced Hostaform C 9021 GV 3/30

Photo 24:
Toothed ring made from Hostaform C 9021 GV 3/30 – true-running and distortion-free
o.d. = 135 mm
i.d. = 100 mm

Photo 25:
Pump with parts made from Hostaform C 9021 GV 1/30 for an automotive windshield (screen) washer unit


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Impact-modified grades

These grades are blends with elastomers and have higher impact strength than the basic grades.

Photo 26:
Parts of a conveyor system for garment blanks in the clothing industry: garment carrier and pulley made from Hostaform S 9063, other parts made from C 13021 and C 2521

Photo 27:
Automotive aerial bushing made from impact-resistant, easyflowing Hostaform S 27063

Photo 28:
Orbital sander plate with outsert moulded components made from Hostaform S 9063

Photo 29:
Flexible adjusting ring made from high-impact Hostaform S 27064 for trimming-depth adjustment on an electric shaver

Photo 30:
High-load-bearing belt fasteners made from high-impact, high-weld-strength Hostaform S 9244; hinged flap with snap-in projections made from extremely easyflowing Hostaform C 52021

Laser marking of Hostaform

This is a fast, clean, noncontact process which offers a high degree of flexibility and produces very good results.

Photo 31:
Money box made from very easyflowing Hostaform C 27021

Photo 32:
Hair collector for an electric shaver, laser-marked with text, codes, safety symbols and the company logo

Photo 33:
Laser-marked fountain pen top made from very easyflowing Hostaform C 27021 (two-colour injection moulding)


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9. Subject index

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Published in August 2006

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Hostaform®, Celcon®
polyoxymethylene copolymer (POM)

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Hostaform® *Polyoxymethylene Copolymer (POM)*

B 244 BR E-08.2006/035 Printed in Germany

From: [redacted]
Sent: Friday, July 11, 2014 12:27 PM
To: [redacted].)
Subject: FW: door latches

From: [redacted]
Sent: Friday, July 11, 2014 7:44 AM
To: [redacted])
Cc: T[redacted]
Subject: FW: door latches

Steve, not sure of all the parts but here is the status on two of the handles for the Fiesta.

BE8Z 5426412 B – there is enough inventory in transit to cover all the open backorders
BE8Z 5426413 B - there is enough inventory in transit to cover all the open backorders

---

From: [redacted]
Sent: Wednesday, July 09, 2014 2:01 PM
To: [redacted]
Subject: FW: door latches

[redacted] – these door latch issues are starting to proliferate. Do you have any update?

Steve Papanikolas
[redacted]

From: [redacted]
Sent: Wednesday, July 09, 2014 10:59 AM
To: [redacted]
Subject: door latches

Dan and Jason, Do you have any insight on the door latch issues and getting parts with fiesta, focus, fusion and escape. We have several on back order at all of our Ford stores and a bunch of pissed off warranty and retail customers waiting for latches.. We have been putting them in rentals and don't know what Ford is doing to help the dealers with this. (I will see what I can do about getting you a list of vin #s). If at all possible I would like to know that Ford will assist with the rentals beyond Tap for theses latch customers and if we could get some kind of clear answer on the parts, looks like August is availability date now.. Ugg…

[redacted]
Corporate Director, Fixed Operations
Richardson Enterprises/San Tan Ford
[redacted]

-

From: [redacted]L.)
Sent: Tuesday, July 01, 2014 11:29 AM
To: [redacted]
[redacted]
Subject: FW: Fiesta Door Latches

Jake Doss provided the below two part numbers to Basil that are related to this string of emails. Please provide any additional part numbers that are known to be related to this issue.

BE8Z 5426412 B – Lock Assembly, enough inventory in-transit to cover all 444 backorders. Supplier shipping more stock this week. See below for how demand is increasing:

```
MONTH YEAR    Quantity
  --   ----   ---------
  06   2014         696
  05   2014         411
  04   2014         280
  03   2014         146
  02   2014         143
  01   2014         115
```

BE8Z 5426413 B – LATCH, only 4 stock backorders that will fill this week. See below for demand pattern:

```
MONTH YEAR    Quantity
  --   ----   ---------
  06   2014         120
  05   2014          70
  04   2014          79
  03   2014          54
  02   2014          51
  01   2014          52
```

Mark Talbott
N. A. Supply Chain Manager
Ford Customer Service Division
email:[redacted]
[redacted]

From:[redacted])
Sent: Monday, June 30, 2014 1:24 PM
[redacted]
Subject: FW: Fiesta Door Latches

Kris and Joe, A potential CCRG concern. From talking briefly to Steve, some are surmising the concern to be heat related, and may potentially affect other vehicle lines.

Mark and Basil, Looks like another part shortage. Not an FSA... Any insight on who would be following to help provide the field with some relief?

From: [redacted]
Sent: Monday, June 30, 2014 1:06 PM
[redacted]
Subject: FW: Fiesta Door Latches

Tom –

This is the email I was referring to in my voice mail, can you call me when you have a chance? Thanks.

[redacted]

From:[redacted]
Sent: Monday, June 30, 2014 9:34 AM
[redacted]
Subject: FW: Fiesta Door Latches

[redacted]

Additional concerns from Peoria Ford on the Fiesta Door Latch Issues. Matt Tonoli claims they have 8 vehicles at their Dealership right now awaiting parts. Brandon is working with him to assist with the process to provide the customers loaner vehicles, but it seems that this issue is growing exponentially. Can you contact Matt or have Brayan contact Matt and then get the information to provide to engineering so we can act quickly. We will have Matt enter the information into the Global Concern Reporting site so that there are more GCQUIS reports on this.

[redacted]
Parts & Service Operations Manager
Phoenix Region
[redacted]

From: [redacted]
Sent: Monday, June 30, 2014 9:20 AM
[redacted]
Subject: Fiesta Door Latches

Gentlemen,

I am a little concerned about this Fiesta Door Latch product issue that we are seeing a lot of...

When I spoke to Brandon about this earlier today, he gave me the impression that Ford only knows about isolated cases of this problem.
HOW IS THIS POSSIBLE?? – THIS IS ALL OVER HE INTERNET AND IS A CONCERN WE ARE GETTING PHONE CALLS ON DAILY!

We have 8 of these here at our dealer RIGHT NOW!

THE CUSTOMER COMPLAINT IS – DOOR WILL NOT LATCH AND STAY CLOSED – this is obviously a HUGE safety concern. The parts are on intergalactic national back order with an estimated ETA of sometime in mid to late July…

Here are 2 examples of VIN'S WITH FM 360 CASES FROM EARLY THIS MONTH –

1. VIN # 3FADP4BJ1CM[redacted] – CASE # -[redacted]-H5F0S3 – June 17th
2. VIN # 1FAHP3J25CL[redacted] – CASE #[redacted]W2LOV8 – June 4th

In all of these cases – the customers cannot keep their door closed and latched, which could lead to somebody falling out of the vehicle if they were not belted in. In all of these cases, our customer is requesting alternate transportation since the vehicle cannot be driven safely….

HERE IS THE PROBLEM!!!!!

Ford says to write a repair order on the vehicle to get a FM360 case started to order the part – If Peoria Ford does this (WE "Peoria Ford") will need to provide alternate transportation to this customer immediately – not knowing whether or not we will be reimbursed for the rental…? Once the car has a repair order on it – WE CANNOT LET IT OUT OF OUR POSSESION WITH DOOR THAT WILL NOT STAY LATCHED!!! Huge Liability!!!!

WE HAVE DIRECTED ALL CUSTOMERS TO CALL THE FORD CONSUMER AFFAIRS HOTLINE – IN EACH CASE THEY ARE BEING TOLD THAT THE DEALERSHIP SHOULD BE PROVING RENTALS – WHY WOULD THEY BE TELLING THE CUSTOMER THIS???

Peoria Ford has ZERO tap Funds and will only be getting another $5000 tomorrow July 1st – COMPARE THAT TO "CAMLEBACK FORD -#11296" THE DEALER I JUST CAME FROM THAT WILL BE GETTING ANOTHER $35000+ -

IS THERE ANYTHING THAT CAN BE DONE ABOUT THIS SITUATION IMMEDIATELY ??

This is a CSI nightmare waiting to happen- PERCEPTION IS REALITY – the customer only sees that Peoria Ford is not helping them or providing another vehicle to drive while theirs is down for repair… WE HAVE RECEIVED THREE OF THESE VEHICLES JUST TODAY …

Thanks for your help in advance

Mathew Tonoli | Service Director
[redacted]

"The most significant and lasting way to set ourselves apart, is the way we define and deliver hospitality, which exist when someone feels you are on their side."

From: [redacted]
Sent: Tuesday, September 09, 2014 11:55 AM
To: [redacted]
[redacted]
Subject: FW: Future Ford - More Door Latches Broken
Attachments: IMG_20140908_150156_006.jpg

I should have included you. We have had multiple dealers share concern on Fiesta and Fusion.

From: [redacted]
Sent: Tuesday, September 09, 2014 11:44 AM
[redacted]
Subject: FW: Future Ford - More Door Latches Broken

Tom – as discussed.

From: [redacted]
Sent: Tuesday, September 09, 2014 11:00 AM
To[redacted])
Subject: Future Ford - More Door Latches Broken

Ernita / Denise: FYI – Pls forward as appropriate.

[redacted]
San Francisco Regional Manager
Ford Lincoln Sales, Parts & Service
Cell: [redacted]

From: W[redacted]
Sent: Monday, September 08, 2014 9:05 PM
[redacted]
Subject: RE: IMG_20140908_150156_006.jpg

[redacted] - thanks for sending. I will ensure our senior team has this first thing in the morning. In terms of how to proceed, I believe the repair procedure is defined and Joe knows best how to handle the customer. Pls send me the Part #. The photo is helpful and I will keep you posted.

[redacted]
San Francisco Regional Manager

-----Original Message-----
From: [redacted]
Sent: Monday, September 08, 2014 11:59 PM Eastern Standard Time
To: [redacted]
[redacted]
Subject: FW: IMG_20140908_150156_006.jpg

Mark, has this been brought to the attention of upper management? I think our liability is huge and we should get some specific direction as how to proceed. Steve

-----Original Message-----
From: [redacted]
Sent: Monday, September 08, 2014 5:18 PM
To: [redacted]
Subject: FW: IMG_20140908_150156_006.jpg

I just wanted you to see how these cars are coming in our service drive. We had two more today, this one with a strap securing one door to the other so the customer could drive and the other the customer tied his seatbelt around the door toget here. These parts are on delay until September 29th and obviously the cars aren't drivable. We'll call Tammy tomorrow and see if she'll cover the rental cars until the parts come in. I don't need anyone to do anything with it, we'll deal with the situation that's are job and will do everything we can to take care of the customers I just wanted you to see. Ford is obviously very aware of the situation after our conference call.

Thanks,

[redacted]
Parts & Service Director
[redacted]

-----Original Message-----
From:[redacted]
Sent: Monday, September 08, 2014 5:07 PM
To:[redacted]
Subject: IMG_20140908_150156_006.jpg

Two more doors that wouldn't close.

From:	[redacted]
Sent:	Thursday, July 31, 2014 12:30 PM
To:	[redacted]
Subject:	FW: Latch Return - CCRG wants to bring it back to PDC
Attachments:	Cerradura VIN EM105348.xlsx; DSC00032.JPG; DSC00034.JPG; DSC00063.JPG

Images of the latch claimed to have "opened while driving" post teardown in KdM – more pictures forthcoming apparently. I will try organizing a bunch of the documentation and data alongside the open items list and sending it out, just need some time to do it. The photo above isn't very high resolution, zooming in on the pawl feature just gets grainy.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]]
Sent: Thursday, July 31, 2014 12:27 PM
To: [redacted]
[redacted]
Subject: FW: Latch Return - CCRG wants to bring it back to PDC

[redacted]
Please see the photos for this particular latch from the VIN requested.

I have spoken to Arturo Robles (Ron's counterpart at KDM) and included him on the this response. Arturo informs me that the tab is still there but fractured at the base (Reference photo #63).

Arturo has additional photos that he is sending and I will forward them on to you.

Regards,

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 10:35 AM
To: [redacted]
Cc: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

Hello [redacted]

I got this latch with me. This is the one CSAP claimed the customer was very upset because stated the door was unexpectedly open while the vehicle was in movement
I am sending this part to your attention UPS overnight, so you will get the part tomorrow.
Latch was tested and torn-down. It has the same broken tab issue we have seen in other latches nothing else different.
We've tried to re-assembly the latch as near the original condition
I'm attaching the data from CSAP provided to this latch and also some pictures of the part

Best regards

Arturo Robles | Warranty Engineer | Kiekert de Mexico | Chachapa Industrial Park | Amozoc, Pba 72990 Mexico
Phone: [redacted]

[redacted]
Sent: jueves, 31 de julio de 2014 08:51 a.m.
To: [redacted]
Cc: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

[redacted],
I spoke to KdM about this specific latch. They are looking to see if they have this specific VIN return. I am not sure if this latch was intercepted by Hermosillo PVT , if it was returned to the Ford Warranty center in in Mexico, etc.

It has not been returned to WPRC in Michigan.

We delivered 7 latches to Kosta last week that exhibit this same condition. Is there any reason that they want this specific latch?

Regards,

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
[redacted]

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.

[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 9:29 AM
To: [redacted]
Subject: Latch Return - CCRG wants to bring it back to PDC

[redacted]
I am hoping Chris Okeh contacts you, but if not we need the latch listed below:

3FADP4EJ4EM[redacted] - Autos de Hermosillo Contact: Jorge Arredondo 662-2892-029 (this latch was delivered to Kiekert 2 weeks ago and found the same root cause of door not latching, couldn't reproduce the opening door condition)

CCRG wants to put it on a vehicle here and Dearborn to understand the intensity of indication (door chimes, door ajar?, only door bounceback?) associated with door will not close. I'll be on a call for the next 30 but email me back – I just got off the CCRG call.

Best Regards,

[redacted]
STA – Latches/Door Systems
[redacted]

Headquarters: Kiekert AG, Hoeseler Platz 2, 42579 Heiligenhaus/Germany
T: +49-2056-15-0; www.kiekert.com
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Executive Board: Dr. Karl Krause (Chairman), Stephan Espelage, Ulrich-Nicolaus Kranz, Juergen Wenzel
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1074 4142 12913A
EBKTA
CL
FoMoCo
AE8A-5426412-BF


3805JC

VIN	DEALER NAME	TRANS	ODOMETE	DEALER	MODEL	REPORT	Exist in Other	COMMENTS
3FADP4EJ4EM[redacted]	Autos de Hermosillo, S.A. de C.V.	5SP IB5	3994	M2633	2014	07/03/2014	Yes	CONCERN: 07/03/2014 12:56PM ERICK VELAZQUEZ VO - FOM - CUST SERV TECH/QLTY TECH STS CUSTOMER IS VERY UPSET DUE TO DRIVING AT LOW SPEED REAR RIGHT SIDE DOOR OPEN WHEN VEHICLE WAS TURNING. CUSTOMER SAID THAT SOMETIMES IT IS VERY HARD TO CLOSE THIS DOOR. TECH CONFIRMED THAT DOOR CANNOT BE CLOSE, INSPECTED LATCH/HANDLE ASSEMBLY AND HINGES BUT DID NOT FIND SOMETHING ABNORMAL ONLY A INTERNAL PART LOOSE. RECOMM: 07/03/2014 12:56PM ERICK VELAZQUEZ VO - FOM - CUST SERV TECH/QLTY I WILL SEND AN EMAIL TO QUALITY AND PVT TEAM TO KNOW IF IT IS POSSIBLE TO RETRIEVE THIS ASSEMBLY. ADV TO REPLACE IT.

From:	[redacted]
Sent:	Thursday, July 31, 2014 11:06 AM
To:	[redacted]
Subject:	FW: Latch Return - CCRG wants to bring it back to PDC

Customs....really......

Thanks,

[redacted]

STA – Latches/Door Systems

From: [redacted]
Sent: Thursday, July 31, 2014 11:02 AM
To: [redacted]
[redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

Shipment for Mexico below. But I do have recent housings here and lathes that are a couple of months old. If this shipment below is not received before you get here I will give you those.

Additional Information

Shipped/Billed On:	07/30/2014
Type:	Package
Weight:	8.00 kgs

Shipment Progress

Location	Date	Local Time	Activity
	07/31/2014	6:33 A.M.	The package is awaiting clearing agency review. / The package is at the clearing agency awaiting final release.
Louisville, KY, United States	07/31/2014	3:38 A.M.	Warehouse Scan
	07/31/2014	12:32 A.M.	Import Scan
	07/31/2014	12:01 A.M.	Arrival Scan
Mexico City, Mexico	07/30/2014	7:44 P.M.	Departure Scan
	07/30/2014	7:13 P.M.	Export Scan
	07/30/2014	5:16 P.M.	Arrival Scan
Puebla, Mexico	07/30/2014	3:40 P.M.	Departure Scan
	07/30/2014	3:05 P.M.	Export Scan
	07/30/2014	3:05 P.M.	Origin Scan
Mexico	07/30/2014	1:55 P.M.	Order Processed: Ready for UPS

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 10:38 AM
To: [redacted]
Cc: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

Yeah this is one of the 5 that was indicated as "door opens while driving" They want to understand as close to the simulated failure replication as possible how strong the indication would have been to the driver that the door did not close. Was the door ajar light on? Did the door chime work?

Bradley is coming with me and I am guessing I will get out of here and get out of there to snag the housings, and I was hoping this latch unfortunately, around 1 PM.

Thanks,

[redacted]
STA – Latches/Door Systems

From: [redacted]]
Sent: Thursday, July 31, 2014 9:51 AM
To: [redacted]
Cc: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

[redacted]
I spoke to KdM about this specific latch. They are looking to see if they have this specific VIN return. I am not sure if this latch was intercepted by Hermosillo PVT , if it was returned to the Ford Warranty center in in Mexico, etc.

It has not been returned to WPRC in Michigan.

We delivered 7 latches to Kosta last week that exhibit this same condition. Is there any reason that they want this specific latch?

Regards,

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 9:29 AM
To: [redacted]
Subject: Latch Return - CCRG wants to bring it back to PDC

[redacted]
I am hoping Chris Okeh contacts you, but if not we need the latch listed below:

3FADP4EJ4EM[redacted] - Autos de Hermosillo Contact: Jorge Arredondo 662-2892-029 (this latch was delivered to Kiekert 2 weeks ago and found the same root cause of door not latching, couldn't reproduce the opening door condition)

CCRG wants to put it on a vehicle here and Dearborn to understand the intensity of indication (door chimes, door ajar?, only door bounceback?) associated with door will not close. I'll be on a call for the next 30 but email me back – I just got off the CCRG call.

Best Regards,

[redacted]
STA – Latches/Door Systems
[redacted]

T: +49-2056-15-0; www.kiekert.com
Registered in Heiligenhaus; Company Register Wuppertal HRB No 17915
Executive Board: Dr. Karl Krause (Chairman), Stephan Espelage, Ulrich-Nicolaus Kranz, Juergen Wenzel
Supervisory Board: Xizeng Li (Chairman)
IBAN : DE72 3307 0090 0484 1300 01
BIC : DEUTDEDWXXX
>

From: [redacted].J.)
Sent: Saturday, August 23, 2014 9:06 PM
To: [redacted]
Subject: FW: Latches to Dealer

Did you get back to Ernie with this yet? I am going to guess our window of opportunity is closing on this as the kid's car will soon get fixed through the normal channels.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Friday, August 22, 2014 2:21 PM
To: [redacted]
Cc: [redacted]
Subject: RE: Latches to Dealer

[redacted]
Could you please find out what the charges would be from the dealership to remove the entire vehicle set of latches from the one vehicle mentioned below and replace them with one of 3 vehicle sets of latches that were sent to the attention of Bill Wilcox at Jim Charlon Ford in Ridgecrest, CA. This latches are expected to arrive on Monday, August 25.

I will then need to figure out on my end how we get payment to the dealership.

Thanks.

Regards,

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Wednesday, August 20, 2014 2:32 PM
To: [redacted]
Cc: Greenisen, Matt (M.J.)
Subject: RE: Latches to Dealer

Hey [redacted]

I called several dealers in the area for a Fiesta most did not even return my call. This dealer said sure no problem come get it. I just thought it would be good to give him a few car sets of latches so that he would have a buffer to appease his customers while the backorder is still an issue.

However the main reason to send him so many sets is to get him to return 2 or 3 full vehicle sets. It would be very valuable to see and analyze different levels of failure and degradation from vehicles known to exhibit this condition. In particular this Fiesta this has had three of the four latches fail. 2 were replace at different times in the past. The 3rd is awaiting parts on backorder and drivers is still working. Replacing and analyzing all 4 lathes will be very valuable information (2 original to the vehicle that was exposed to the Summer of 2013 and 2 replacements that were only exposed to this summer).

I am requesting Kiekert to send a technician to this dealer with latches and swap out all the door latches from 1 or 2 Fiestas and 1 or 2 Fusions. If not practical, cover the labor cost if the dealer is willing. I can speak with the dealer to see if this can be arranged.

Again, please consider this valuable opportunity to have field samples to compare to the test samples.

Please call me to discuss when you are back in the office.

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

From: [redacted]
Sent: Wednesday, August 20, 2014 10:41 AM
To: [redacted]
[redacted]
Subject: RE: Latches to Dealer

Paul – Thank you. Please have them overnighted and send me the tracking number.

I will discuss with Ernie additional ways Kiekert may express gratitude to this small dealer; allowing us to just take a brand new Fiesta off his lot and put over 500 miles on it to help solve a supplier problem.

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | 313-806-5018 | bmullen9@ford.com

---

[redacted]
Sent: Wednesday, August 20, 2014 10:18 AM
To: [redacted]
[redacted])
Subject: RE: Latches to Dealer

[redacted]

I talked to my General Manager and he has authorized 3 car sets.

[redacted]
Customer Quality Engineer
Keykert USA, Inc.
[redacted]

www.kiekert.com

From: [redacted]
Sent: Wednesday, August 20, 2014 9:48 AM
To: [redacted]
[redacted]
Subject: RE: Latches to Dealer

Please send 12 pair (overnight at least 2 pair) to:

Attn: Bill Wilcox
[redacted]

[redacted]

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

[redacted]
Sent: Tuesday, August 19, 2014 1:07 PM
[redacted]
Subject: RE: Latches to Dealer

Brad,

Please provide the Dealer address that you want the replacement latches sent to.

[redacted]
Customer Quality Engineer
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 11:51 AM
To: [redacted]
[redacted]
Subject: Latches to Dealer

Hey [redacted]

Can you send some latches to the Dealer that loaned us the black Fiesta for the measurements in Death Valley? Kind of as thank you but also to get some latches back that have not failed but saw the same environment as ones that did. I'd like to get back the front driver's side and both rear latches form the Fusion we reviewed and both front and rear driver's side latches of the kid's Fiesta (3 of 4 failed).

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

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From: [redacted])
Sent: Friday, August 29, 2014 12:42 PM
To: [redacted])
Subject: FW: VINS - Fiesta latching
Signed By: jbonnic1@ford.com

FYI – I asked Kosta again about the "vintage" of the 5 latches Dave M brought up. Here is the note string about them & none are for "door came open"

From: [redacted]
Sent: Friday, August 29, 2014 12:38 PM
To: [redacted]
Subject: FW: VINS

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson

[redacted]
Technical Specialist -Latching Body Hardware
Body Engineering
([redacted]
[redacted]

From: [redacted]
Sent: Friday, July 25, 2014 4:05 PM
To: P[redacted]
Subject: RE: VINS

1FAHP3F24CL[redacted]

No door-related reports found

3FAFP4AJ5DM[redacted]

STANDING REAR DOOR DOES NOT LOCK

Tech Comments: REV. LA UNIT BEING Q STANDING REAR DOOR DOES NOT LOCK BY THE Q PROCEEDED TO TAKE APART DOOR AND LOOK OVER CONTINUITY WITH MULTIMETER DIGI SO DETECTING INTERNAL PLATE PROBLEMS ACTUATOR BY THE Q PROCEEDED TO RZAR PLATES ACTUATOR TO CORRECT; THE PROBLEMS.

3FAFPAJ1DM[redacted]

VIN not found

3FAOR4EJ5CM[redacted]

VIN not found

1FAHP3H23CL[redacted]

RV. - DOORS RIGHT SIDE DO NOT LOCK Tech Comments: REV.LA UNIT ENCONTRNADO Q REAR DOOR AND FRONT OF RIGHT SIDE DO NOT CLOSE, BY THE Q PROCEEDED TO TO THEIR REVISION DESTAPIZARON DOORS DETECTNADO INTERNAL PROBLEMS IN ACTUATORS OF PTAS BY LOQ PROC.A RZAR ACTUATORS FOR CORREG.CON REP.ATD EGGF2002 GRANTS POLICY OF BY DEFAULT FROM THE MATERIAL CRC.

From: [redacted]
Sent: Friday, July 25, 2014 3:52 PM
To: [redacted]
Subject: VINS

Here are what I think they are. The writing is not clear to me in all cases but...

1FAHP3F24CL[redacted]

3FAFP4AJ5DM[redacted]

3FAFPAJ1DM[redacted]

3FAOR4EJ5CM[redacted]

1FAHP3H23CL[redacted]

Do not go where the path may lead, go instead where there is no path and leave a trail. - Ralph Waldo Emerson

[redacted]

Technical Specialist -Latching Body Hardware

Body Engineering

[redacted]

From: [redacted]
Sent: Monday, September 15, 2014 9:45 AM
To: [redacted]
Subject: Fwd: lower housing
Attachments: Projects.jpg

Categories: Supplier Team

Hey [redacted] ,

We cant get to the brose file in TCe

Sent from my Verizon Wireless 4G LTE DROID

[redacted]
Project Engineer / Ford Development
Keykert USA, Inc.
[redacted]

-------- Original Message --------
Subject: RE: lower housing
From: [redacted]
[redacted]
CC:

Morning Scott,

After searching in 6 of 7 Ford servers it is my conclusion the reason I cannot find it is because either it was assigned to a project in Teamcenter I do not have access to or it is completely missing an assigned project all together. I have attached a list of projects I have access to for reference.

[redacted]
[redacted] - Engineering CAD
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Monday, September 15, 2014 8:37 AM
To [redacted]
Cc: Mittelbach Stephan; Bishop, Bryan
Subject: FW: lower housing

Morning Jeff,

Can you help us out with pulling down this file so we can send it to Stephan for analysis?

Scott Brown
Project Engineer / Ford Development
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Friday, September 12, 2014 5:14 PM
To: Brown, Scott; Uhrin, Michael; Verde, Hector
Subject: FW: lower housing

Gentlemen,

I prefer this proposal from Brose which does not alter the assembly process or put stress on the tab to install the spring. Based the FEA from each of you Brose's proposal decreases the stress more than Kiekert's. Please pull down the CAD from TCE and provide me with an assessment of feasibility and timing by next Friday.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson

[redacted]
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted]
Sent: Friday, September 12, 2014 3:19 PM
To: [redacted]
Cc: Bridges, Robert; Rosales, David; Almeida, Ana; Urriola, Maria
Subject: FW: lower housing

Hi [redacted]

Jim just got the confirmation… I don't know why but the system is extremely slow.

Best Regards
Teamleiter Konzeptentwicklung

[redacted]

Speed dial: 8008 4722
Phone: [redacted]
[redacted]

From: [redacted]
Sent: Friday, September 12, 2014 3:07 PM
To: [redacted]
Subject: RE: lower housing

ALL SET ATTACHED ARE THE CONFORMATIONS IN TCE

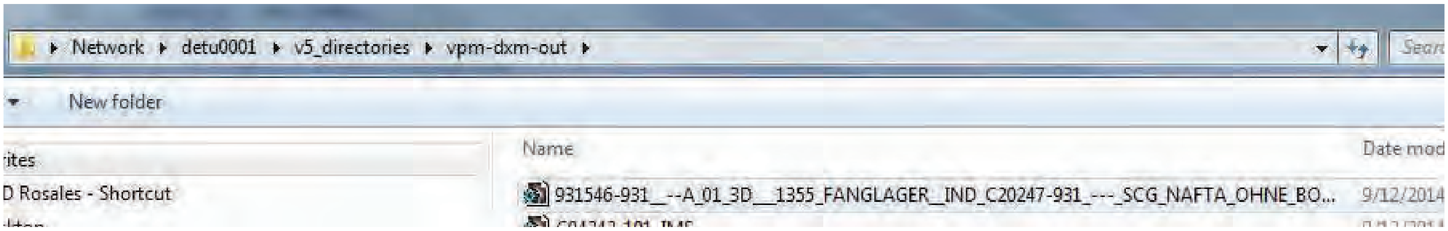
From: [redacted]
Sent: Friday, September 12, 2014 2:20 PM
To: [redacted]
Subject: lower housing

Hi Jim,

Please send this CAD to Kosta:

931546-931__--A_01_3D___1355_FANGLAGER__IND_C20247-931_---_SCG_NAFTA_OHNE_BOWDEN

Thanks!



Network ▸ detu0001 ▸ v5_directories ▸ vpm-dxm-out ▸

931546-931__--A_01_3D__1355_FANGLAGER_IND_C20247-931_---_SCG_NAFTA_OHNE_BO... 9/12/2014

Best Regards
Teamleiter Konzeptentwicklung

David Rosales

Speed dial: [redacted]
[redacted]

Headquarters: Kiekert AG, Hoeseler Platz 2, 42579 Heiligenhaus/Germany
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2014/07/14

2014 Fiesta – latch concern

Door not latching

Key contacts:
Noah Mass
Dave Burgess
Bhupendra Patel

Supplier: Keykert Puebla

Engineered in FoE

Suspect supplier quality concern

per T. Herline discussion

High Temperature Slow Crack Growth in Polyoxymethylene

CHRISTOPHER J.G. PLUMMER,[†] PASCAL SCARAMUZZINO,
HANS-HENNING KAUSCH, *and* JEAN-MICHEL PHILIPPOZ*

Laboratoire de Polymères
Ecole Polytechnique Fédérale de Lausanne
CH-1015 Switzerland

**DuPont de Nemours*
Geneva, CH-1000 Switzerland

Brittle failure has been observed in polyoxymethylene during long-term low-level tensile loading at elevated temperatures. It is argued to be associated with slow crack growth via the breakdown of the localized planar fibrillar damage zones that form under these conditions. This phenomenon has been characterized using notched compact tension specimens tested under various static loads and at different temperatures. The specimen lifetime at a given load is found to decrease strongly with increasing temperature and to increase with molar mass at a given load and temperature. The associated crack-tip fibrillar damage zones are shown to arise from the breakdown of more localized microfibrillar deformation zones, which in turn result from interlamellar cavitation in the early stages of tensile deformation.

INTRODUCTION

Slow crack growth (SCG) leading to unstable failure under long-term, low-level loading conditions has attracted enormous interest over the years, and is of considerable practical concern in applications such as pipes subject to significant internal pressure or corrosive environments (1). Among low T_g semicrystalline polymers, particular interest has focussed on polyethylene (PE), in which SCG is generally preceded by the formation of localized, craze-like fibrillar damage zones (2). The aim of the present work is to demonstrate the existence of similar phenomena in another commercially important semicrystalline polymer, polyoxymethylene (POM).

The T_g of amorphous POM is generally held to be comparable to that of PE (3). However, unlike PE, POM is not usually macroscopically ductile in room temperature tensile tests and at moderate strain rates, in that failure does not involve substantial plastic necking. The strains at break, thought to include substantial contributions from internal cavitation (4, 5), can nevertheless reach up to about 70%, depending on the molar mass, and the effective toughness is therefore similar to that of other engineering thermoplastics (1, 6). At higher test temperatures or lower effective strain rates, there is an initial transition to plastic necking, accompanied by a decrease in cavitation (6). However, as will be described in what follows, at sufficiently high temperatures and/or sufficiently low effective strain rates, global plasticity may become suppressed in un-notched specimens (7). Since the strains to break in this latter regime do not exceed a few percent, the corresponding transition is referred to here as a high temperature "ductile-brittle transition."

By analogy with the behavior of PE, such embrittlement is expected to be associated with SCG. Moreover one might anticipate a ductile-brittle transition also to occur in POM at room temperature for sufficiently long test times, although such conditions have not so far been consistently achieved in this laboratory. The present investigation has therefore centered on the influence of the loading time, and also the molar mass, during constant load tests at a temperature of 100°C. This temperature is sufficient to induce the ductile-brittle transition within a convenient range of test times. On the other hand, it does not lead to significant chemical degradation of the specimens in the time range considered [based both on thermo-gravimetric data and on tensile tests on specimens aged at 100°C over much longer times (7)].

---

*To whom correspondence should be addressed.

EXPERIMENTAL

The materials used in this study were commercial grades of POM homopolymer from DuPont de Nemours, with number average molar masses, M_n, of 35, 41 and 66 kg/mol, and polydispersities of about 2. The molar masses were all well above the entanglement molar mass [estimated to be about 3000 kg/mol (3)]. Preliminary creep tests were carried out on injection molded tensile test bars with dimensions corresponding to the norm ISO 527, with a rectangular cross-section of 4×10 mm^2. Dead weight tensile loads were applied to the specimens and the strain measured using inductive contact extensometers with a maximum displacement of ± 20 mm for an initial gauge length of 20 mm. The tests were carried out in a creep oven equipped with a 60 channel numerical data acquisition system [UPM 60 (Qualimatest)] controlled using software based on the Labview platform [National Instruments].

In order to characterize SCG in POM, measurements were made under static loading using the compact tension (CT) specimen geometry illustrated in *Fig. 1*. CT specimens with the dimensions shown were machined from 120×230 mm^2 edge-gated injection molded plaques, with a nominal thickness of 10 mm. Pre-cracking was carried out by sliding a fresh razor blade along the notch tip just prior to testing. Specimens with $M_n = 70$ kg/mol were also tested, and showed results that were qualitatively consistent with those for the lower M_n. However, they will not be presented here, since static testing indicated the plaques to display a significant degree of anisotropy, the mechanical properties varying with the orientation of the tensile axis with respect to the original flow direction.

Tensile tests were performed using a screw-driven Schenck tensile test machine, equipped with an environmental chamber. The specimens were tested under various loads after conditioning for one hour at the test temperature. For convenience, the crack opening was characterized using the load line crack opening displacement (COD_{LL}), that is the displacement of the loading points during the tests. Measurements made using the CCD camera indicated COD_{LL} to be directly proportional to the crack opening displacement at the crack tip over the whole range of displacements to be discussed in what follows. It was therefore inferred that bulk creep far from the notch tip did not have a significant influence on COD_{LL}.

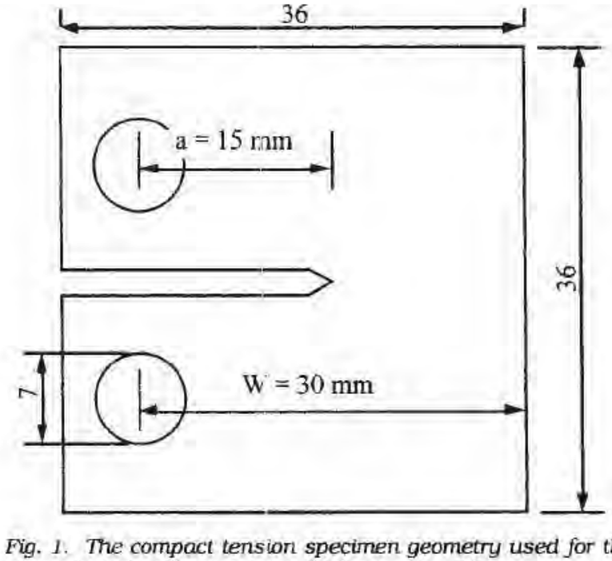

Fig. 1. The compact tension specimen geometry used for the present study. The specimen thickness B = 10 mm.

Certain tests were terminated prior to unstable fracture, but after a certain amount of stable crack propagation had occurred. A wedge was inserted between the notch faces in order to maintain the final crack opening displacement on removal of the specimen from the tensile test machine. The entire specimen was then embedded in Epon™ resin (Fluka GmbH) following the multistep procedure recommended by the supplier, designed to ensure maximum penetration of the resin into the specimen. (The initial step was to impregnate the specimen with a solution of the resin in propylene oxide, which is a nonsolvent for POM.) A Reichert-Jung Ultracut E microtome and a Diatome diamond cryo-knife (45°) were used to obtain ultrathin sections at −120°C (≤ 100 nm) centered on the zone of interest (typically just ahead of the crack tip). The sections were transferred onto distilled water with the aid of a drop of sucrose solution, picked up on 200 mesh transmission electron microscopy (TEM) grids, and dried. They were then stained by exposure to RuO_4 vapor for about 8 h, depending on the thickness of the section (thicker sections generally required longer staining times). TEM observations were made using either the Philips EM 300 at 100 kV or the Philips CM 20 at 200 kV.

Scanning electron microscopy (SEM) was also used to investigate the crack tip deformation zone, in some cases after exposing internal surfaces by cryo-fracture in a plane perpendicular to that of the crack faces. SEM was carried out on uncoated specimens in low voltage mode (about 1 kV), using the JEOL 6300F SEM equipped with a field emission gun.

RESULTS

Tensile Creep of Un-notched Specimens

Figure 2 shows the nominal strain in specimens with $M_n = 41$ kg/mol and 66 kg/mol as a function of time in creep tests at 60°C at different constant nominal stresses, illustrating the behavior described in the introduction. At 30 MPa, all the specimens showed fully ductile behavior and stable plastic necking up to at least 250% strain (that is, the upper limit of the extensometer). At 24 MPa, however, specimens with $M_n = 41$ kg/mol failed at a strain of 8% after about 500 h. This compares with a failure time of 2500 h and a failure strain of 25% for $M_n = 66$ kg/mol at the same stress. The failure strain for $M_n = 41$ kg/mol dropped further to 3% when the stress was decreased to 18

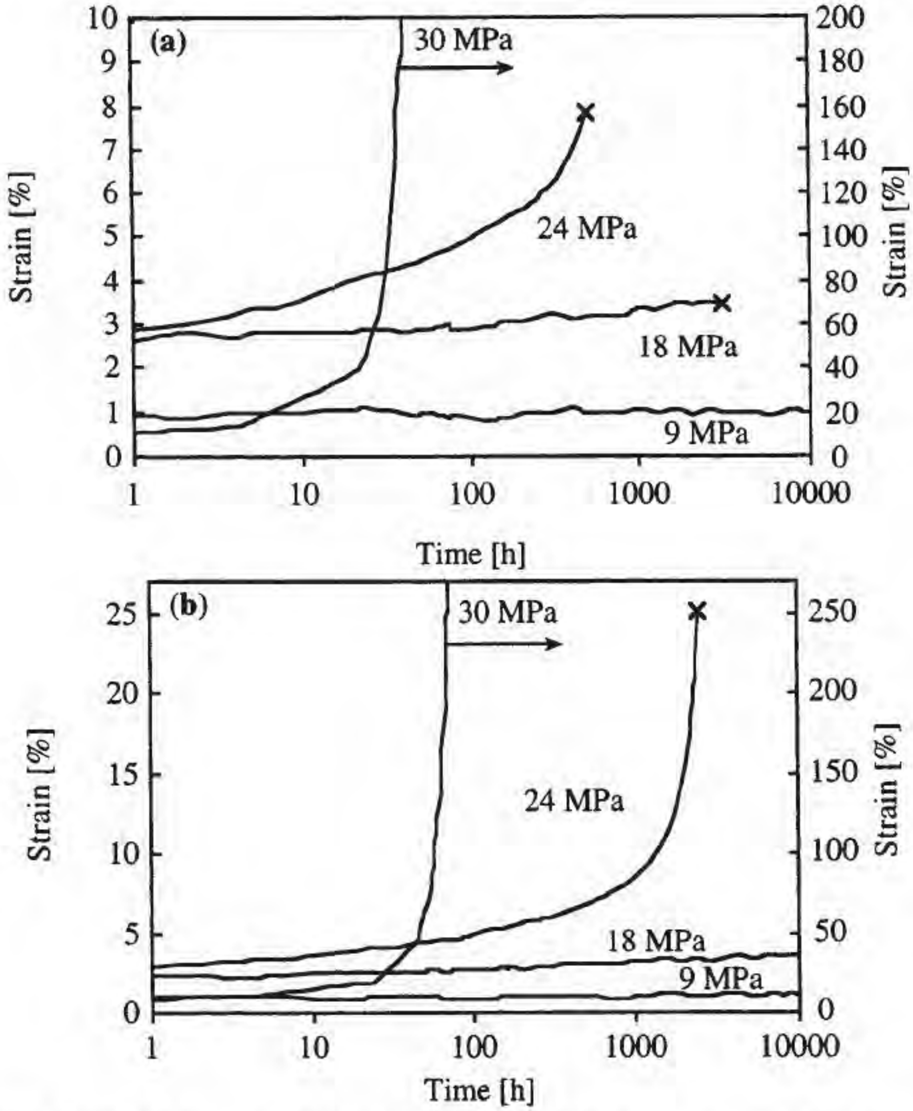

Fig. 2. Tensile creep for (a) M_n = 41 kg/mol and (b) M_n = 66 kg/mol at 60°C at various stresses (the arrows indicate those curves that should be referred to the right-hand strain axis).

MPa, although the time to failure (3000 h) was considerably longer than at 24 MPa. Indeed, specimens with M_n = 41 kg/mol tested at 9 MPa, and specimens with M_n = 66 kg/mol tested at 18 MPa and 9 MPa remained load bearing up to the maximum test time of 10,000 h. Similar behavior has also been observed in specimens tested at higher temperatures, with failure occurring at about 5% strain for M_n = 41 kg/mol loaded at 15 MPa at 80°C, whereas fully ductile behavior was seen in specimens loaded at 25 MPa (7).

This transition to "brittle" behavior was associated with the formation of highly localized planar fibrillar deformation zones. They appeared in the form of parallel crack-like features on the specimen surfaces when these were inspected optically after the tests. The SEM micrograph in *Fig. 3* shows the interior of one such deformation zone that had undergone partial breakdown, showing the fibrils to be between 0.1 and 1 μm in diameter. This compares with typical values of about 10 nm for crazes in glassy polymers (8). Nevertheless, crazes with fibril diameters comparable to those in *Fig. 3* have often been associated with deformation in other semicrystalline polymers above their T_g (9), and with SCG in PE in particular (2).

Slow Crack Growth in CT Specimens

The observed embrittlement at low loads in simple tension is attributed to the ability of localized deformation zones to nucleate and grow from local stress concentrations at stresses below those required for global yielding and plastic deformation at any given time or temperature. Cracks growing within the deformation zones can therefore reach critical sizes at low global strains. However, in simple tension the

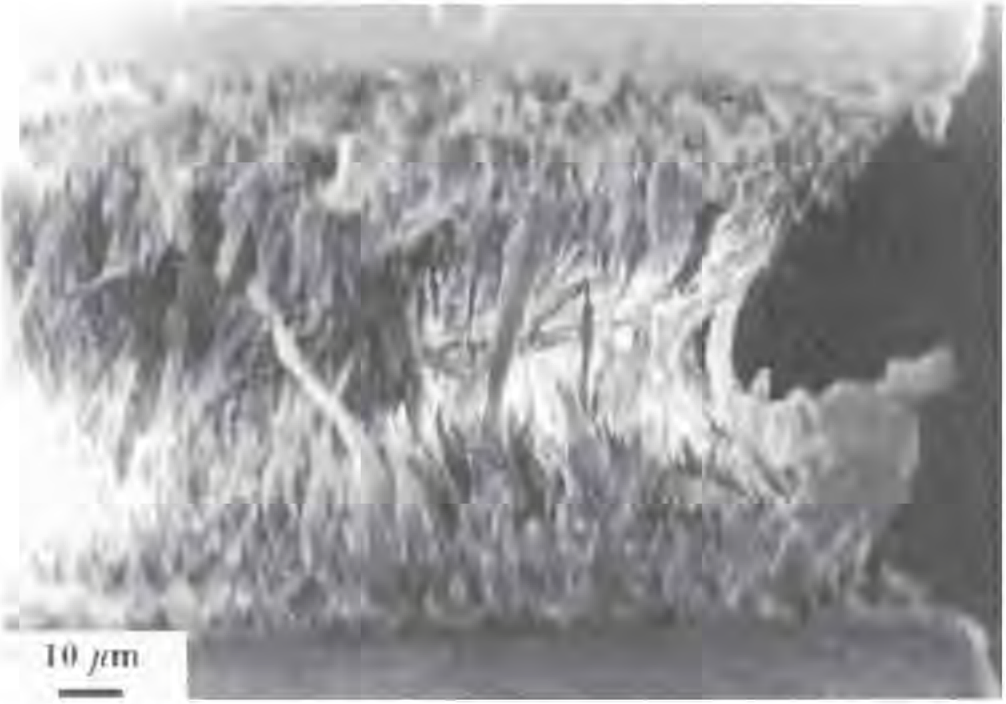

Fig. 3. SEM image of part of a fibrillar deformation zone observed at the surface of a specimen with M_n = 41 kg/mol deformed at 80°C at a constant stress of 20 MPa (the tensile axis is vertical in the image).

relationship between global variables such as strain and the evolution of individual localized deformation zones and/or cracks is often obscure. The investigation was therefore pursued using notched pre-cracked specimens, in an attempt to induce controlled nucleation and growth of one main deformation zone.

Figure 4 shows the evolution of COD_{LL} in CT specimens with $M_n = 41$ kg/mol deformed at 100°C under a constant load, corresponding to an initial nominal applied stress intensity factor K_{app} of 1.67 MPa.m$^{1/2}$. K_{app} was calculated from the initial crack length, using standard expressions for the stress intensity factor from linear elastic fracture mechanics (10). Also shown in this *Figure* are images of the crack tip deformation zone at various stages of the test. A fibrillar craze-like region is clearly visible in the images corresponding to the longest times, similar to those encountered in the creep tests in simple tension.

Under the above conditions, as sketched in *Fig. 4*, crack growth was observed to take place in two distinct stages. Stage I involved crack blunting and development of a diffuse stress-whitened region at the crack tip, accompanied by the formation and growth of the fibrillar deformation zone. Dilatational measurements have shown that some cavitation accompanies yielding in POM even at high temperatures, which accounts for the stress-whitening (7). This is useful in that it allows one to obtain a reasonable idea of the extent of the yielded zone simply by optical inspection. Stage I continued up to a time t_b, and $COD_{LL} = COD_b$ at which point there was a sharp acceleration in $d(COD_{LL})/dt$ and a crack began to propagate through the fibrillar deformation zone. Stable crack growth (stage II) then continued up to time t_f, where final failure intervened via rapid unstable crack propagation.

The Influence of Molar Mass

Figure 5a compares the crack opening behavior of specimens with different molar masses under the test conditions of *Fig. 4*. The initial evolution of COD_{LL} was similar for all the M_n, but there was a clear monotonic increase in t_b with increasing M_n as shown in *Fig. 5b*. Also plotted in *Fig. 5b* are critical crack opening rates $(dCOD/dt)_b$, defined as the minimum slope of $COD_{LL}(t)$. The transition to rapid crack advance in Stage II occurred at progressively lower values of $(dCOD/dt)_b$ as M_n increased.

Figure 6 shows the rate of advance of the tip of the fibrillar deformation zone, da/dt, as a function of time for the different M_n (a is the distance between the deformation zone tip and the initial position of the notch tip, and does not include the stress-whitened region ahead of the fibrillar zone). da/dt was substantially reduced at high M_n, which suggests an increase in the stability of the stress-whitened region with respect to advance of the fibrillar zone.

The Influence of the Applied Stress Intensity

Thus far, results for only one value of the applied stress intensity, K_{app} = 1.67 MPa.m$^{1/2}$, have been

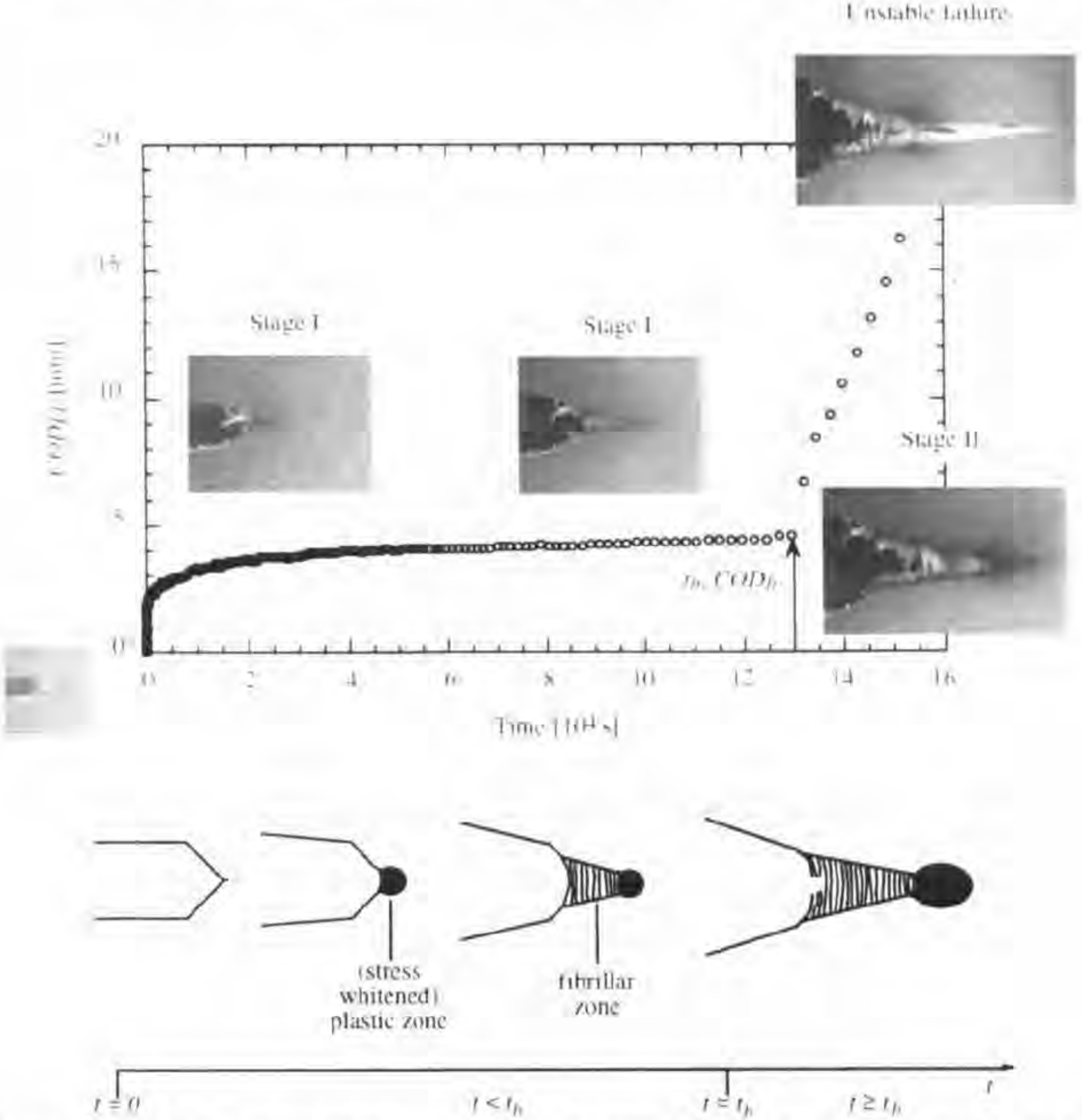

Fig. 4. The evolution of COD_{LL} in a CT specimen with M_n = 41 kg/mol deformed at 100°C at constant load, with an initial nominal applied stress intensity factor of K_{app} of 1.67 MPa.m$^{1/2}$. Also shown are video captures at different stages of the test, along with sketches of the different regimes of crack tip deformation.

discussed. This value was sufficiently low to ensure stable crack growth via the formation of a fibrillar damage zone for all values of M_n at 100°C, while not being so low as to result in prohibitively long test times. In *Fig. 7*, COD_b has been plotted against t_b for a range of K_{app} and all the M_n, using data from tests carried out at 100°C, permitting an overview of the behavior and the establishment of a window for stable crack growth. The data points for the highest K_{app} (3.34 MPa.m$^{1/2}$) corresponded to unstable failure, and indeed this K_{app} value was comparable with K_Q in constant loading rate experiments at 100°C (7). (K_Q designates a critical K value for crack initiation obtained under test conditions for which the small scale yielding criteria for the application of linear elastic fracture mechanics are not strictly fulfilled, and can only be considered as an approximation to the plane strain mode I critical stress intensity, K_{IC}.) Since the failure times were relatively short, it was doubtful whether conditions of constant loading were achieved during these tests.

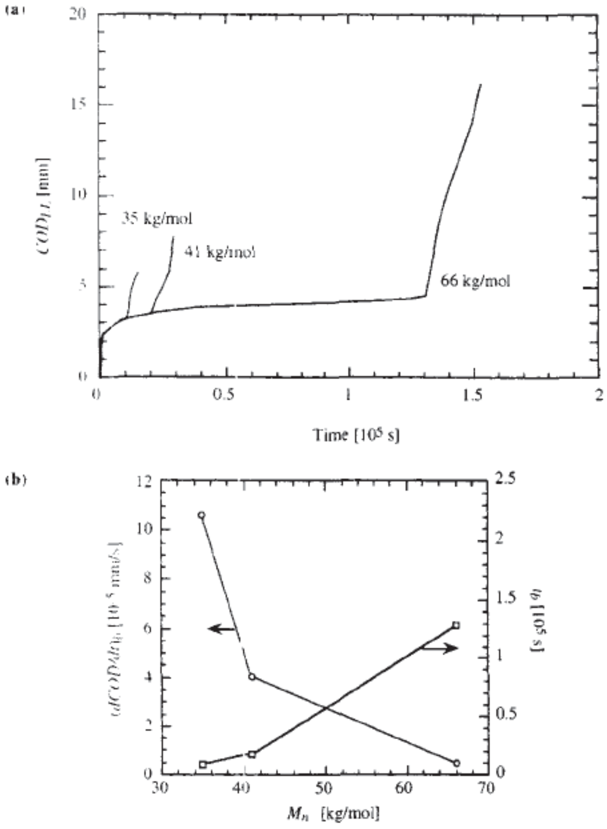

Fig. 5. (a) The evolution of COD_{LL} in CT specimens with different molar masses (M_r = 35, 41, and 66 kg/mol) at 100°C and K_{app} = 1.67 MPa.m$^{1/2}$; (b) the corresponding evolution in t_b and $(dCOD/dt)_b$ with M_n.

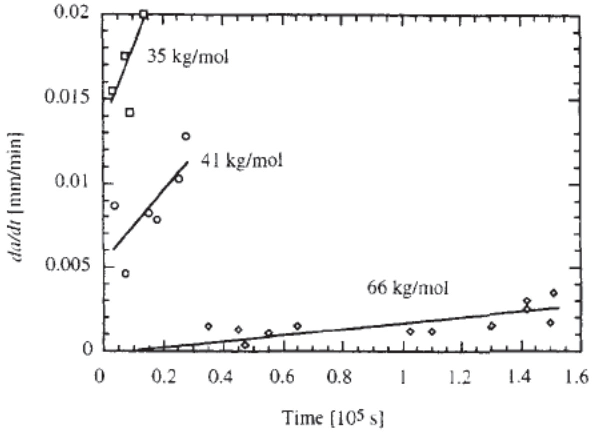

Fig. 6. The influence of M_n on the rate of advance of the tip of the fibrillar deformation zone, da/dt, at 100°C with K_{app} = 1.67 MPa.m$^{1/2}$.

As the applied load was reduced both COD_b and t_b initially increased. This behavior was associated with the formation of a large stress-whitened region at the crack tip, but subsequent failure continued to intervene in an unstable manner, without the formation of a fibrillar deformation zone. For K_{app} less than about 2.8 MPa.m$^{1/2}$, COD_b began to decrease. It was only when K_{app} reached 1.67 MPa.m$^{1/2}$ that stable growth and fibrillar deformation were observed, as shown in *Fig. 7b*. This was true of all the grades regardless of M_n, although M_n clearly influenced COD_b over the full range of K_{app} investigated at this temperature.

Microdeformation in Tension

Since the dimensions of damage zones in the CT specimens greatly exceeded those appropriate for cryo-ultramicrotomy, considerable retrimming of the specimens was necessary, depending on which part of the damage zone was to be sectioned. In order to obtain an overview of the damage zones, use was therefore made of SEM of freeze fracture surfaces obtained by cleaving embedded specimens in liquid N_2 perpendicular to the crack plane.

The initial stages of irreversible tensile deformation were assumed to involve stretching and cavitation of interlamellar amorphous zones, and cavitation in regions separating lamellar stacks whose planes were oriented at large angles to the tensile axis. The void dimensions at this stage of the deformation were expected to be of the order of the lamellar spacing (a few nm), consistent with the void sizes measured by small angle X-ray scattering at the onset of cavitation in specimens of POM deformed in simple tension (5). The quality of the thin sections obtained here was nevertheless generally insufficient to reveal structure on the scale of individual lamellae. This was due both to the tendency of the stain to obscure fine features, and to beam damage, particularly since high beam intensities were needed to observe heavily stained specimens at the magnifications of around 30,000x typically employed here. Although the stained sections were relatively stable in the beam after long exposures, some initial movement and mass loss was perceptible, and the diffraction patterns from crystalline regions of the POM had faded well before the images shown here were recorded.

Figure 8 shows part of a typical thin section taken from the periphery of the stress-whitened region surrounding the coarse fibrillar zone at the crack tip in a specimen of POM with M_n = 41 kg/mol, deformed under the conditions of *Fig. 4*. In spite of the reservations expressed above, the superlamellar structure visible in *Fig. 8* was believed to be representative of the original structure of the section, and was typical of that seen in sections taken from the periphery of the damage zone. The craze-like feature visible in *Fig. 8* contained fibrils with a diameter of 50 to 100 nm, and whose fine structure suggested them to correspond to single and/or multiple stacked lamellae. Given that the planes of the edge-on lamellae in the surrounding relatively undeformed material were oriented perpendicular to the tensile axis, the fibrils appear to have originated in sections of lamellar stacks that had been torn away from the adjacent lamellar stacks and progressively oriented and stretched parallel

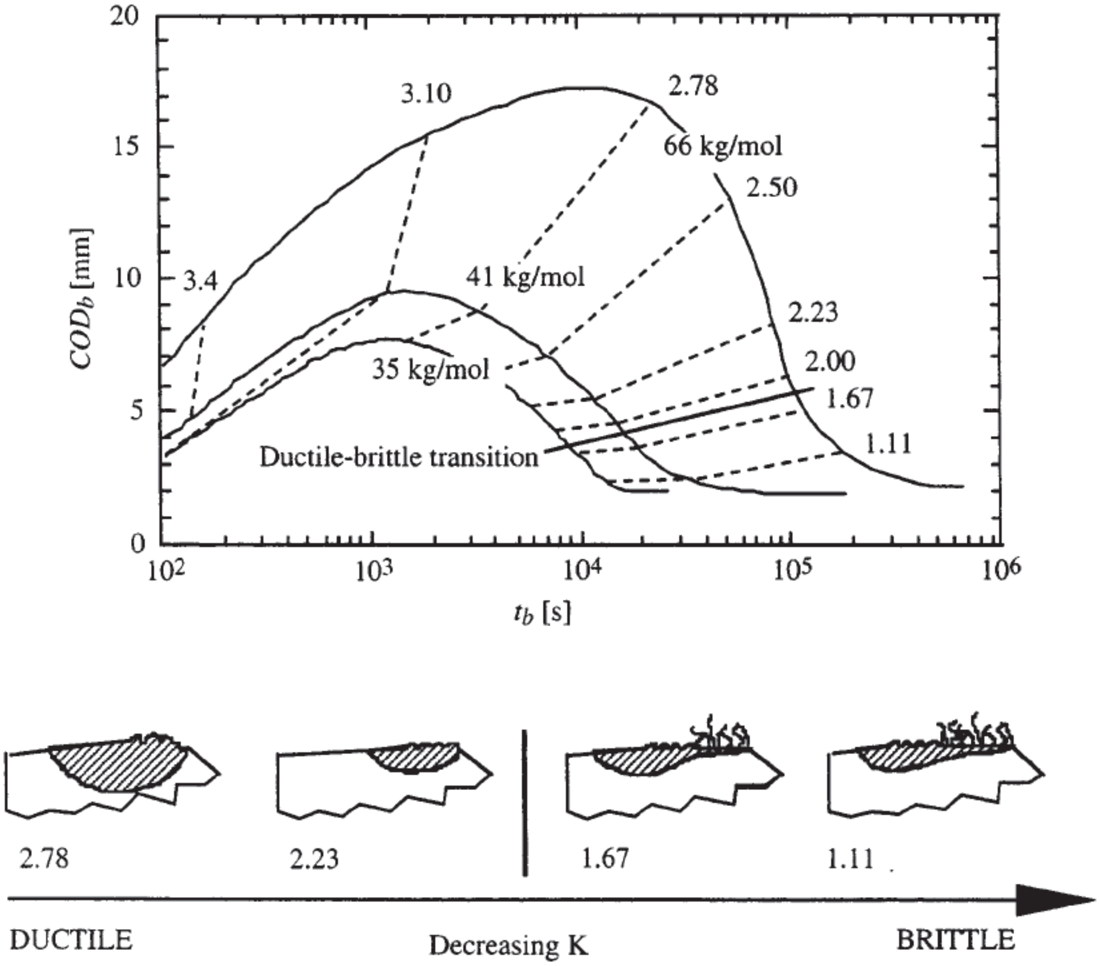

Fig. 7. (a) COD_b vs t_b for the different values of K_{app} indicated at 100°C and for different M_n (the dotted lines represent lines of constant K_{app}); (b) SEM images of the fracture surfaces corresponding to M_n = 41 kg/mol and various K_{app}.

to the stress direction. This lends support to an earlier suggestion that the scale of the fibrillation at this stage in the deformation process should be commensurate with that of the lamellar stacks, rather than that of individual lamellae (11).

Features such as that shown in *Fig. 8* were identified with strongly light scattering, crack-like defects seen in optical sections from deformed tensile test bars, prepared using petrographic methods. These occur predominantly in equatorial regions of spherulites and in regions of columnar growth (where the lamellar orientation is broadly the same as at the spherulite equators). They are also thought to give rise to the intense stress-whitening and hard elastic behavior observed in room temperature tensile tests, where pseudo-brittle failure occurs prior to macroscopic necking.

Figure 9 shows part of a freeze fracture surface corresponding to the periphery of the main coarse fibrillar zone at the crack tip. It indicates not only the presence of numerous craze-like features with dimensions consistent with those of the deformation zone in *Fig. 8*, but also regions of relatively coarse cavitation/fibrillation. It is apparent from *Fig. 9* that the development of the coarser fibrillar zones was not solely a result of continuous widening of pre-existing defects in the direction of the tensile axis, but also proceeded by deformation of the intervening matrix ligaments. These rotated towards the tensile axis, forming "macrofibrils," much as described for the transformation of lamellar stacks into the fibrils in *Fig. 8* (albeit on a different length scale). A TEM micrograph taken from close to the main coarse fibrillar zone is shown in *Fig. 10*. This part of the specimen had been well impregnated with the embedding epoxy resin, and the section appears in reverse contrast with respect to the voids, owing to mass loss from the POM. Traces of the original lamellar texture can still be seen in relatively undeformed regions of the matrix in *Fig. 10*, again indicating the lamellar trajectories to be locally perpendicular to the deformation axis. The fibrils spanning the deformation zones had undergone considerable drawing compared with those in *Fig. 8*, and the deformation zone boundaries were irregular, with islands

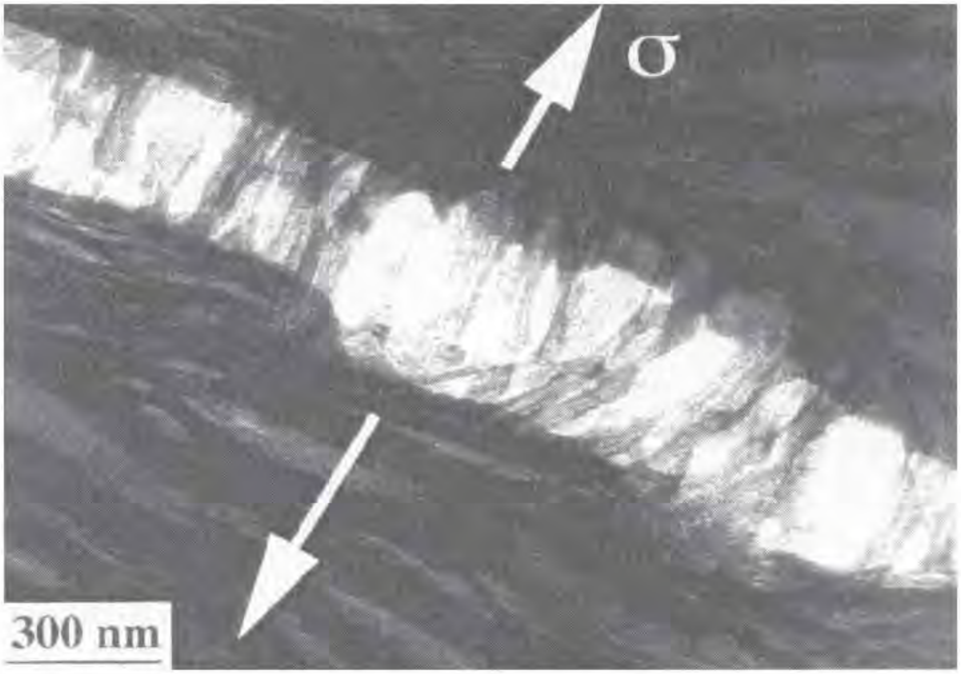

Fig. 8. TEM micrograph of a craze-like feature observed in the periphery of the stress-whitened region at the tip of a crack propagating in a stable manner at 100°C (the arrows indicate the tensile direction).

of relatively undeformed matrix having become substantially isolated from the surrounding matrix. It is inferred that constraints on shear deformation and rotation of these regions due to the surrounding material were substantially relaxed. Thus the global deformation process may be seen as one of formation and widening (and possibly breakdown) of relatively fine fibrillar deformation zones such as in *Fig. 8*, accompanied by shear and rotation of the surrounding matrix, giving rise to coarser structures.

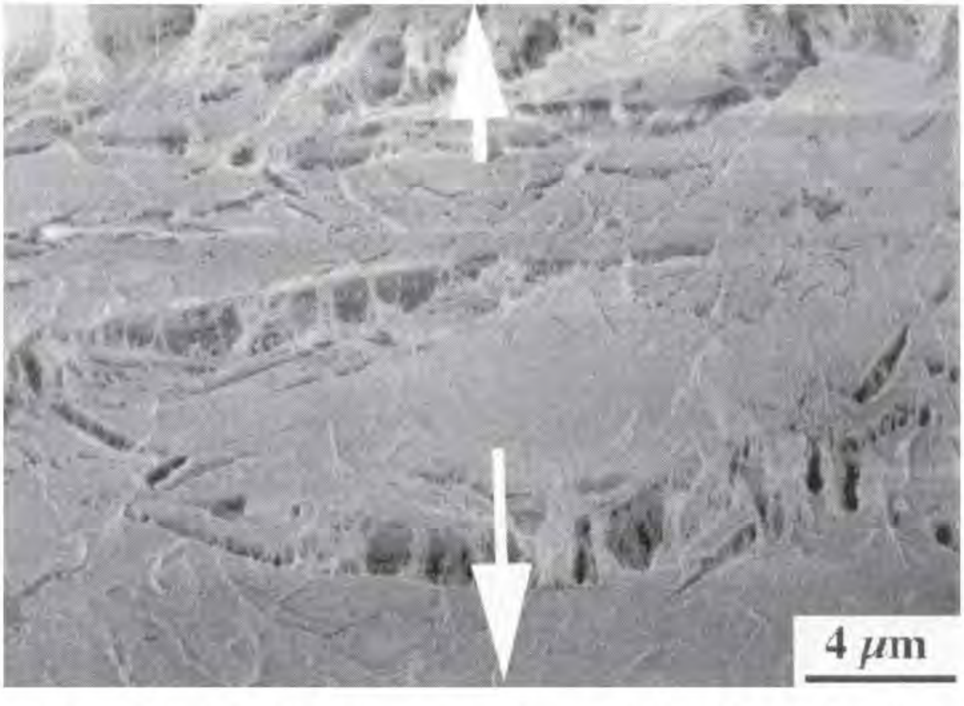

Fig. 9. SEM micrograph of a specimen freeze fractured perpendicular to the crack plane after a stable crack propagation at 100°C, showing deformation in the stress-whitened region and at the periphery of the coarse fibrillar zone (the arrows indicate the tensile direction).

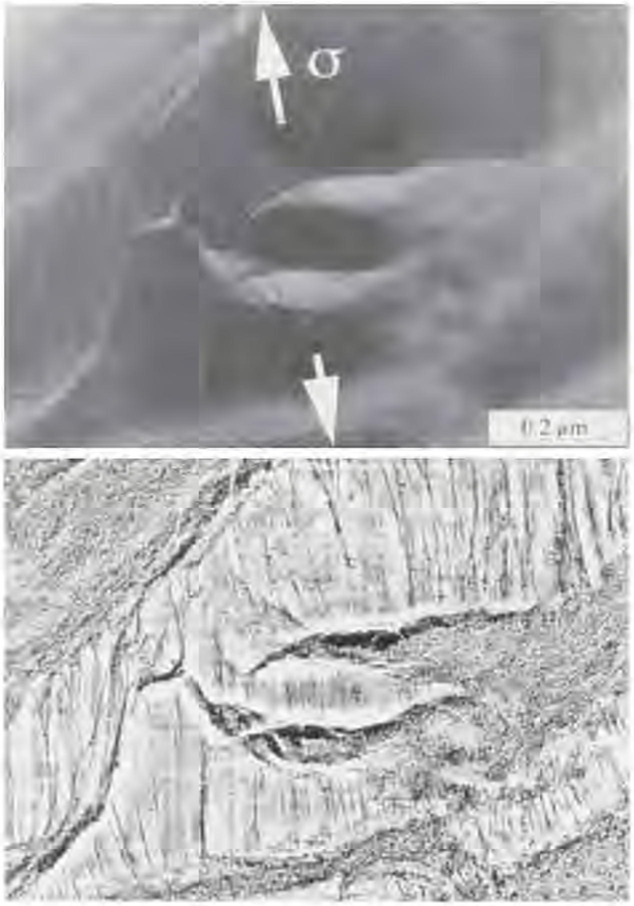

Fig. 10. TEM micrograph of microdeformation close to the edge of the coarse fibrillar zone at the tip of a crack propagating in a stable manner at 100°C. The bottom image is the same micrograph after application of a high pass filter, contrast enhancement and inversion, which makes the fibrils easier to see.

Fig. 11. SEM micrograph of a detail of a macrofibril within the coarse fibrillar zone.

Since some of the coarser fibrils in the main fibrillar zone were up to 100 μm or more in diameter, they incorporated many of the smaller fibrillar zones initially present in the stress-whitened region. These also rotated through about 90° so that their final trajectories were parallel to the stress axis, as may be seen in *Fig. 11*, which shows the structure of a macrofibril. Continued drawing of the macrofibrils resulted in collapse of the localized fibrillar zones, giving rise to a characteristic fibrous texture, similar to that in macroscopic necks in tensile test bars drawn at close to melting point. (Indeed, given that the formation of macroscopic necks is also mediated by stress-whitening/ cavitation there appears every justification for assuming macro-fibrils and macroscopic necks to be analogous, as implicit in certain approaches to SCG in PE (12, 13).) A further illustration of this is given in *Fig. 12*, which shows deformation at the base of a macrofibril in more detail. The resulting sponge-like network of drawn matrix and voids with characteristic dimensions of the order of 100 nm (although there is considerable variation), is also reflected by observations by surface replication of POM specimens drawn in tension (14), as well as post mortem observations by SEM of fracture surfaces of tensile test specimens. In the example given in *Fig. 13*, it is thought that the electron beam has etched away a certain amount of material from the specimen surface, revealing the underlying voided structure. (We initially ascribed such observations to beam damage and/or damage induced during deposition of conducting coatings, when working with conventional SEMs at relatively high tensions.)

It is not clear whether the scale of the fibrillation in the coarse fibrillar zone at the crack tip was itself associated with any particular microstructural feature (such as the discontinuities in the global lamellar orientation). It is clear, however, that the formation of the coarse fibrillar zone must involve considerable global matrix shear deformation as well as micronecking in localized fibrillar zones, and that the role of these latter is primarily to relax constraints on the deformation and rotation of the matrix. At lower temperatures, suppression of matrix shear deformation presumably renders unstable crack propagation via breakdown of the local fibrillar deformation zones more favorable than at high temperatures.

DISCUSSION

The microscopic investigations have shown that localized cavitation is characteristic of the initial stages of deformation in POM over the whole temperature range investigated, appearing in the form of localized craze-like regions of interlamellar voiding. Brittle behavior is expected to ensue if (i) unstable crack initiation by breakdown of the voided regions occurs at stresses lower than the global yield stress or (ii) macrofibrillation and SCG take place. The intervention of one or the other of these phenomena is a question of the time-scale and temperature of the test as

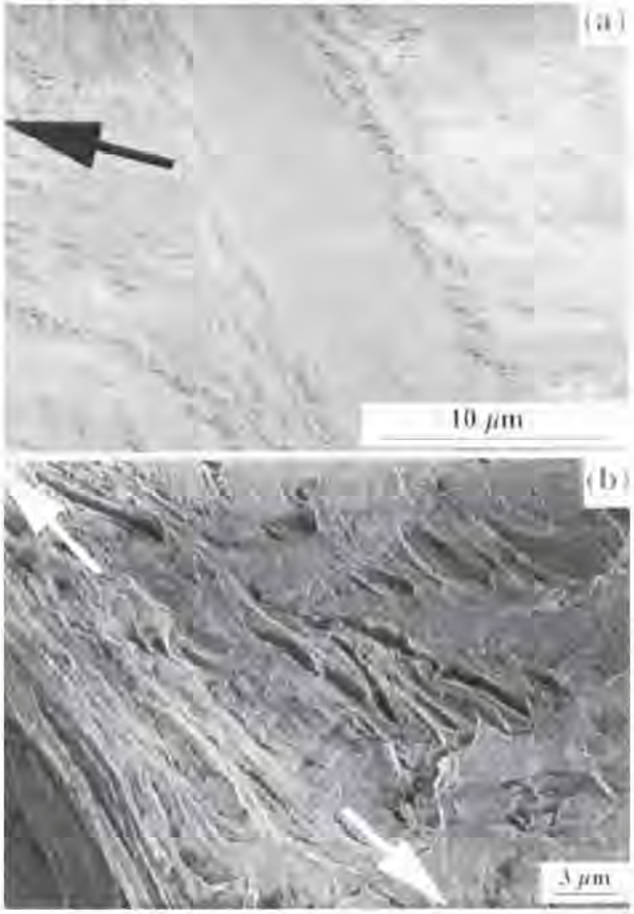

Fig. 12. (a) SEM micrograph of deformation at the edge of the coarse fibrillar zone (the arrow indicates the local tensile direction); (b) detail of the interior of the coarse fibrillar zone close to the crack tip (the arrows indicate the local tensile direction).

well as the level of applied stress. However, if it is assumed that brittle failure is associated with short characteristic times and that it is weakly thermally activated, to a first approximation it may be associated with a constant critical stress. On the other hand, SCG is thought to be essentially a creep phenomenon, with final rupture involving continued drawing down of the macrofibrils after their formation (12, 13, 15). Indeed, it is clear from micrographs such as that in *Fig. 3*, that neither their width nor their volume fraction is constant across the width of the damage zones. One would therefore expect SCG to be characterized by relatively long characteristic times and to be strongly thermally activated. Global yielding is considered to represent the intermediate case. A similar scenario based on the notion of different characteristic times for different deformation mechanisms has also been proposed to describe the competition between scission crazing, yield and disentanglement crazing in glassy polymers (16) and a strong analogy exists between disentanglement crazing and SCG in semicrystalline polymers, at least at the phenomenological level. Indeed disentanglement crazing has also been linked to long term embrittlement in certain glassy polymers (17).

Fig. 13. SEM micrograph of a detail of the damage zone from a tensile fracture surface.

In the present case, breakdown of the macrofibrils is assumed to occur when the fibril draw ratio, and hence the crack opening displacement, reaches some critical value beyond which the fibril is unstable with respect to further creep. The critical draw ratio is expected to depend on the molar mass. This is consistent with the results, but cannot be taken to infer anything particular about the mechanisms of fibril breakdown, since as shown in *Fig. 7*, a strong molar mass dependence persists in all regimes of behavior. Moreover, in view of the high polydispersities of the specimens considered, the observed scaling with M_n is difficult to interpret quantitatively. However, the fact that M_n only weakly influences COD_{LL} prior to the onset of SCG suggests that widening of the macrofibrillar zones is essentially governed by the yielding process.

If one assumes the macrofibrillar zone to behave as a Dugdale zone with boundary stress equal to the yield stress, σ_y (18), then for small scale yielding conditions and mode I crack opening

$$\delta_o \sigma_y \approx \frac{K_I^2(1-\nu^2)^2}{E} \tag{1}$$

where δ_o is the crack opening displacement for a stress intensity factor K_I. In a creep test, δ_o is effectively the crack opening displacement after relatively short times and it may further be assumed from the data that $\delta_o >> \delta_b - \delta_o$ (δ_o might be taken to be the intercept at $t = 0$ of the tangent to $\delta(t)$ at times corresponding to the establishment of steady-state creep rate, for example (15)). In order to derive an expression for the steady state crack opening rate, $d\delta/dt$, Brown and Lu assumed Newtonian behavior, so that the total creep rate in the fibrils is (15)

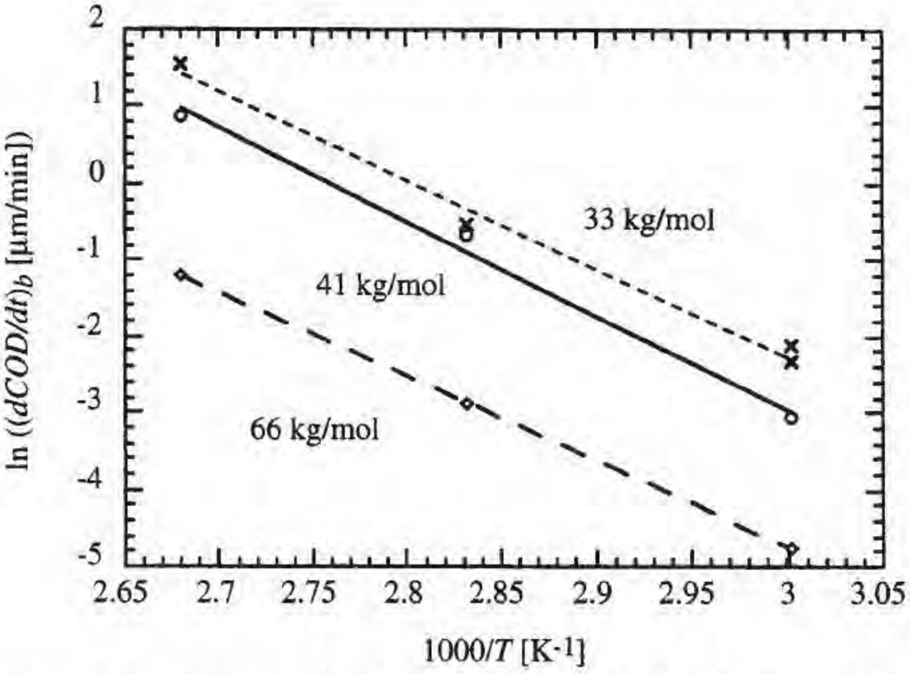

Fig. 14. The influence of temperature on $(dCOD/dt)_b$ *for different* M_n *and* $K_{app} = 1.67$ *MPa.m*$^{1/2}$.

$$\frac{d\varepsilon}{dt} = \frac{1}{\delta_o}\frac{d\delta}{dt} \approx \frac{\sigma_f}{\eta} \qquad (2)$$

where σ_f is the true stress in the fibrils, taken to be equal to $\sigma_y \delta_o / D$, where D is the width of the region from which the fibrils were initially formed and η is the effective fibril viscosity. Combining *Eqs 1* and *2* with the above expression for σ_f leads to

$$\frac{d\delta}{dt} = \delta_o \frac{d\varepsilon}{dt} \approx \frac{\delta_o^2 \sigma_y}{D\eta} \approx \frac{K_I^4 (1 - \upsilon^2)^2}{D\eta E^2 \sigma_y} \qquad (3)$$

Thus it has been suggested that the steady state crack opening rate should be given by an expression of the form

$$\frac{d\delta}{dt} = C \exp\left(\frac{-Q}{kT}\right) \qquad (4)$$

where Q is an activation energy characteristic of the fibril viscosity (15) (although the viscosity is not the only temperature dependent term in *Eq 3*). In the present case $d\delta/dt$ was identified with $(dCOD/dt)_b$. However, insufficient data were available to confirm the K_I^4 dependence of $(dCOD/dt)_b$. Neither is it clear that a true steady state crack opening rate was achieved at any time during the tests, particularly for the lower molar masses. An attempt was nevertheless made to derive an activation energy using *Eq 4*. *Figure 14* shows $\ln((dCOD/dt)_b)$ at $K_{app} = 1.67$ MPa.m$^{1/2}$ plotted against reciprocal temperature for each M_n. The apparent activation energy $Q \approx 120$ kJ/mol was similar to values obtained in the same way for SCG in PE (15). The mechanisms of deformation also remained very similar over this range of conditions, with t_b increasing monotonically with decreasing temperature. Thus at 60°C, SCG initiated after about 10 days for $M_n = 41$ kg/mol, which compares with a value of 2×10^5 s at 100°C for the same molecular weight.

CONCLUSIONS

It has been demonstrated that POM may show relatively brittle behavior when subjected to long-term low level static loading at elevated temperatures. This is linked to localized fibrillation and SCG. The same phenomena have also been induced in notched CT specimens in static loading, again at elevated temperatures. The microscopic analysis suggests breakdown of craze-like structures arising from interlamellar cavitation and which are characteristic of the whole range of test conditions, may relax three-dimensional constraints on regions of matrix that are then able to draw down to form the macrofibrils. From the appearance of the macrofibrillar zones, subsequent slow crack deformation is assumed to occur by fibril creep. Fibril breakdown is suggested to correspond to a critical value of the fibril draw ratio. This value is inferred from the results to increase with molar mass.

The somewhat questionable assumptions inherent in the attempt at a quantitative analysis of the crack opening rate (particularly the use of *Eq 2*) might be circumvented by use of the phenomenological approach adopted by O'Connell and co-workers, based on the observed creep behavior in macroscopic necks (13). Although such data were not available for the present specimens at the time of writing, this would be a promising avenue for future attempts to establish a predictive model for long-term failure in POM. At the same time it would be of interest to explore other test geometries, and in particular the full-notched specimen geometry adopted by Duan and Williams (19), with the aim of investigating the mechanical response of the macrofibrillar damage zone to a well-defined stress field.

REFERENCES

1. H.-H. Kausch, in *Polymer Fracture*, Springer Verlag, Berlin (1987).
2. S. K. Bhattacharya and N. J. Brown, *J. Mat. Sci.*, **19**, 2519 (1984).
3. J. Brandrup and E. H. Immergut, in *Polymer Handbook*, John Wiley, New York (1989).
4. G. Menges, E. Wiegand, D. Pütz, and F. Maurer, *Kunststoffe*, **65**, 368 (1975).
5. J. H. Wendorff, *Polymer*, **21**, 553 (1980).
6. C. J. G. Plummer, P. Béguelin, and H.-H. Kausch, *Polym. Eng. Sci.*, **34**, 318 (1994).
7. P. Scaramuzzino, PhD thesis, EPF Lausanne (1998).
8. E. J. Kramer, *Adv. Polym. Sci.*, **52/53** (H.-H. Kausch, Ed.), Ch. 1, Springer Verlag, Berlin (1983).
9. K. Friedrich, *Adv. Polym. Sci.*, **52/53** (H.-H. Kausch, Ed.), Ch. 1, Springer Verlag, Berlin (1983).
10. J. G. Williams, in *Stress Analysis of Polymers*, Longman, London (1973).
11. C. J. G. Plummer, P. Menu, N. Cudré Mauroux, and H.-H. Kausch, *J. Appl. Polym. Sci.*, **55**, 489 (1995).
12. M. J. Cawood, A. D. Channell, and G. Capaccio, *Polymer*, **34**, 423 (1993).
13. P. A. O'Connell, M. J. Bonner, R. A. Duckett, and I. M. Ward, *Polymer*, **36**, 2355 (1995).
14. K. O'Leary and P. H. Geil, *J. Macromol. Sci.-Phys.*, **B2**, 261 (1968).
15. N. Brown and X. Lu, *Polymer*, **36**, 543 (1995).
16. C. J. G. Plummer and A. M. Donald, *J. Polym. Sci.-Polym. Phys. Ed.*, **27**, 235 (1989).
17. M. T. Takemori, *Adv. Polym. Sci.*, **91/92** (H.-H. Kausch, Ed.), Ch. 6, Springer Verlag, Berlin (1990).
18. X. Wang, N. Brown, and L. Fager, *Polymer*, **30**, 453 (1989).
19. D.-M. Duan and J. G. Williams, *J. Mat. Sci.*, **33**, 625 (1998).

From: [redacted]
Sent: Friday, August 01, 2014 10:21 AM
To: [redacted])
Subject: Latch production date Pictures (example)

Go Further

Sergio Maynez
CSAP - PVT Body Exterior
T + 52 55 1334-7069
Ford Net 943-7069
[redacted]


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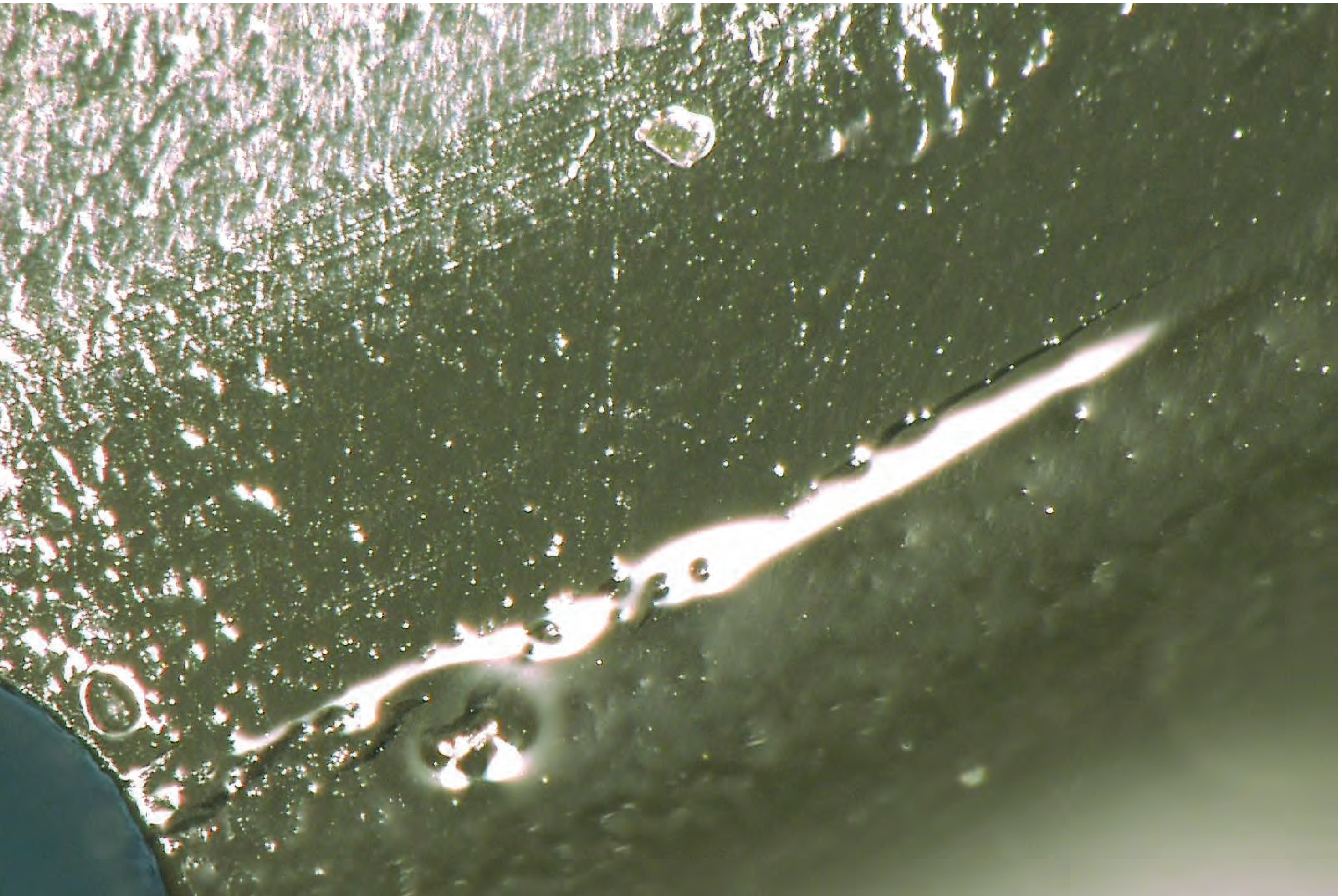

Number of Repairs by Zip Code in Arizona

QTY by Zip Code

Filters

VIEW

To filter the view, drag fields from the field list.

Number of Repairs by Zip Code CA/AZ/TX

QTY by Zip Code

Filters

VIEW

To filter the view, drag fields from the field list.

Number of Repairs by Zip Code for California

QTY by Zip Code

Filters

VIEW

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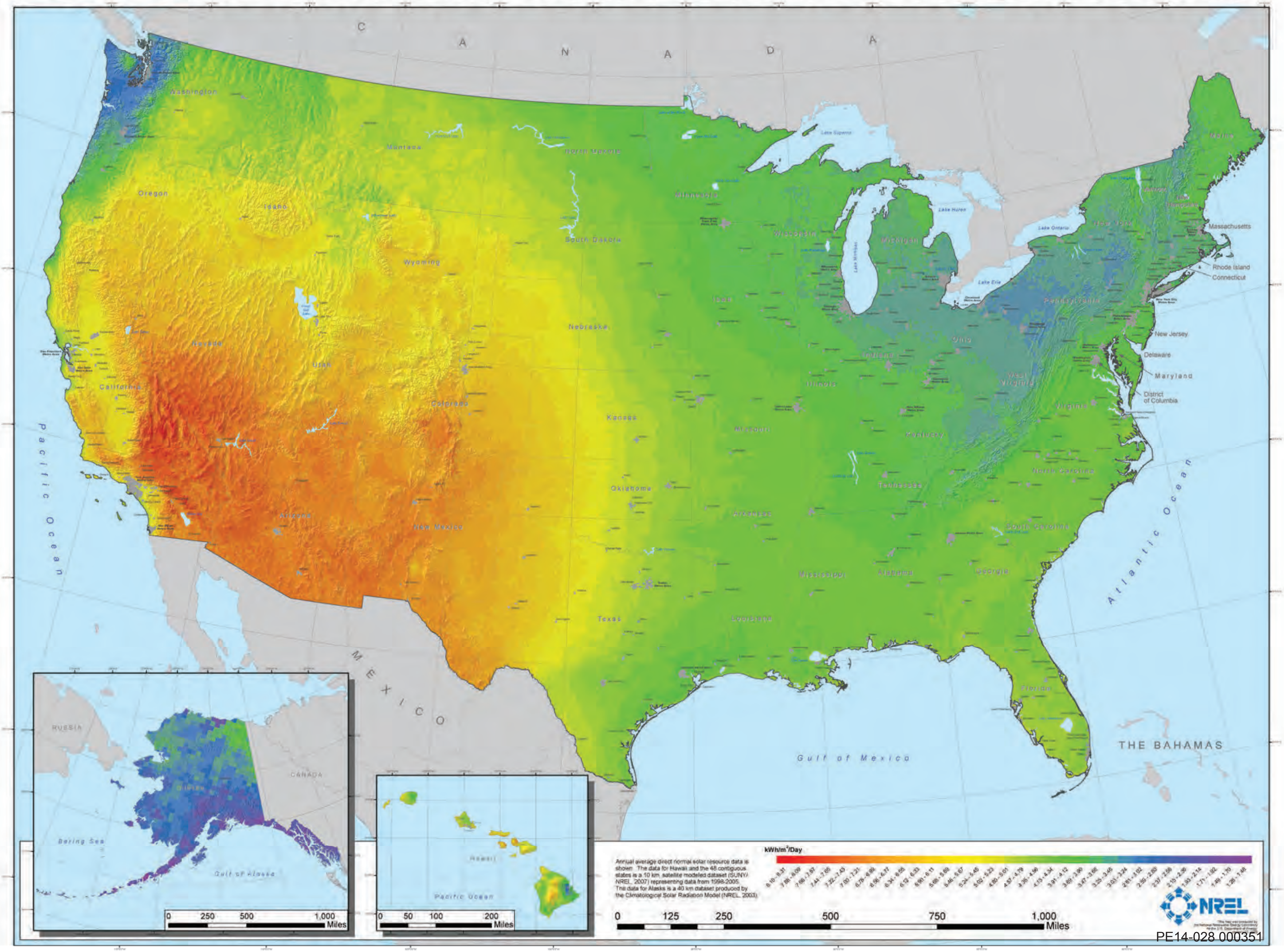
Number of Repairs by Zip Code for California

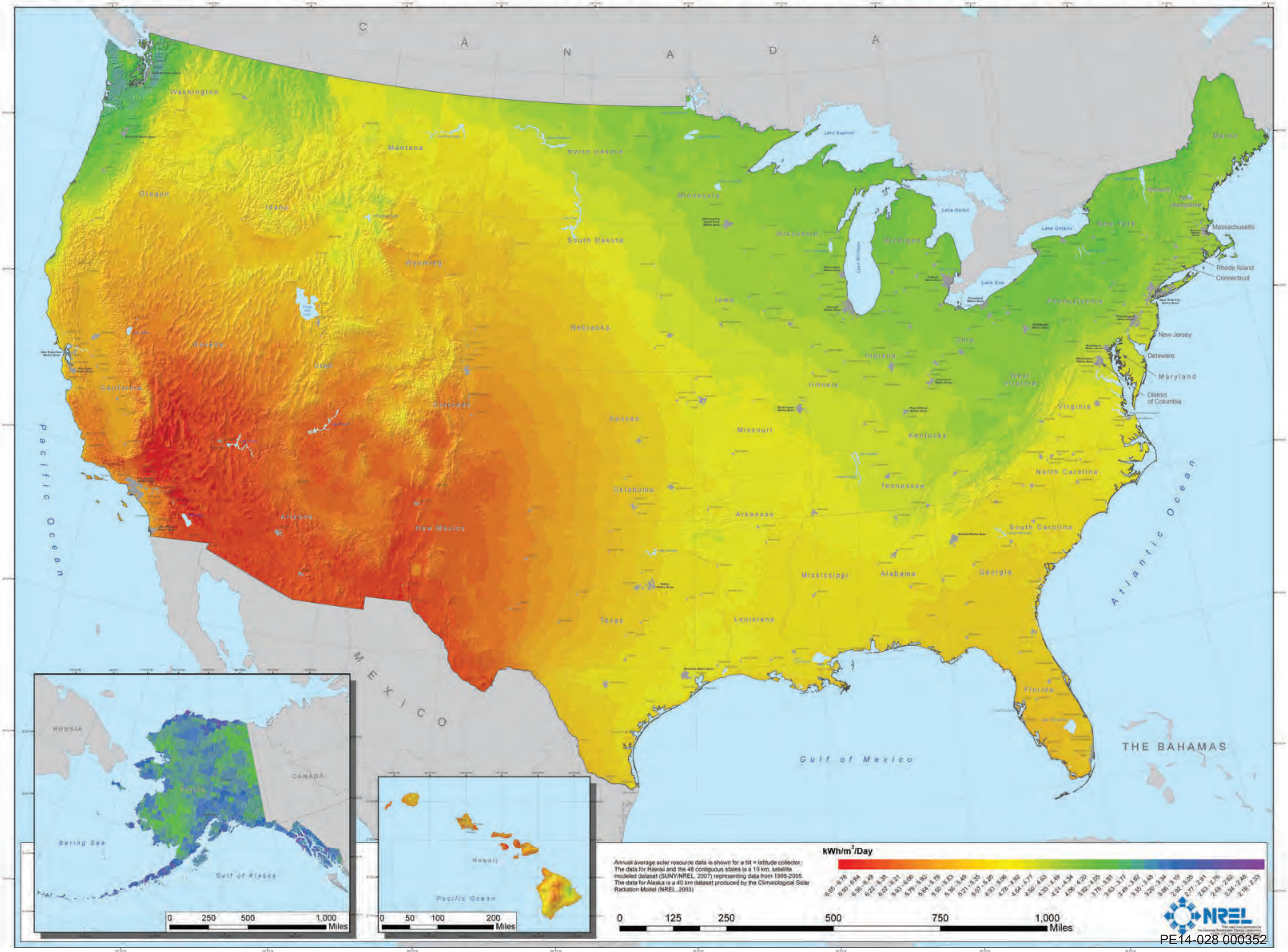
United States Concentrating Solar Power Resource : Direct Normal



Annual average direct normal solar resource data is shown. The data for Hawaii and the 48 contiguous states is a 10 km satellite modeled dataset (SUNY/NREL, 2007) representing data from 1998-2005. The data for Alaska is a 40 km dataset produced by the Climatological Solar Radiation Model (NREL, 2003).

This map was produced by the National Renewable Energy Laboratory for the U.S. Department of Energy.

United States Photovoltaic Solar Resource : Flat Plate Tilted at Latitude



Annual average solar resource data is shown for a tilt = latitude collector. The data for Hawaii and the 48 contiguous states is a 10 km, satellite modeled dataset (SUNY/NREL, 2007) representing data from 1998-2005. The data for Alaska is a 40 km dataset produced by the Climatological Solar Radiation Model (NREL, 2003).

From: [redacted].A.)
Sent: Friday, August 22, 2014 6:16 PM
To: [redacted]
[redacted] [redacted]
Subject: Need External Help - 2011-2014 Fiesta Rear Door Latches

Nick, I was reviewing our open issues, and I see we may still be on the hook for reviewing a large number of records for the 2011-2014 Fiesta rear door latch concern.

Is that correct? If so, I will chat with Mark and / or Dave to get External to help us review the records. I believe the records are already loaded into TEDDS, and Bob has created the categories for the reviewer(s).

Bob: FYI. Please correct me if I'm wrong in anything above.

If you have any questions, please do not hesitate to call. Thanks.

[redacted]

NHTSA Talking Points

Q: Are you aware of the issue?

Ans: Yes, I am aware of a warranty issue on Fiesta where customers are having trouble closing their doors. (if prompted about OWD: I am also aware of a small number of open while driving claims.)

Q: How does the latch work?

Ans: How much experience do you have with latches? The pawl spring provides torque to the pawl in order to rotate it into engagement with the catch. This is allows the latch to engage into the latched (primary)position.

Q: Could the door open while driving?

Ans: Once the latch is in the latched position it cannot become unlatched during driving even if the housing is fractured.

Q: Are there any legal or regulatory issues?

Ans: None that I am aware of. If the housing is fractured and the pawl spring is no longer engaged the door can't be closed. (if prompted about latching with a broken pawl spring: we need to do some work to understand that.)

Q: What are we doing about it?

Ans: We are investigating housing molding parameters, spring dimensional data, and potential design robustness actions. (if prompted about OWD claims: We are planning to talk to customers to get information about the details of the claims.)

Q: What is the root cause?

Ans: The root cause of the will not close issue is fracture of the lower housing tab which retains the fixed leg of the pawl spring leading to pawl spring disengagement. Once the pawl spring is disengaged the latch cannot be closed to the latched position. (if prompted about OWD root cause: We have not verified any open while driving claims. We are planning to talk to the customers to get information about the details of the claims.)

Q: What other vehicles use this latch?

Ans: Fiesta, Fusion, MKZ, and the swing gate of EcoSport.

Data

- 3425 will not close complaints on Fiesta.
- (If prompted about will not close complaints on Fusion/MKZ: 894 will not close complaints on Fusion/MKZ.)

From: [redacted]
Sent: Thursday, April 10, 2014 12:19 PM
To: [redacted] J.)
Cc: [redacted] (T.)
Subject: OK to Start - Action requested for 6-Sigma Project #: 63081

OK to Start - Action requested for 6-Sigma Project #: 63081

Project Number: 63081
Project Title: Door will not close due to door latch.
Project Statement: Door will not close due to the C1A door latch produced by Kiekert on the Fiesta, Fusion and MKZ.

Please review project #63081 and submit an Approve/Deny decision based on the project information within 48 hours after receipt of this notification.

Recording Black Belt Comments:

Click this link http://www.6-sigma.ford.com/cgi-bin/project_approval.cgi?proj_id=63081 to launch your browser to approve or deny this project for Approved Project Status.

Steps for Reviewing a Project for Approval. From the Project Screen
1) View \ Team Information
2) View \ Financial Information
3) View \ Customer Information
4) Attachments \ View
5) View \ Key Actions/Replication
6) Approve
   - Enter a Comment for the Project (Optional)
   - Select Approve/Deny Button

Thank you for your attention to this notification.

From: [redacted]
Sent: Monday, August 04, 2014 6:08 PM
To: [redacted]
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Now that is an interesting paper, I found it this weekend and had sent it to Keykert and Brose but I just got a chance to read it completely, note the page 3 text about visual inspection of the surface. Seldom do I get to find something so tied into what we are seeing.

Best Regards,
Matt Greenisen
STA – Latches/Door Systems
[redacted]

High Temperature Slow Crack Growth in Polyoxymethylene

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Brittle failure has been observed in polyoxymethylene during long-term low-level tensile loading at elevated temperatures. It is argued to be associated with slow crack growth via the breakdown of the localized planar fibrillar damage zones that form under these conditions. This phenomenon has been characterized using notched compact tension specimens tested under various static loads and at different temperatures. The specimen lifetime at a given load is found to decrease strongly with increasing temperature and to increase with molar mass at a given load and temperature. The associated crack-tip fibrillar damage zones are shown to arise from the breakdown of more localized microfibrillar deformation zones, which in turn result from interlamellar cavitation in the early stages of tensile deformation.

INTRODUCTION

Slow crack growth (SCG) leading to unstable failure under long-term, low-level loading conditions has attracted enormous interest over the years, and is of considerable practical concern in applications such as pipes subject to significant internal pressure or corrosive environments (1). Among low T_g semicrystalline polymers, particular interest has focussed on polyethylene (PE), in which SCG is generally preceded by the formation of localized, craze-like fibrillar damage zones (2). The aim of the present work is to demonstrate the existence of similar phenomena in another commercially important semicrystalline polymer, polyoxymethylene (POM).

The T_g of amorphous POM is generally held to be comparable to that of PE (3). However, unlike PE, POM is not usually macroscopically ductile in room temperature tensile tests and at moderate strain rates, in that failure does not involve substantial plastic necking. The strains at break, thought to include substantial contributions from internal cavitation (4, 5), can nevertheless reach up to about 70%, depending on the molar mass, and the effective toughness is therefore similar to that of other engineering thermoplastics (1, 6). At higher test temperatures or lower effective strain rates, there is an initial transition to plastic necking, accompanied by a decrease in cavitation (6). However, as will be described in what follows, at sufficiently high temperatures and/or sufficiently low effective strain rates, global plasticity may become suppressed in un-notched specimens (7). Since the strains to break in this latter regime do not exceed a few percent, the corresponding transition is referred to here as a high temperature "ductile-brittle transition."

By analogy with the behavior of PE, such embrittlement is expected to be associated with SCG. Moreover one might anticipate a ductile-brittle transition also to occur in POM at room temperature for sufficiently long test times, although such conditions have not so far been consistently achieved in this laboratory. The present investigation has therefore centered on the influence of the loading time, and also the molar mass, during constant load tests at a temperature of 100°C. This temperature is sufficient to induce the ductile-brittle transition within a convenient range of test times. On the other hand, it does not lead to significant chemical degradation of the specimens in the time range considered [based both on thermo-gravimetric data and on tensile tests on specimens aged at 100°C over much longer times (7)].

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EXPERIMENTAL

The materials used in this study were commercial grades of POM homopolymer from DuPont de Nemours, with number average molar masses, M_n, of 35, 41 and 66 kg/mol, and polydispersities of about 2. The molar masses were all well above the entanglement molar mass [estimated to be about 3000 kg/mol (3)]. Preliminary creep tests were carried out on injection molded tensile test bars with dimensions corresponding to the norm ISO 527, with a rectangular cross-section of 4 × 10 mm^2. Dead weight tensile loads were applied to the specimens and the strain measured using inductive contact extensometers with a maximum displacement of ± 20 mm for an initial gauge length of 20 mm. The tests were carried out in a creep oven equipped with a 60 channel numerical data acquisition system [UPM 60 (Qualimatest)] controlled using software based on the Labview platform [National Instruments].

In order to characterize SCG in POM, measurements were made under static loading using the compact tension (CT) specimen geometry illustrated in *Fig. 1*. CT specimens with the dimensions shown were machined from 120 × 230 mm^2 edge-gated injection molded plaques, with a nominal thickness of 10 mm. Pre-cracking was carried out by sliding a fresh razor blade along the notch tip just prior to testing. Specimens with M_n = 70 kg/mol were also tested, and showed results that were qualitatively consistent with those for the lower M_n. However, they will not be presented here, since static testing indicated the plaques to display a significant degree of anisotropy, the mechanical properties varying with the orientation of the tensile axis with respect to the original flow direction.

Tensile tests were performed using a screw-driven Schenck tensile test machine, equipped with an environmental chamber. The specimens were tested under various loads after conditioning for one hour at the test temperature. For convenience, the crack opening was characterized using the load line crack opening displacement (COD_{LL}), that is the displacement of the loading points during the tests. Measurements made using the CCD camera indicated COD_{LL} to be directly proportional to the crack opening displacement at the crack tip over the whole range of displacements to be discussed in what follows. It was therefore inferred that bulk creep far from the notch tip did not have a significant influence on COD_{LL}.

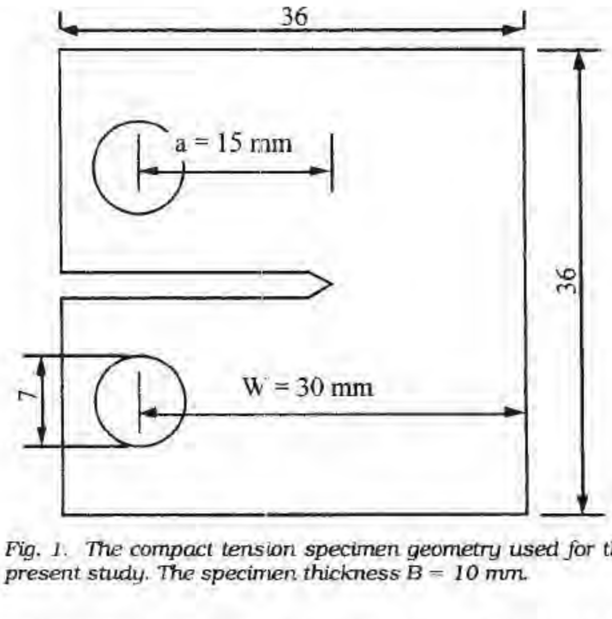


Fig. 1. The compact tension specimen geometry used for the present study. The specimen thickness B = 10 mm.

Certain tests were terminated prior to unstable fracture, but after a certain amount of stable crack propagation had occurred. A wedge was inserted between the notch faces in order to maintain the final crack opening displacement on removal of the specimen from the tensile test machine. The entire specimen was then embedded in Epon™ resin (Fluka GmbH) following the multistep procedure recommended by the supplier, designed to ensure maximum penetration of the resin into the specimen. (The initial step was to impregnate the specimen with a solution of the resin in propylene oxide, which is a nonsolvent for POM.) A Reichert-Jung Ultracut E microtome and a Diatome diamond cryo-knife (45°) were used to obtain ultrathin sections at −120°C (≤ 100 nm) centered on the zone of interest (typically just ahead of the crack tip). The sections were transferred onto distilled water with the aid of a drop of sucrose solution, picked up on 200 mesh transmission electron microscopy (TEM) grids, and dried. They were then stained by exposure to RuO_4 vapor for about 8 h, depending on the thickness of the section (thicker sections generally required longer staining times). TEM observations were made using either the Philips EM 300 at 100 kV or the Philips CM 20 at 200 kV.

Scanning electron microscopy (SEM) was also used to investigate the crack tip deformation zone, in some cases after exposing internal surfaces by cryo-fracture in a plane perpendicular to that of the crack faces. SEM was carried out on uncoated specimens in low voltage mode (about 1 kV), using the JEOL 6300F SEM equipped with a field emission gun.

RESULTS

Tensile Creep of Un-notched Specimens

Figure 2 shows the nominal strain in specimens with M_n = 41 kg/mol and 66 kg/mol as a function of time in creep tests at 60°C at different constant nominal stresses, illustrating the behavior described in the introduction. At 30 MPa, all the specimens showed fully ductile behavior and stable plastic necking up to at least 250% strain (that is, the upper limit of the extensometer). At 24 MPa, however, specimens with M_n = 41 kg/mol failed at a strain of 8% after about 500 h. This compares with a failure time of 2500 h and a failure strain of 25% for M_n = 66 kg/mol at the same stress. The failure strain for M_n = 41 kg/mol dropped further to 3% when the stress was decreased to 18

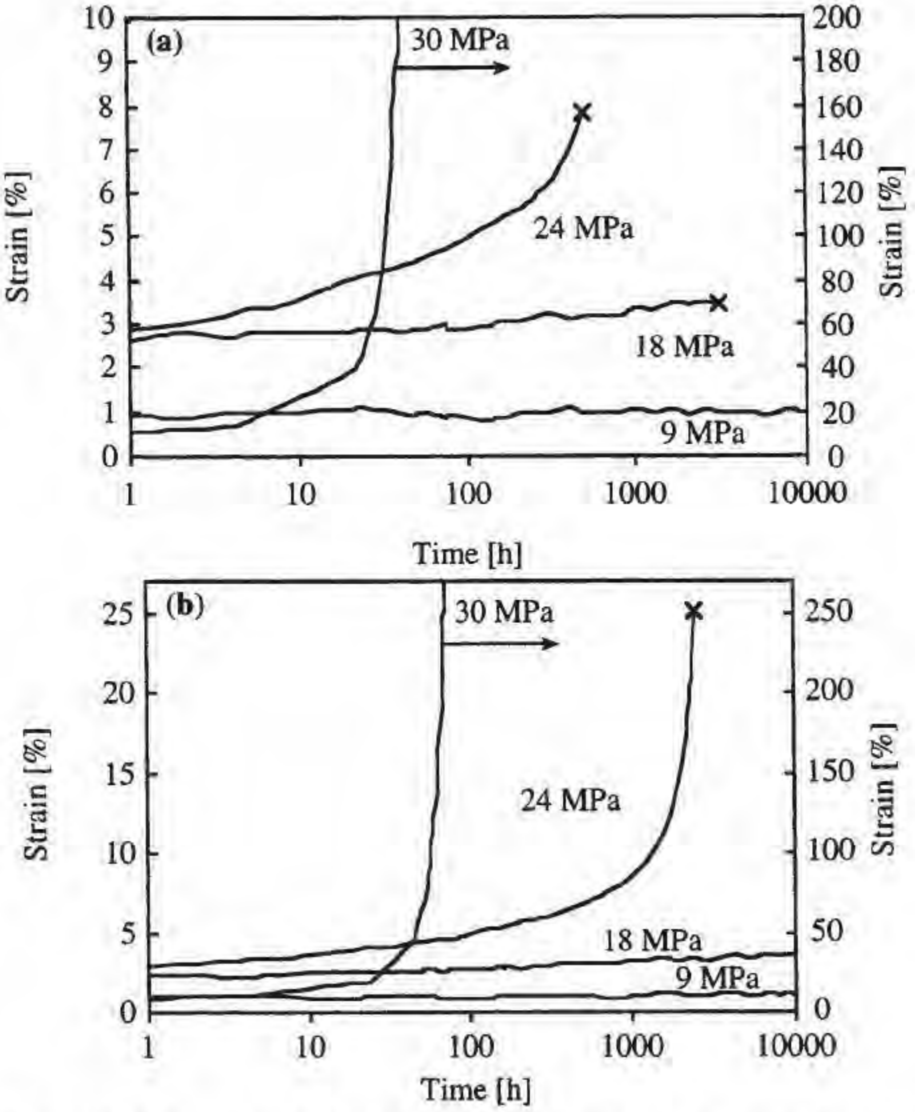


Fig. 2. Tensile creep for (a) M_n = 41 kg/mol and (b) M_n = 66 kg/mol at 60°C at various stresses (the arrows indicate those curves that should be referred to the right-hand strain axis).

MPa, although the time to failure (3000 h) was considerably longer than at 24 MPa. Indeed, specimens with M_n = 41 kg/mol tested at 9 MPa, and specimens with M_n = 66 kg/mol tested at 18 MPa and 9 MPa remained load bearing up to the maximum test time of 10,000 h. Similar behavior has also been observed in specimens tested at higher temperatures, with failure occurring at about 5% strain for M_n = 41 kg/mol loaded at 15 MPa at 80°C, whereas fully ductile behavior was seen in specimens loaded at 25 MPa (7).

This transition to "brittle" behavior was associated with the formation of highly localized planar fibrillar deformation zones. They appeared in the form of parallel crack-like features on the specimen surfaces when these were inspected optically after the tests. The SEM micrograph in *Fig. 3* shows the interior of one such deformation zone that had undergone partial breakdown, showing the fibrils to be between 0.1 and 1 μm in diameter. This compares with typical values of about 10 nm for crazes in glassy polymers (8). Nevertheless, crazes with fibril diameters comparable to those in *Fig. 3* have often been associated with deformation in other semicrystalline polymers above their T_g (9), and with SCG in PE in particular (2).

Slow Crack Growth in CT Specimens

The observed embrittlement at low loads in simple tension is attributed to the ability of localized deformation zones to nucleate and grow from local stress concentrations at stresses below those required for global yielding and plastic deformation at any given time or temperature. Cracks growing within the deformation zones can therefore reach critical sizes at low global strains. However, in simple tension the

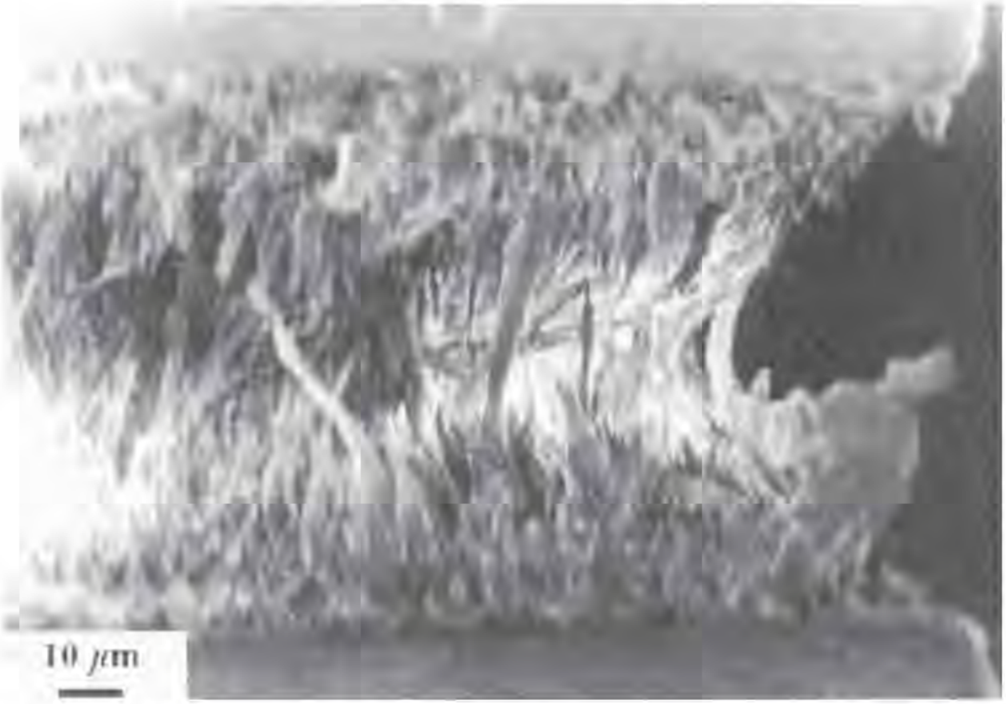


Fig. 3. SEM image of part of a fibrillar deformation zone observed at the surface of a specimen with M_n = 41 kg/mol deformed at 80°C at a constant stress of 20 MPa (the tensile axis is vertical in the image).

relationship between global variables such as strain and the evolution of individual localized deformation zones and/or cracks is often obscure. The investigation was therefore pursued using notched pre-cracked specimens, in an attempt to induce controlled nucleation and growth of one main deformation zone.

Figure 4 shows the evolution of COD_{LL} in CT specimens with $M_n = 41$ kg/mol deformed at 100°C under a constant load, corresponding to an initial nominal applied stress intensity factor K_{app} of 1.67 MPa.m$^{1/2}$. K_{app} was calculated from the initial crack length, using standard expressions for the stress intensity factor from linear elastic fracture mechanics (10). Also shown in this *Figure* are images of the crack tip deformation zone at various stages of the test. A fibrillar craze-like region is clearly visible in the images corresponding to the longest times, similar to those encountered in the creep tests in simple tension.

Under the above conditions, as sketched in *Fig. 4*, crack growth was observed to take place in two distinct stages. Stage I involved crack blunting and development of a diffuse stress-whitened region at the crack tip, accompanied by the formation and growth of the fibrillar deformation zone. Dilatational measurements have shown that some cavitation accompanies yielding in POM even at high temperatures, which accounts for the stress-whitening (7). This is useful in that it allows one to obtain a reasonable idea of the extent of the yielded zone simply by optical inspection. Stage I continued up to a time t_b, and $COD_{LL} = COD_b$ at which point there was a sharp acceleration in $d(COD_{LL})/dt$ and a crack began to propagate through the fibrillar deformation zone. Stable crack growth (stage II) then continued up to time t_f, where final failure intervened via rapid unstable crack propagation.

The Influence of Molar Mass

Figure 5a compares the crack opening behavior of specimens with different molar masses under the test conditions of *Fig. 4*. The initial evolution of COD_{LL} was similar for all the M_n, but there was a clear monotonic increase in t_b with increasing M_n as shown in *Fig. 5b*. Also plotted in *Fig. 5b* are critical crack opening rates $(dCOD/dt)_b$, defined as the minimum slope of $COD_{LL}(t)$. The transition to rapid crack advance in Stage II occurred at progressively lower values of $(dCOD/dt)_b$ as M_n increased.

Figure 6 shows the rate of advance of the tip of the fibrillar deformation zone, da/dt, as a function of time for the different M_n (a is the distance between the deformation zone tip and the initial position of the notch tip, and does not include the stress-whitened region ahead of the fibrillar zone). da/dt was substantially reduced at high M_n, which suggests an increase in the stability of the stress-whitened region with respect to advance of the fibrillar zone.

The Influence of the Applied Stress Intensity

Thus far, results for only one value of the applied stress intensity, K_{app} = 1.67 MPa.m$^{1/2}$, have been

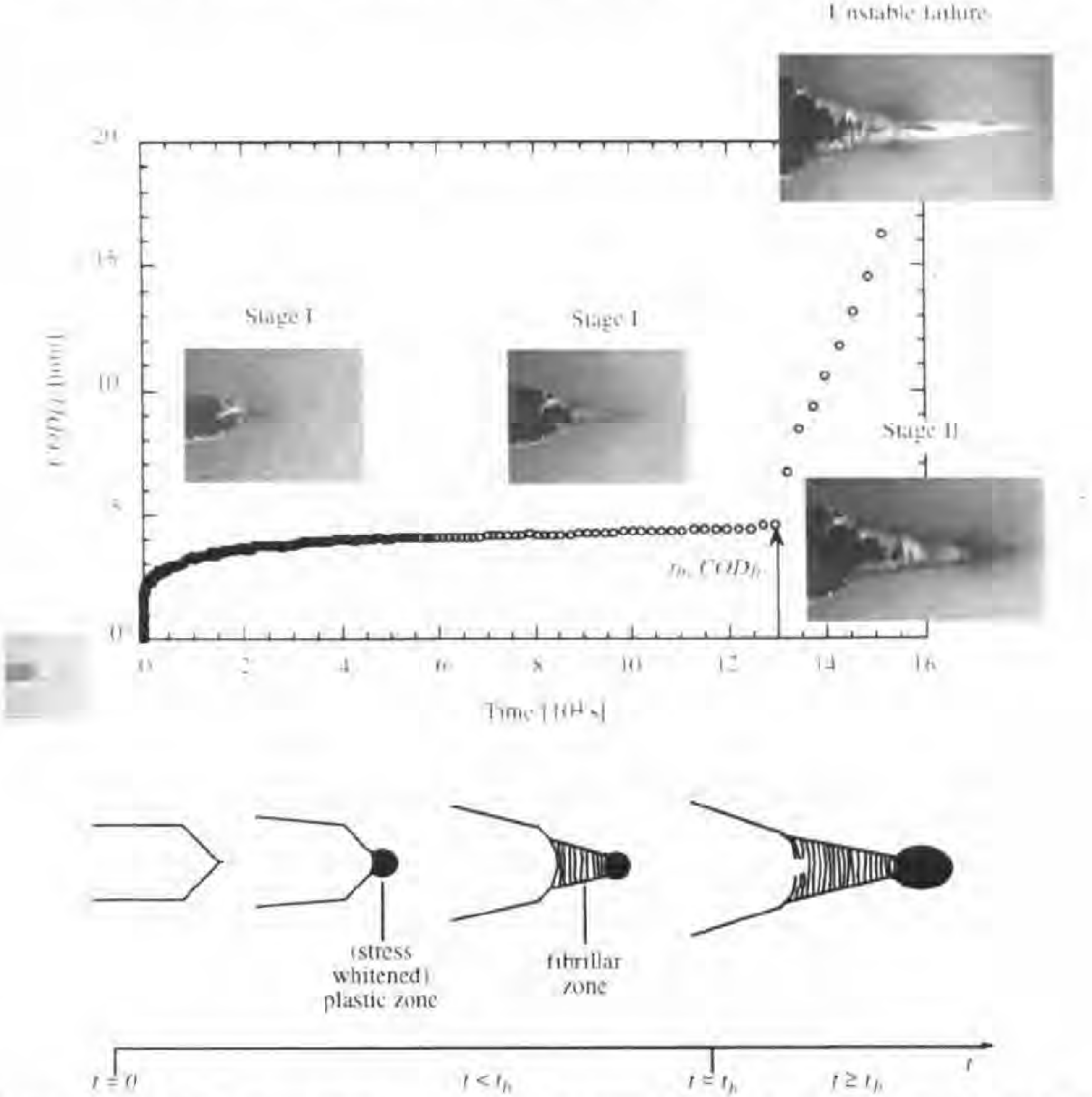


Fig. 4. The evolution of COD_{LL} in a CT specimen with M_n = 41 kg/mol deformed at 100°C at constant load, with an initial nominal applied stress intensity factor of K_{app} of 1.67 MPa.m$^{1/2}$. Also shown are video captures at different stages of the test, along with sketches of the different regimes of crack tip deformation.

discussed. This value was sufficiently low to ensure stable crack growth via the formation of a fibrillar damage zone for all values of M_n at 100°C, while not being so low as to result in prohibitively long test times. In *Fig. 7*, COD_b has been plotted against t_b for a range of K_{app} and all the M_n, using data from tests carried out at 100°C, permitting an overview of the behavior and the establishment of a window for stable crack growth. The data points for the highest K_{app} (3.34 MPa.m$^{1/2}$) corresponded to unstable failure, and indeed this K_{app} value was comparable with K_Q in constant loading rate experiments at 100°C (7). (K_Q designates a critical K value for crack initiation obtained under test conditions for which the small scale yielding criteria for the application of linear elastic fracture mechanics are not strictly fulfilled, and can only be considered as an approximation to the plane strain mode I critical stress intensity, K_{IC}.) Since the failure times were relatively short, it was doubtful whether conditions of constant loading were achieved during these tests.

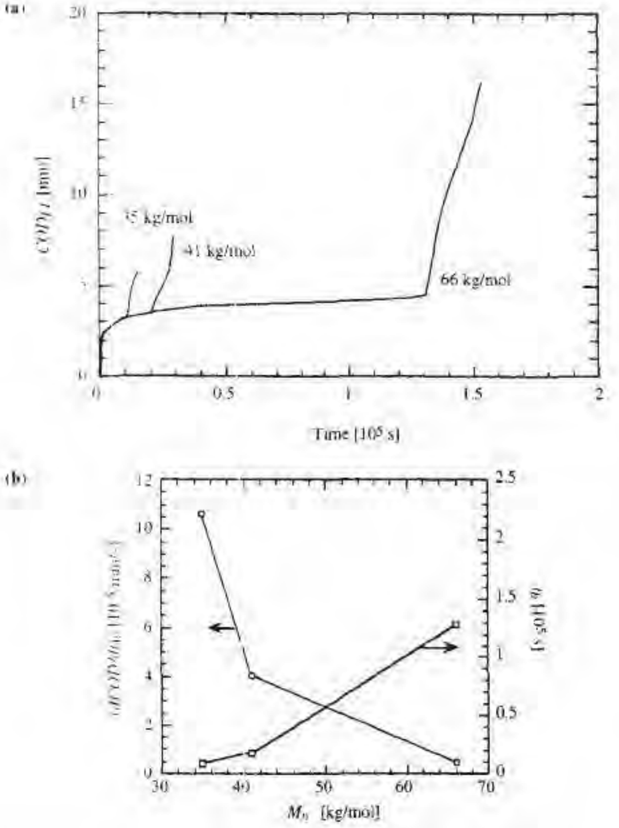


Fig. 5. (a) The evolution of COD_{LL} in CT specimens with different molar masses (M_r = 35, 41, and 66 kg/mol) at 100°C and K_{app} = 1.67 MPa.m$^{1/2}$; (b) the corresponding evolution in t_b and $(dCOD/dt)_b$ with M_n.

As the applied load was reduced both COD_b and t_b initially increased. This behavior was associated with the formation of a large stress-whitened region at the crack tip, but subsequent failure continued to intervene in an unstable manner, without the formation of a fibrillar deformation zone. For K_{app} less than about 2.8 MPa.m$^{1/2}$, COD_b began to decrease. It was only when K_{app} reached 1.67 MPa.m$^{1/2}$ that stable growth and fibrillar deformation were observed, as shown in *Fig. 7b*. This was true of all the grades regardless of M_n, although M_n clearly influenced COD_b over the full range of K_{app} investigated at this temperature.

Microdeformation in Tension

Since the dimensions of damage zones in the CT specimens greatly exceeded those appropriate for cryo-ultramicrotomy, considerable retrimming of the specimens was necessary, depending on which part of the damage zone was to be sectioned. In order to obtain an overview of the damage zones, use was therefore made of SEM of freeze fracture surfaces obtained by cleaving embedded specimens in liquid N_2 perpendicular to the crack plane.

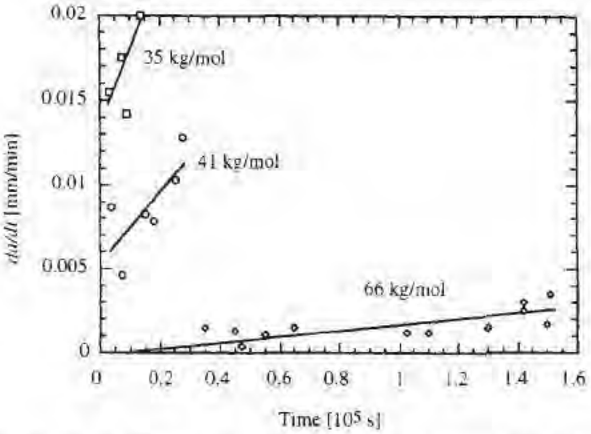


Fig. 6. The influence of M_n on the rate of advance of the tip of the fibrillar deformation zone, da/dt, at 100°C with K_{app} = 1.67 MPa.m$^{1/2}$.

The initial stages of irreversible tensile deformation were assumed to involve stretching and cavitation of interlamellar amorphous zones, and cavitation in regions separating lamellar stacks whose planes were oriented at large angles to the tensile axis. The void dimensions at this stage of the deformation were expected to be of the order of the lamellar spacing (a few nm), consistent with the void sizes measured by small angle X-ray scattering at the onset of cavitation in specimens of POM deformed in simple tension (5). The quality of the thin sections obtained here was nevertheless generally insufficient to reveal structure on the scale of individual lamellae. This was due both to the tendency of the stain to obscure fine features, and to beam damage, particularly since high beam intensities were needed to observe heavily stained specimens at the magnifications of around 30,000x typically employed here. Although the stained sections were relatively stable in the beam after long exposures, some initial movement and mass loss was perceptible, and the diffraction patterns from crystalline regions of the POM had faded well before the images shown here were recorded.

Figure 8 shows part of a typical thin section taken from the periphery of the stress-whitened region surrounding the coarse fibrillar zone at the crack tip in a specimen of POM with M_n = 41 kg/mol, deformed under the conditions of *Fig. 4*. In spite of the reservations expressed above, the superlamellar structure visible in *Fig. 8* was believed to be representative of the original structure of the section, and was typical of that seen in sections taken from the periphery of the damage zone. The craze-like feature visible in *Fig. 8* contained fibrils with a diameter of 50 to 100 nm, and whose fine structure suggested them to correspond to single and/or multiple stacked lamellae. Given that the planes of the edge-on lamellae in the surrounding relatively undeformed material were oriented perpendicular to the tensile axis, the fibrils appear to have originated in sections of lamellar stacks that had been torn away from the adjacent lamellar stacks and progressively oriented and stretched parallel

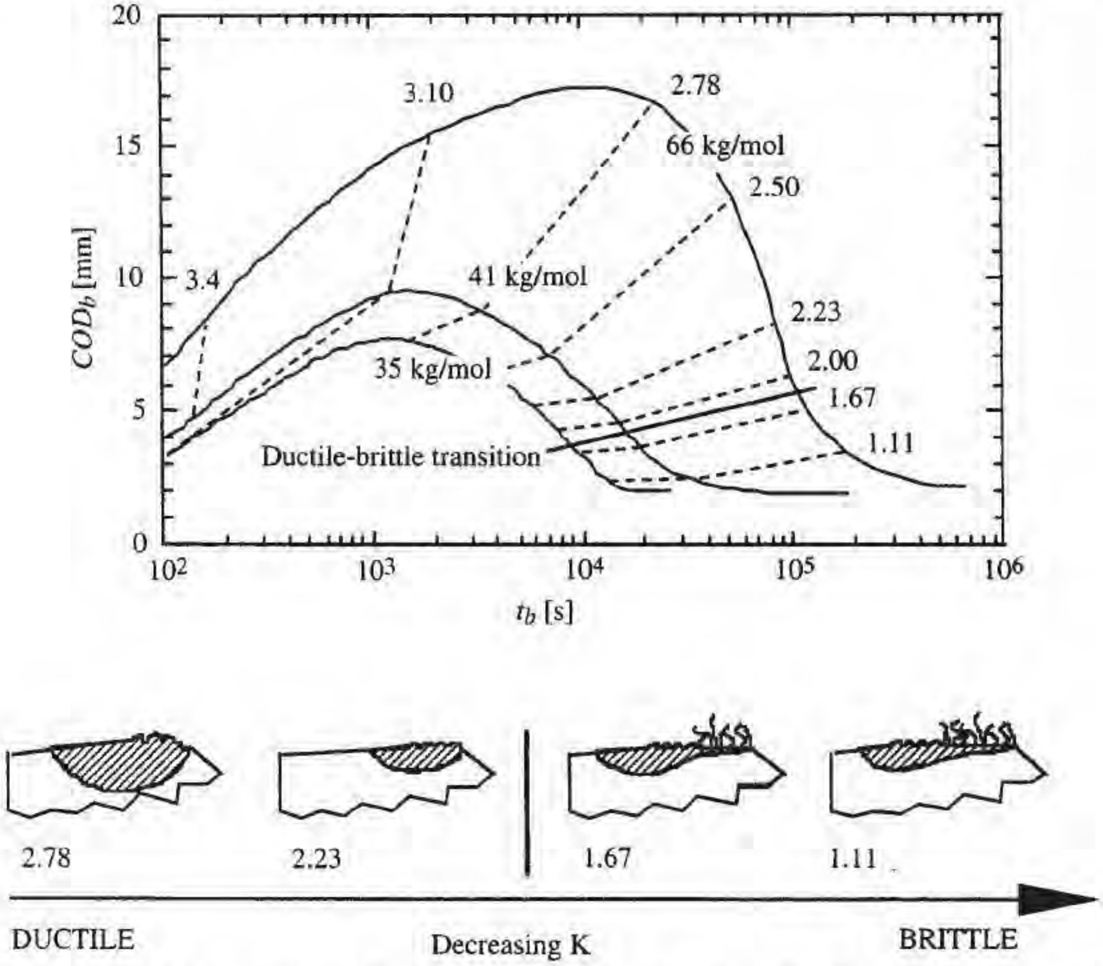


Fig. 7. (a) COD_b vs t_b for the different values of K_{app} indicated at 100°C and for different M_n (the dotted lines represent lines of constant K_{app}); (b) SEM images of the fracture surfaces corresponding to M_n = 41 kg/mol and various K_{app}.

to the stress direction. This lends support to an earlier suggestion that the scale of the fibrillation at this stage in the deformation process should be commensurate with that of the lamellar stacks, rather than that of individual lamellae (11).

Features such as that shown in *Fig. 8* were identified with strongly light scattering, crack-like defects seen in optical sections from deformed tensile test bars, prepared using petrographic methods. These occur predominantly in equatorial regions of spherulites and in regions of columnar growth (where the lamellar orientation is broadly the same as at the spherulite equators). They are also thought to give rise to the intense stress-whitening and hard elastic behavior observed in room temperature tensile tests, where pseudo-brittle failure occurs prior to macroscopic necking.

Figure 9 shows part of a freeze fracture surface corresponding to the periphery of the main coarse fibrillar zone at the crack tip. It indicates not only the presence of numerous craze-like features with dimensions consistent with those of the deformation zone in *Fig. 8*, but also regions of relatively coarse cavitation/fibrillation. It is apparent from *Fig. 9* that the development of the coarser fibrillar zones was not solely a result of continuous widening of pre-existing defects in the direction of the tensile axis, but also proceeded by deformation of the intervening matrix ligaments. These rotated towards the tensile axis, forming "macrofibrils," much as described for the transformation of lamellar stacks into the fibrils in *Fig. 8* (albeit on a different length scale). A TEM micrograph taken from close to the main coarse fibrillar zone is shown in *Fig. 10*. This part of the specimen had been well impregnated with the embedding epoxy resin, and the section appears in reverse contrast with respect to the voids, owing to mass loss from the POM. Traces of the original lamellar texture can still be seen in relatively undeformed regions of the matrix in *Fig. 10*, again indicating the lamellar trajectories to be locally perpendicular to the deformation axis. The fibrils spanning the deformation zones had undergone considerable drawing compared with those in *Fig. 8*, and the deformation zone boundaries were irregular, with islands

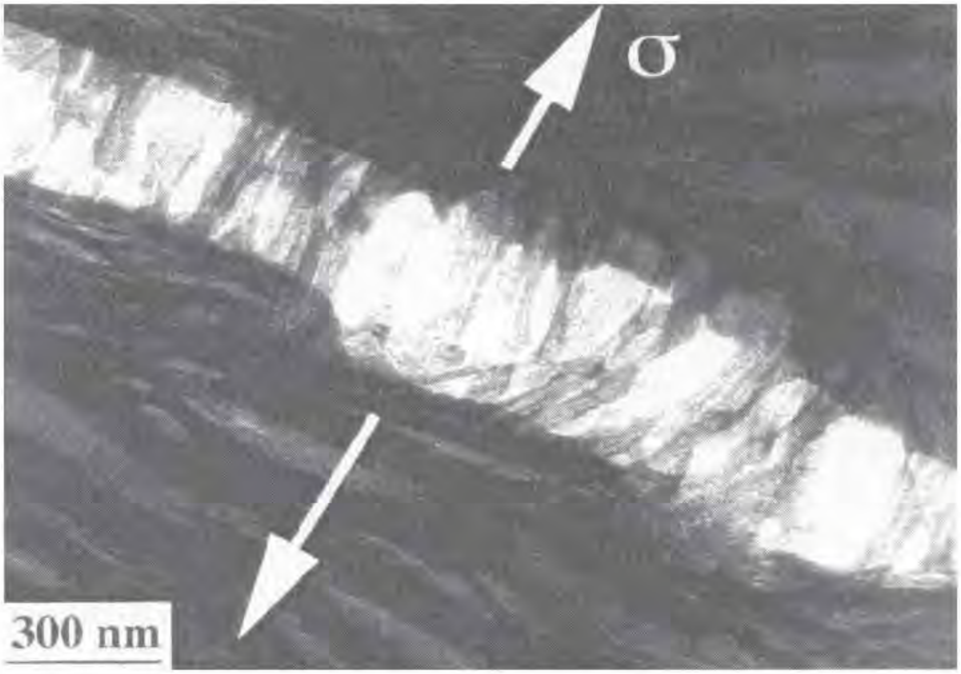


Fig. 8. TEM micrograph of a craze-like feature observed in the periphery of the stress-whitened region at the tip of a crack propagating in a stable manner at 100°C (the arrows indicate the tensile direction).

of relatively undeformed matrix having become substantially isolated from the surrounding matrix. It is inferred that constraints on shear deformation and rotation of these regions due to the surrounding material were substantially relaxed. Thus the global deformation process may be seen as one of formation and widening (and possibly breakdown) of relatively fine fibrillar deformation zones such as in *Fig. 8*, accompanied by shear and rotation of the surrounding matrix, giving rise to coarser structures.

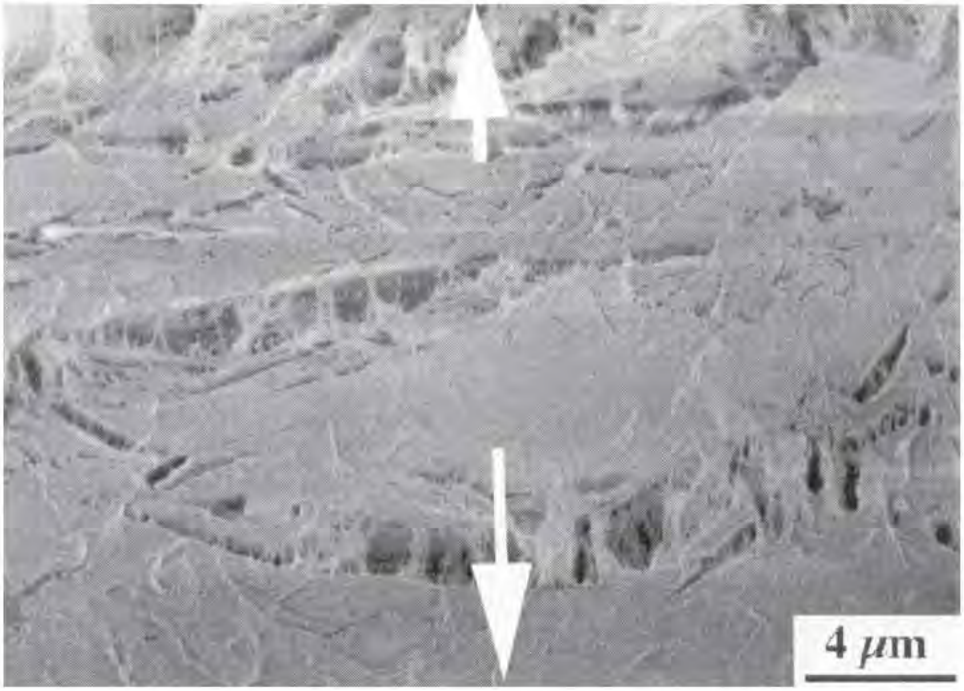


Fig. 9. SEM micrograph of a specimen freeze fractured perpendicular to the crack plane after a stable crack propagation at 100°C, showing deformation in the stress-whitened region and at the periphery of the coarse fibrillar zone (the arrows indicate the tensile direction).

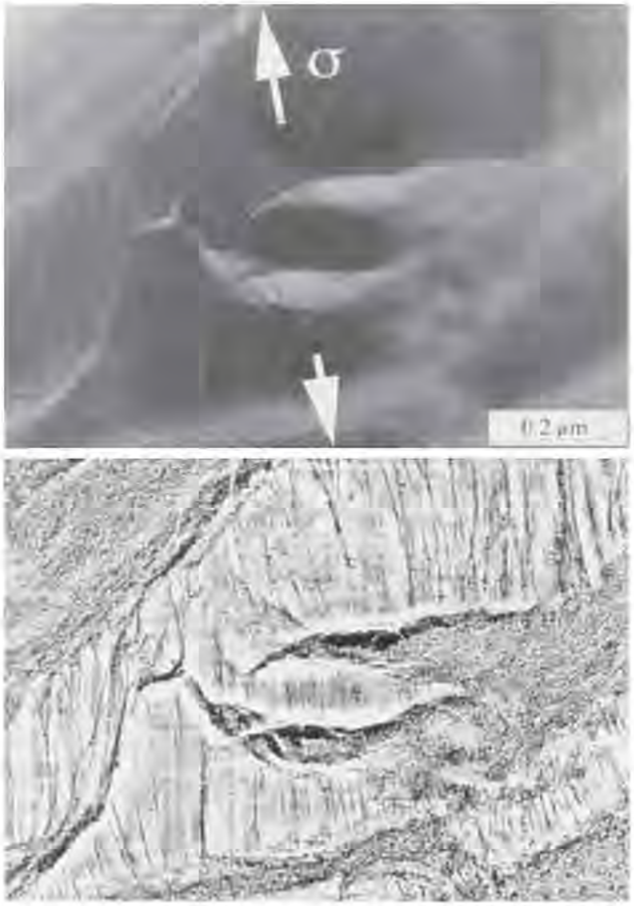


Fig. 10. TEM micrograph of microdeformation close to the edge of the coarse fibrillar zone at the tip of a crack propagating in a stable manner at 100°C. The bottom image is the same micrograph after application of a high pass filter, contrast enhancement and inversion, which makes the fibrils easier to see.

Since some of the coarser fibrils in the main fibrillar zone were up to 100 μm or more in diameter, they incorporated many of the smaller fibrillar zones initially present in the stress-whitened region. These also rotated through about 90° so that their final trajectories were parallel to the stress axis, as may be seen in *Fig. 11*, which shows the structure of a macrofibril. Continued drawing of the macrofibrils resulted in collapse of the localized fibrillar zones, giving rise to a characteristic fibrous texture, similar to that in macroscopic necks in tensile test bars drawn at close to melting point. (Indeed, given that the formation of macroscopic necks is also mediated by stress-whitening/ cavitation there appears every justification for assuming macro-fibrils and macroscopic necks to be analogous, as implicit in certain approaches to SCG in PE (12, 13).) A further illustration of this is given in *Fig. 12*, which shows deformation at the base of a macrofibril in more detail. The resulting sponge-like network of drawn matrix and voids with characteristic dimensions of the order of 100 nm (although there is considerable variation), is also reflected by observations by surface replication of POM specimens drawn in tension (14), as well as post mortem observations by SEM of fracture surfaces of tensile test specimens. In the example given in *Fig. 13*, it is thought that the electron beam has etched away a certain amount of material from the specimen surface, revealing the underlying voided structure. (We initially ascribed such observations to beam damage and/or damage induced during deposition of conducting coatings, when working with conventional SEMs at relatively high tensions.)

Fig. 11. SEM micrograph of a detail of a macrofibril within the coarse fibrillar zone.

It is not clear whether the scale of the fibrillation in the coarse fibrillar zone at the crack tip was itself associated with any particular microstructural feature (such as the discontinuities in the global lamellar orientation). It is clear, however, that the formation of the coarse fibrillar zone must involve considerable global matrix shear deformation as well as micronecking in localized fibrillar zones, and that the role of these latter is primarily to relax constraints on the deformation and rotation of the matrix. At lower temperatures, suppression of matrix shear deformation presumably renders unstable crack propagation via breakdown of the local fibrillar deformation zones more favorable than at high temperatures.

DISCUSSION

The microscopic investigations have shown that localized cavitation is characteristic of the initial stages of deformation in POM over the whole temperature range investigated, appearing in the form of localized craze-like regions of interlamellar voiding. Brittle behavior is expected to ensue if (i) unstable crack initiation by breakdown of the voided regions occurs at stresses lower than the global yield stress or (ii) macrofibrillation and SCG take place. The intervention of one or the other of these phenomena is a question of the time-scale and temperature of the test as

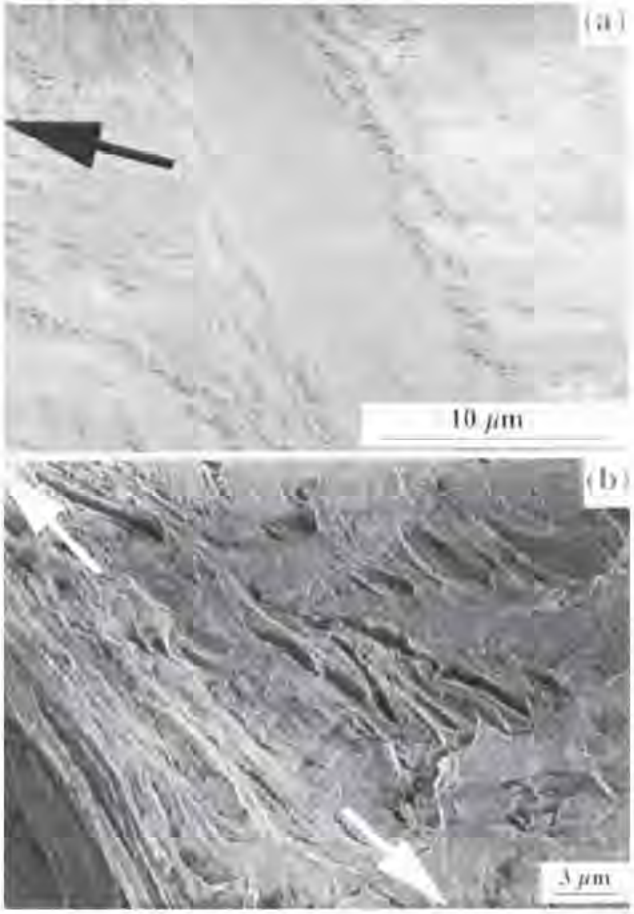


Fig. 12. (a) SEM micrograph of deformation at the edge of the coarse fibrillar zone (the arrow indicates the local tensile direction); (b) detail of the interior of the coarse fibrillar zone close to the crack tip (the arrows indicate the local tensile direction).

well as the level of applied stress. However, if it is assumed that brittle failure is associated with short characteristic times and that it is weakly thermally activated, to a first approximation it may be associated with a constant critical stress. On the other hand, SCG is thought to be essentially a creep phenomenon, with final rupture involving continued drawing down of the macrofibrils after their formation (12, 13, 15). Indeed, it is clear from micrographs such as that in *Fig. 3*, that neither their width nor their volume fraction is constant across the width of the damage zones. One would therefore expect SCG to be characterized by relatively long characteristic times and to be strongly thermally activated. Global yielding is considered to represent the intermediate case. A similar scenario based on the notion of different characteristic times for different deformation mechanisms has also been proposed to describe the competition between scission crazing, yield and disentanglement crazing in glassy polymers (16) and a strong analogy exists between disentanglement crazing and SCG in semicrystalline polymers, at least at the phenomenological level. Indeed disentanglement crazing has also been linked to long term embrittlement in certain glassy polymers (17).

Fig. 13. SEM micrograph of a detail of the damage zone from a tensile fracture surface.

In the present case, breakdown of the macrofibrils is assumed to occur when the fibril draw ratio, and hence the crack opening displacement, reaches some critical value beyond which the fibril is unstable with respect to further creep. The critical draw ratio is expected to depend on the molar mass. This is consistent with the results, but cannot be taken to infer anything particular about the mechanisms of fibril breakdown, since as shown in *Fig. 7*, a strong molar mass dependence persists in all regimes of behavior. Moreover, in view of the high polydispersities of the specimens considered, the observed scaling with M_n is difficult to interpret quantitatively. However, the fact that M_n only weakly influences COD_{LL} prior to the onset of SCG suggests that widening of the macrofibrillar zones is essentially governed by the yielding process.

If one assumes the macrofibrillar zone to behave as a Dugdale zone with boundary stress equal to the yield stress, σ_y (18), then for small scale yielding conditions and mode I crack opening

$$\delta_o \sigma_y \approx \frac{K_I^2(1 - \upsilon^2)^2}{E} \tag{1}$$

where δ_o is the crack opening displacement for a stress intensity factor K_I. In a creep test, δ_o is effectively the crack opening displacement after relatively short times and it may further be assumed from the data that $\delta_o >> \delta_b - \delta_o$ (δ_o might be taken to be the intercept at $t = 0$ of the tangent to $\delta(t)$ at times corresponding to the establishment of steady-state creep rate, for example (15)). In order to derive an expression for the steady state crack opening rate, $d\delta/dt$, Brown and Lu assumed Newtonian behavior, so that the total creep rate in the fibrils is (15)

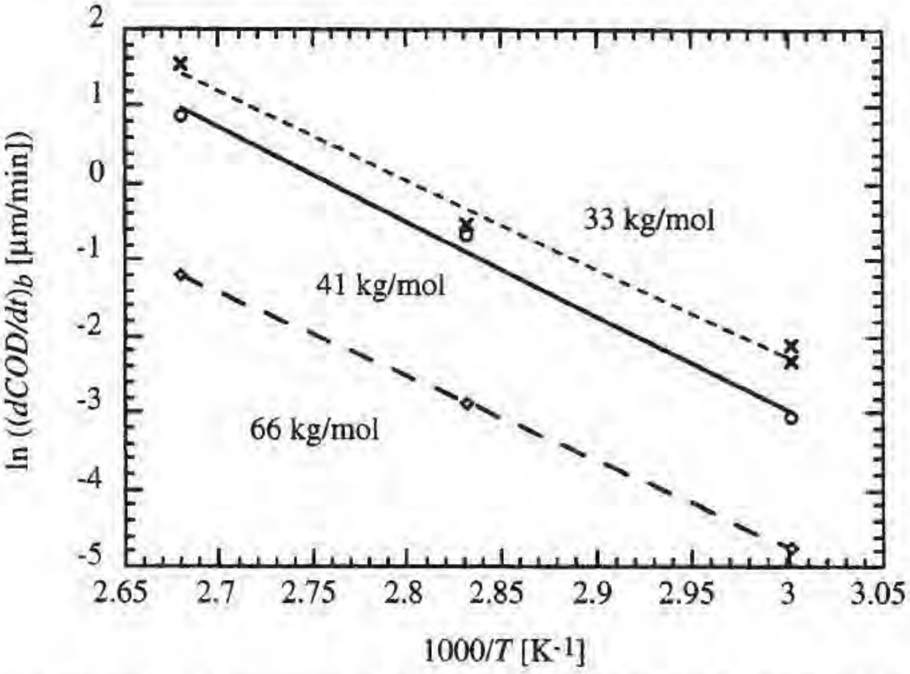


Fig. 14. The influence of temperature on $(dCOD/dt)_b$ for different M_n and K_{app} = 1.67 MPa.m$^{1/2}$.

$$\frac{d\varepsilon}{dt} = \frac{1}{\delta_o}\frac{d\delta}{dt} \approx \frac{\sigma_f}{\eta} \tag{2}$$

where σ_f is the true stress in the fibrils, taken to be equal to $\sigma_y\delta_o/D$, where D is the width of the region from which the fibrils were initially formed and η is the effective fibril viscosity. Combining *Eqs 1* and *2* with the above expression for σ_f leads to

$$\frac{d\delta}{dt} = \delta_o\frac{d\varepsilon}{dt} \approx \frac{\delta_o^2\,\sigma_y}{D\eta} \approx \frac{K_I^4\,(1-\upsilon^2)^2}{D\eta E^2\sigma_y} \tag{3}$$

Thus it has been suggested that the steady state crack opening rate should be given by an expression of the form

$$\frac{d\delta}{dt} = C\exp\left(\frac{-Q}{kT}\right) \tag{4}$$

where Q is an activation energy characteristic of the fibril viscosity (15) (although the viscosity is not the only temperature dependent term in *Eq 3*). In the present case $d\delta/dt$ was identified with $(dCOD/dt)_b$. However, insufficient data were available to confirm the K_I^4 dependence of $(dCOD/dt)_b$. Neither is it clear that a true steady state crack opening rate was achieved at any time during the tests, particularly for the lower molar masses. An attempt was nevertheless made to derive an activation energy using *Eq 4*. *Figure 14* shows $\ln((dCOD/dt)_b)$ at K_{app} = 1.67 MPa.m$^{1/2}$ plotted against reciprocal temperature for each M_n. The apparent activation energy $Q \approx 120$ kJ/mol was similar to values obtained in the same way for SCG in PE (15). The mechanisms of deformation also remained very similar over this range of conditions, with t_b increasing monotonically with decreasing temperature. Thus at 60°C, SCG initiated after about 10 days for M_n = 41 kg/mol, which compares with a value of 2 × 10^5 s at 100°C for the same molecular weight.

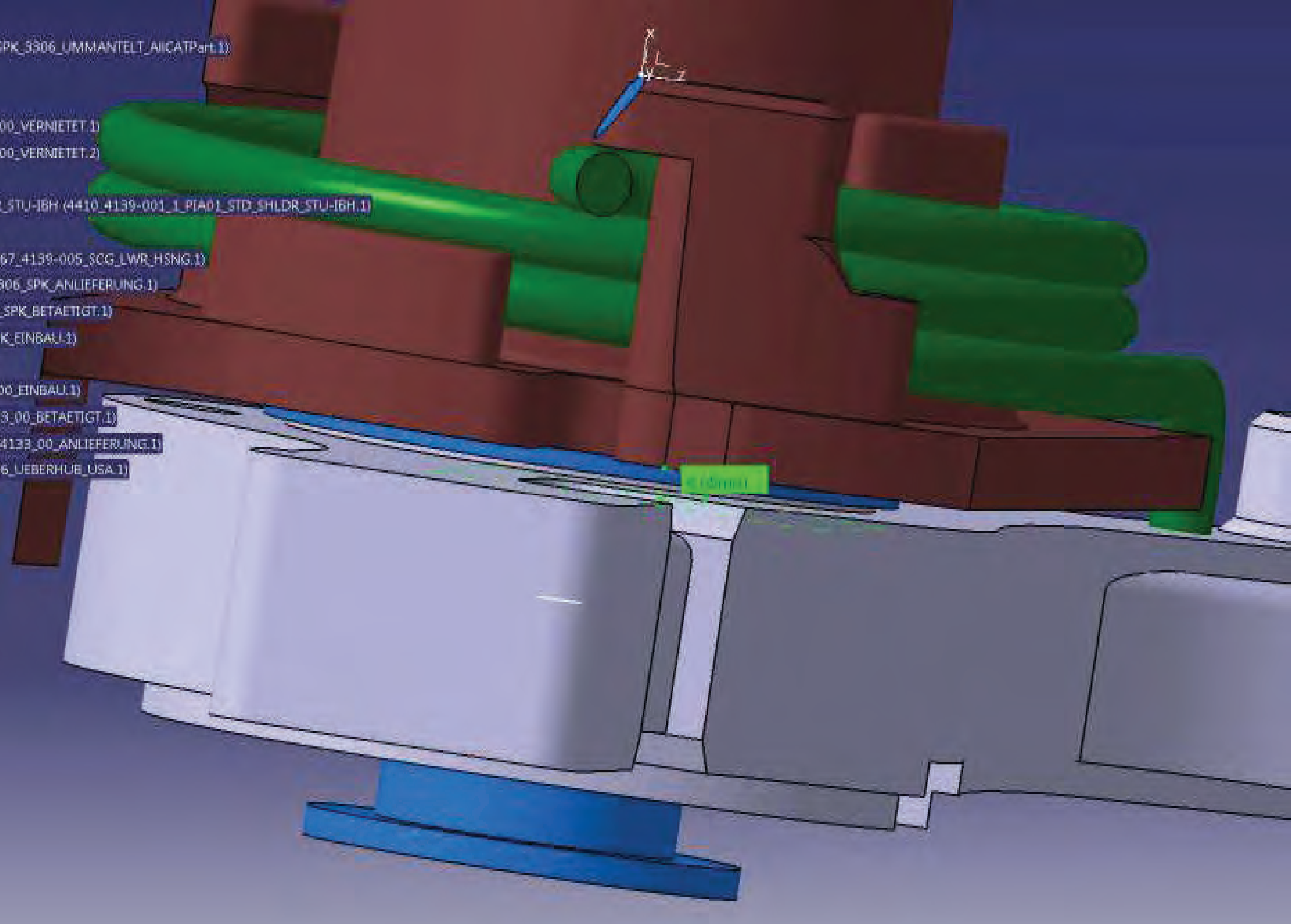
CONCLUSIONS

It has been demonstrated that POM may show relatively brittle behavior when subjected to long-term low level static loading at elevated temperatures. This is linked to localized fibrillation and SCG. The same phenomena have also been induced in notched CT specimens in static loading, again at elevated temperatures. The microscopic analysis suggests breakdown of craze-like structures arising from interlamellar cavitation and which are characteristic of the whole range of test conditions, may relax three-dimensional constraints on regions of matrix that are then able to draw down to form the macrofibrils. From the appearance of the macrofibrillar zones, subsequent slow crack deformation is assumed to occur by fibril creep. Fibril breakdown is suggested to correspond to a critical value of the fibril draw ratio. This value is inferred from the results to increase with molar mass.

The somewhat questionable assumptions inherent in the attempt at a quantitative analysis of the crack opening rate (particularly the use of *Eq 2*) might be circumvented by use of the phenomenological approach adopted by O'Connell and co-workers, based on the observed creep behavior in macroscopic necks (13). Although such data were not available for the present specimens at the time of writing, this would be a promising avenue for future attempts to establish a predictive model for long-term failure in POM. At the same time it would be of interest to explore other test geometries, and in particular the full-notched specimen geometry adopted by Duan and Williams (19), with the aim of investigating the mechanical response of the macrofibrillar damage zone to a well-defined stress field.

REFERENCES

1. H.-H. Kausch, in *Polymer Fracture*, Springer Verlag, Berlin (1987).
2. S. K. Bhattacharya and N. J. Brown, *J. Mat. Sci.*, **19**, 2519 (1984).
3. J. Brandrup and E. H. Immergut, in *Polymer Handbook*, John Wiley, New York (1989).
4. G. Menges, E. Wiegand, D. Pütz, and F. Maurer, *Kunststoffe*, **65**, 368 (1975).
5. J. H. Wendorff, *Polymer*, **21**, 553 (1980).
6. C. J. G. Plummer, P. Béguelin, and H.-H. Kausch, *Polym. Eng. Sci.*, **34**, 318 (1994).
7. P. Scaramuzzino, PhD thesis, EPF Lausanne (1998).
8. E. J. Kramer, *Adv. Polym. Sci.*, **52/53** (H.-H. Kausch, Ed.), Ch. 1, Springer Verlag, Berlin (1983).
9. K. Friedrich, *Adv. Polym. Sci.*, **52/53** (H.-H. Kausch, Ed.), Ch. 1, Springer Verlag, Berlin (1983).
10. J. G. Williams, in *Stress Analysis of Polymers*, Longman, London (1973).
11. C. J. G. Plummer, P. Menu, N. Cudré Mauroux, and H.-H. Kausch, *J. Appl. Polym. Sci.*, **55**, 489 (1995).
12. M. J. Cawood, A. D. Channell, and G. Capaccio, *Polymer*, **34**, 423 (1993).
13. P. A. O'Connell, M. J. Bonner, R. A. Duckett, and I. M. Ward, *Polymer*, **36**, 2355 (1995).
14. K. O'Leary and P. H. Geil, *J. Macromol. Sci.-Phys.*, **B2**, 261 (1968).
15. N. Brown and X. Lu, *Polymer*, **36**, 543 (1995).
16. C. J. G. Plummer and A. M. Donald, *J. Polym. Sci.-Polym. Phys. Ed.*, **27**, 235 (1989).
17. M. T. Takemori, *Adv. Polym. Sci.*, **91/92** (H.-H. Kausch, Ed.), Ch. 6, Springer Verlag, Berlin (1990).
18. X. Wang, N. Brown, and L. Fager, *Polymer*, **30**, 453 (1989).
19. D.-M. Duan and J. G. Williams, *J. Mat. Sci.*, **33**, 625 (1998).


SPK_3306_UMMANTELT_AllCATPart.1)
00_VERNIETET.1)
00_VERNIETET.2)
_STU-IBH (4410_4139-001_1_PIA01_STD_SHLDR_STU-IBH.1)
67_4139-005_SCG_LWR_HSNG.1)
306_SPK_ANLIEFERUNG.1)
_SPK_BETAETIGT.1)
K_EINBAU.1)
00_EINBAU.1)
3_00_BETAETIGT.1)
4133_00_ANLIEFERUNG.1)
6_UEBERHUB_USA.1)

From: [redacted]
Sent: Thursday, April 24, 2014 11:25 AM
To: [redacted] (T.)
Subject: PDFs
Attachments: Cuautitlan - Fiesta AWS dealership code breakdown MY11 thru MY14 Updated....pdf; Cuautitlan - Fiesta AWS dealership code breakdown MY11 thru MY14 Updated....pdf; Cuautitlan - Fiesta AWS dealership code breakdown MY11 thru MY14 Updated....xlsx

[redacted]

Something I put together late last night using the visualization tools in the new excel, I have attached the excel file but I am not sure whether you have the updated Excel, we don't here at Ford (I use mine at home). Take a look at the two maps. I chose California to show contrasting climates of high population centers (San Fran vs. Los Angeles area). The very telling feature I think the visualization shows is the low population area out towards the desert in California towards Arizona is massively over represented as demonstrated by the size of the dot.

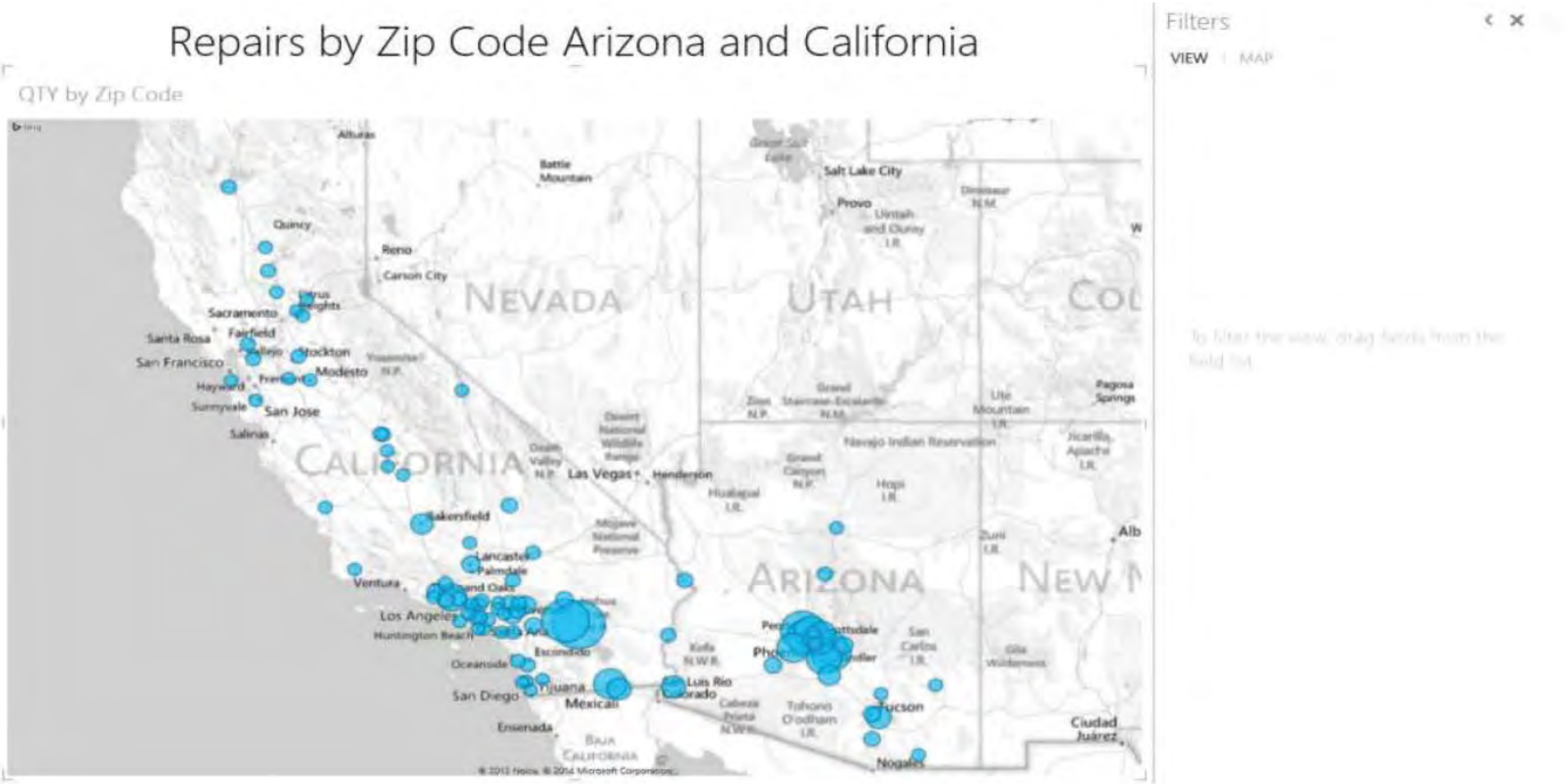
Best Regards,

[redacted]

STA

Repairs by Zip Code Arizona and California

QTY by Zip Code



Filters

VIEW | MAP

To filter the view, drag fields from the field list.

Repairs in California by Dealer Zip Code

QTY by Zip Code

From: [redacted]
Sent: Thursday, April 24, 2014 10:43 AM
To: [redacted])
Subject: PDFs of geographic distribution of repairs
Attachments: Cuautitlan - Fiesta AWS dealership code breakdown MY11 thru MY14 Updated....pdf; Cuautitlan - Fiesta AWS dealership code breakdown MY11 thru MY14 Updated....pdf

Repairs in California by Dealer Zip Code

QTY by Zip Code

Filters

VIEW | MAP

To filter the view, drag fields from the field list.

Repairs by Zip Code Arizona and California

QTY by Zip Code

Filters

To filter the view, drag fields from the field list.

From: [redacted])
Sent: Thursday, September 04, 2014 6:59 PM
To: [redacted]
Subject: Pictures
Attachments: photo 3.JPG; photo 2.JPG; photo 1.JPG

[redacted]

Here are some pictures which hopefully clarify how the spring is attached to the pawl.

<<...>> <<...>> <<...>>

Do not go where the path may lead, go instead where there is no path and leave a trail. - Ralph Waldo Emerson

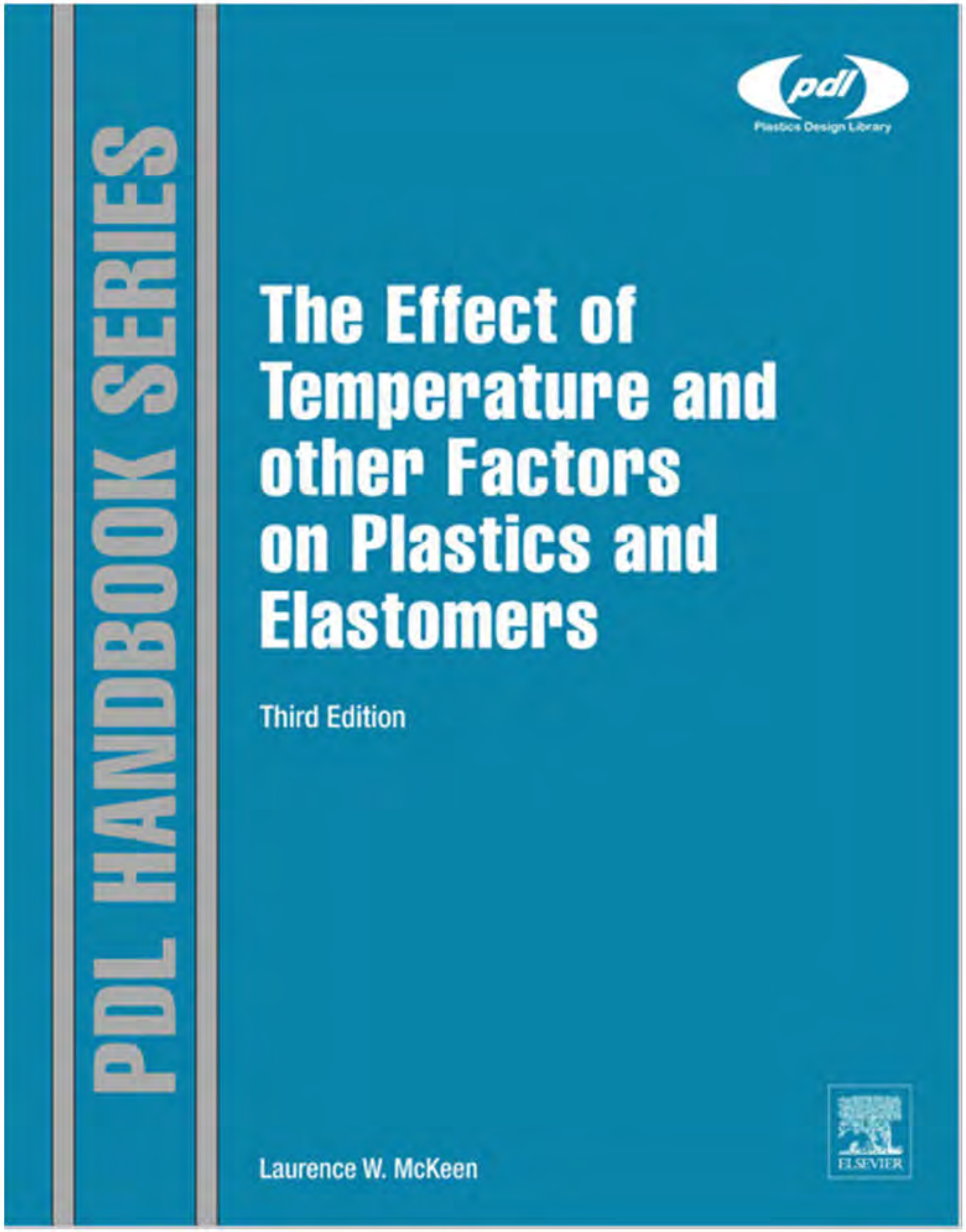
[redacted]

Technical Specialist -Latching Body Hardware

Body Engineering

([redacted]

[redacted]



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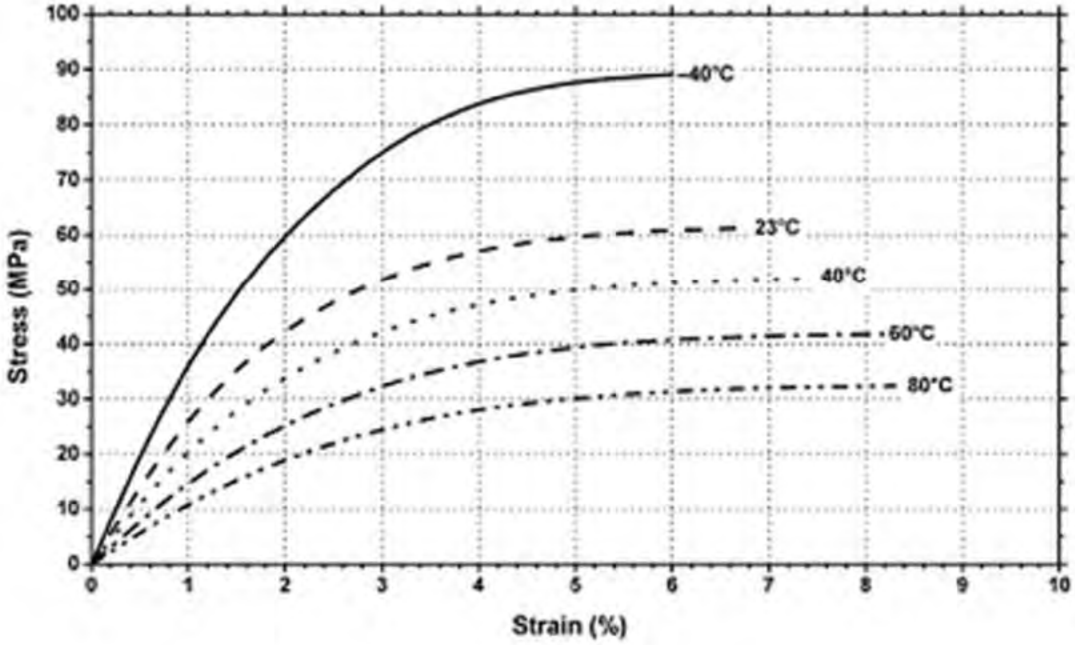


Figure 3.30 Stress vs. strain for Celanese Hostaform® C 9021—general purpose grade acetal copolymer resin.

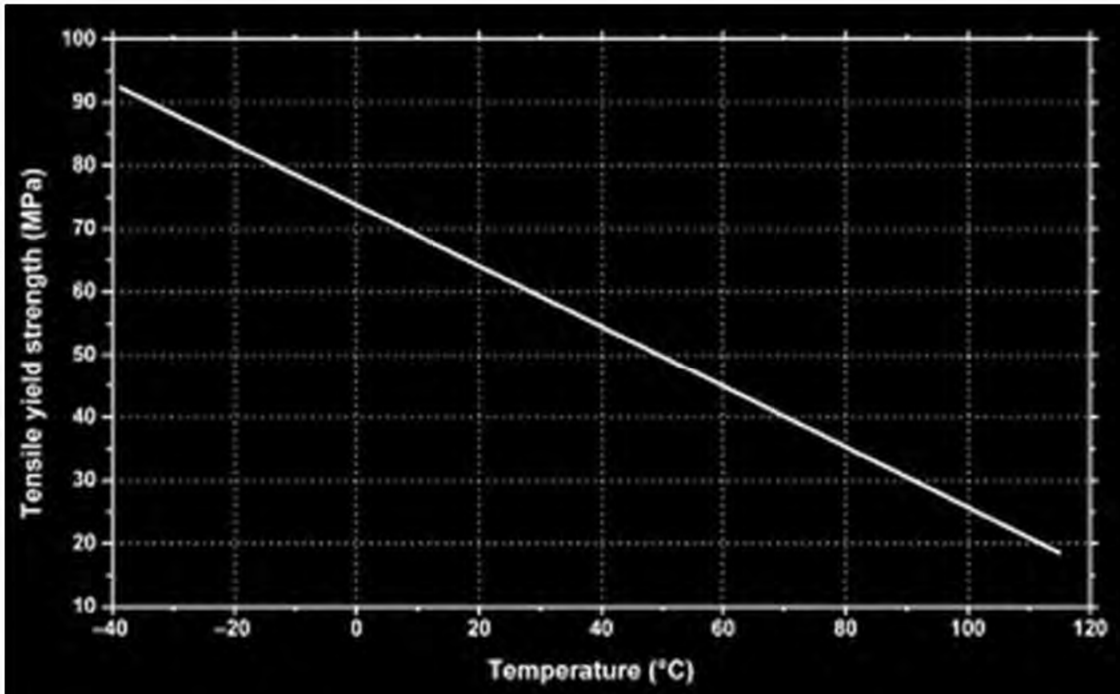


Figure 3.52 Tensile yield strength vs. temperature for Celanese Celcon® M90—medium viscosity, general purpose acetal copolymer resin.

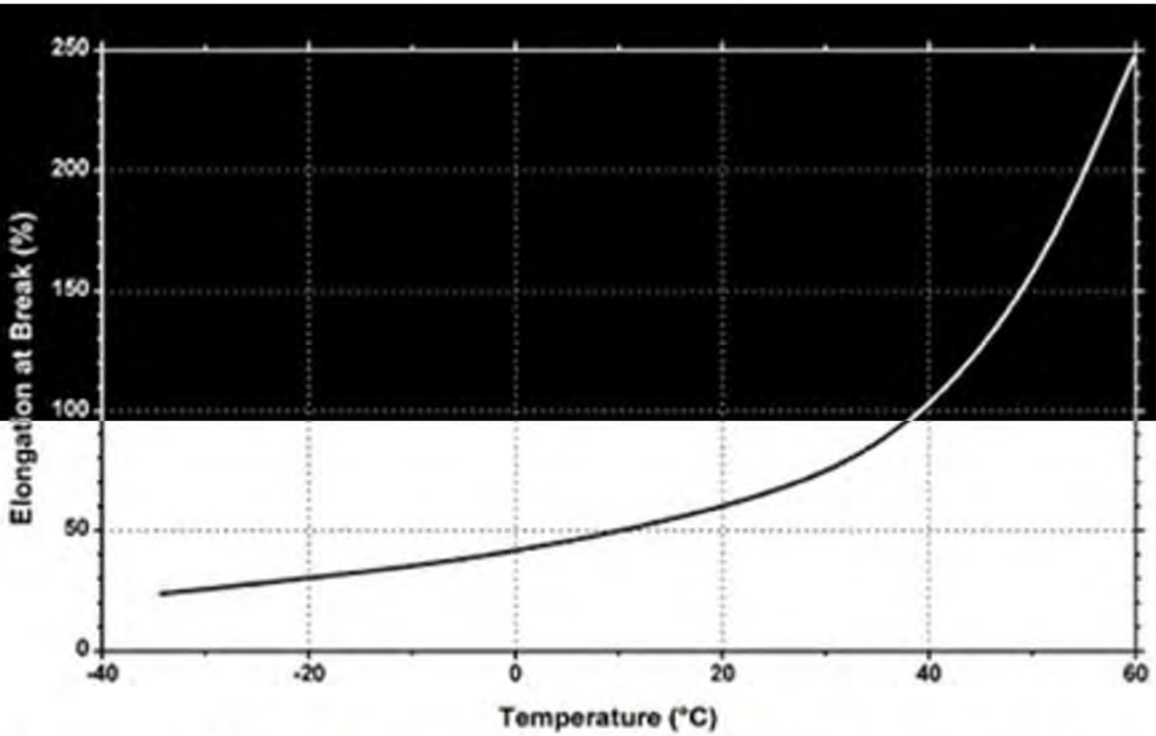


Figure 3.57. Elongation at break vs. temperature for Ticona Celcon® M90—general purpose acetal copolymer resin.

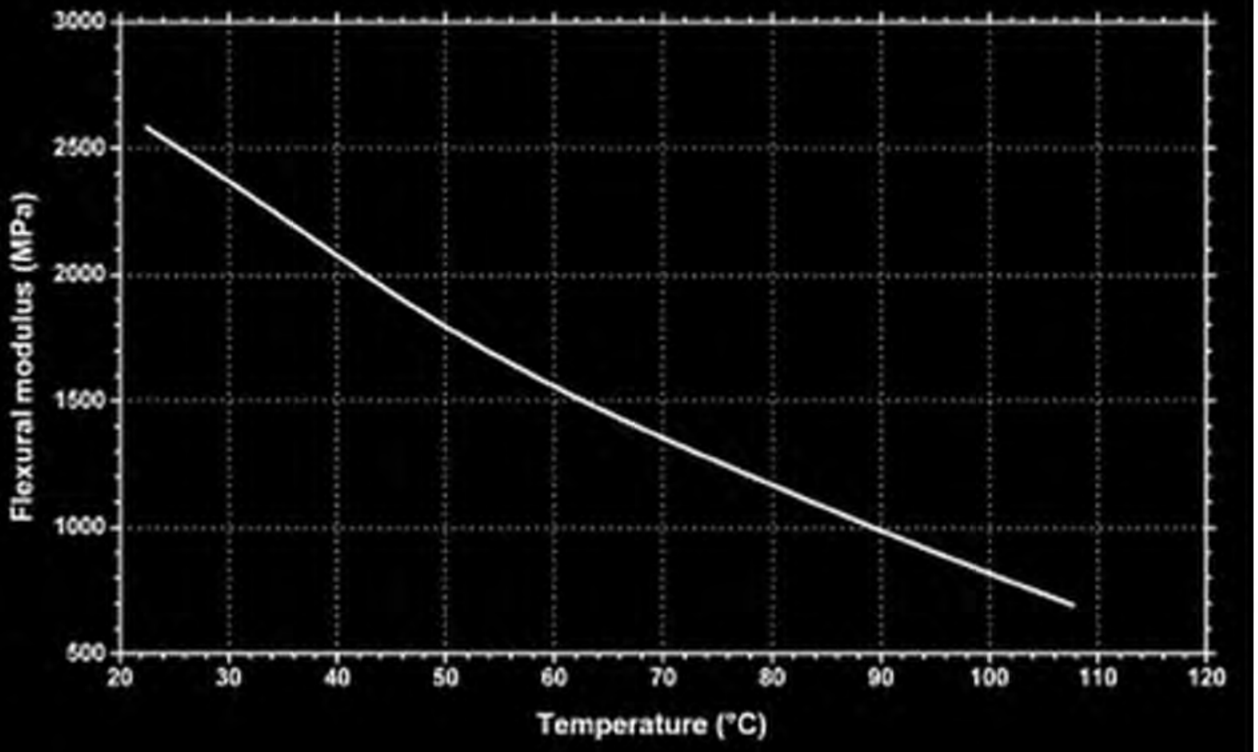


Figure 3.38 Flexural modulus vs. temperature for Celanese Celcon® M25/M90/M270 acetal copolymer resins.

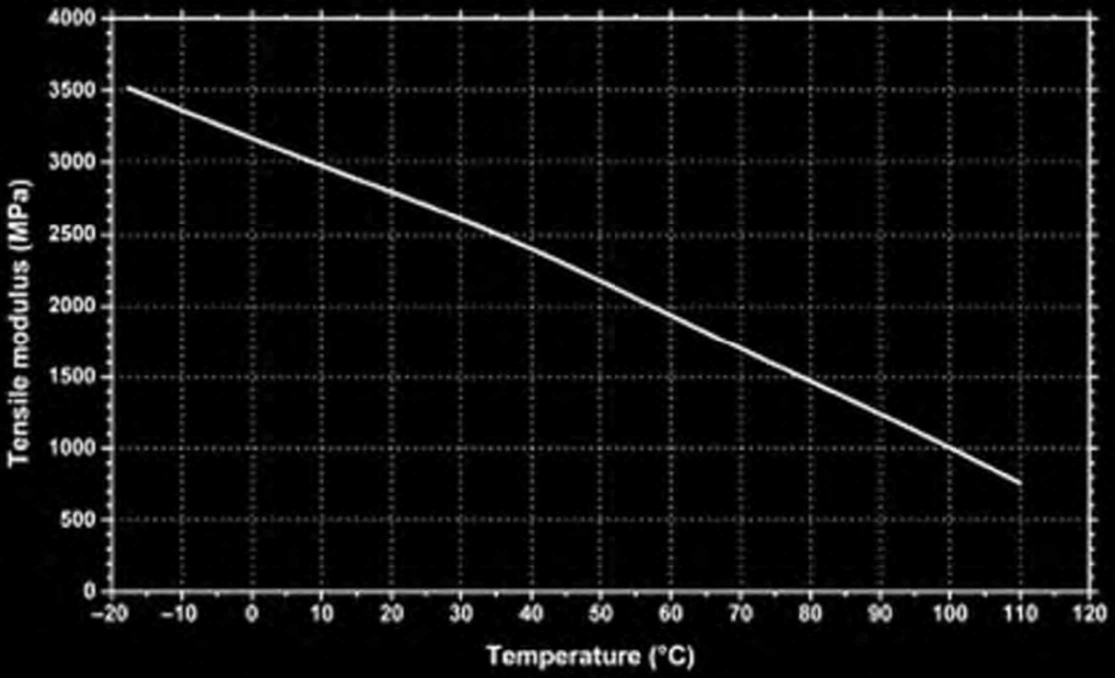


Figure 3.43 Tensile modulus vs. temperature for Celanese Celcon® M25/M90/M270 acetal copolymer resins.

Fig. 48 · Change in the tensile strength of Hostaform C 9021 as a function of storage time and temperature represented on an Arrhenius diagram

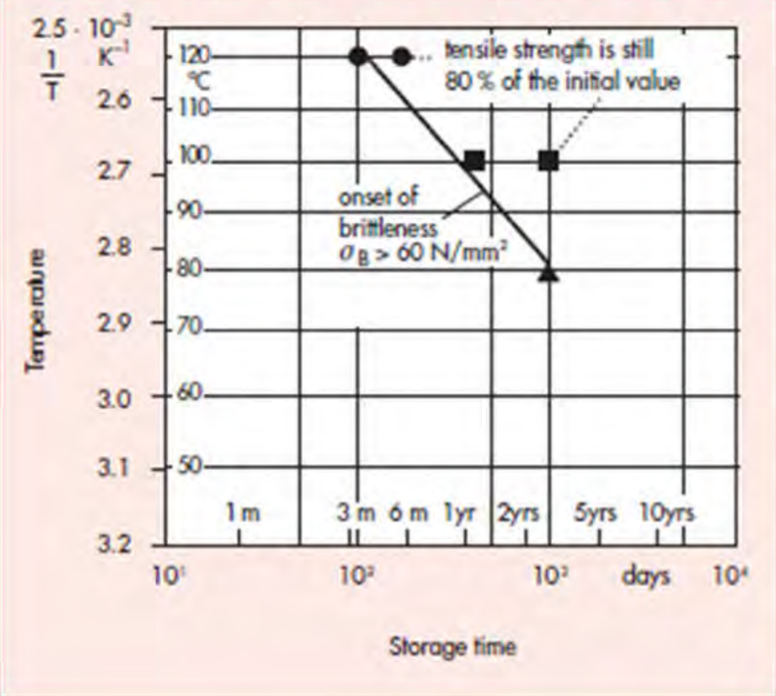


Fig. 49 · Relative elongation at break of Hostaform C 9021 as a function of storage time in air at elevated temperature

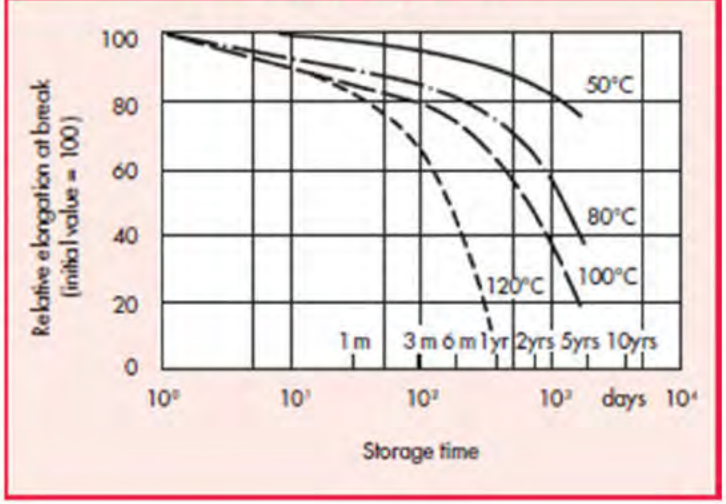
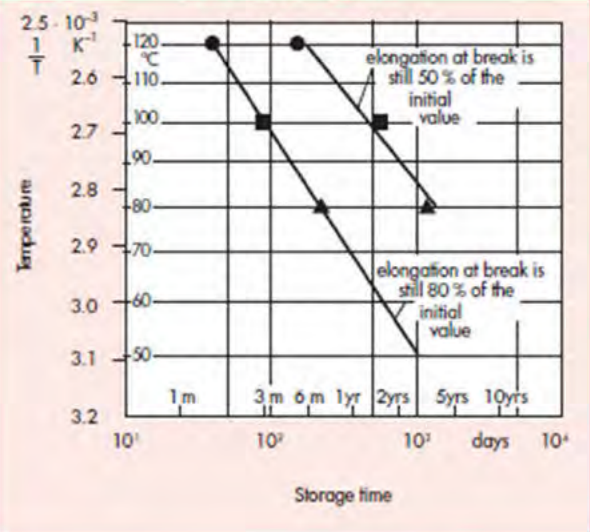


Fig. 50 · Change in the elongation at break of Hostaform C 9021 as a function of storage time and temperature (in air) represented on an Arrhenius diagram



From: [redacted]
Sent: Thursday, August 28, 2014 5:40 PM
To: [redacted]
Subject: Questions
Attachments: B299 Door Latch FCSD Customer Questions.docx

I have revised it to remove references to cold temp and sticking handles.

<<...>>

Do not go where the path may lead, go instead where there is no path and leave a trail. - Ralph Waldo Emerson

Kosta Papanikolaou

Technical Specialist -Latching Body Hardware

Body Engineering

([redacted]

[redacted]

Customer Follow-Up Questions

2013 Escape Door Latch/Handle Issues

DRAFT

1. Statement from FCSD apologizing about the issue…..assume FCSD will provide this statement.
2. Can you please tell us generally about your experience with the door coming open that day?
3. Did the door open completely or was it in an ajar state (slightly open)?
4. Did you notice any indication (audible, dome lamp, or icon in message center):
    a. when you started the vehicle?
    b. prior to putting the vehicle into DRIVE?
    c. after you started driving the vehicle?
5. Do you remember how far you drove prior to the door coming open?
6. Do you recall the speed you were travelling when the door opened?
7. Do you recall if you were turning a corner when the door opened?
8. Do you recall the outside temperature when the incident occurred? Was the vehicle in a garage prior to driving it?
9. Has the door come open on more than one occasion?
10. Is the door that came open generally easy or hard to close?

From: [redacted]
Sent: Thursday, August 28, 2014 8:49 AM
To: [redacted] J.)
Cc: Baracos, Nicholas (N.); Girolamo, Robert (R.F.)
Subject: RE: 2011 Fiesta - Romanoff Letter

Dave, it was a separate e-mail sent by a director of parts and service from a dealer (Ken Grody Ford) with a 2011 Fiesta with a driver's door opening while driving (the complaint was regarding a part back order). Nick can send you the original note.

Chris Gurney

From: [redacted]
Sent: Wednesday, August 27, 2014 8:17 PM
[redacted]
Cc: [redacted] .)
Subject: RE: 2011 Fiesta - Romanoff Letter

Thanks [redacted]

What is the Romanoff/Ken Grody Ford letter? Is this the Arizona dealer that has reported on 3 separate vehicles?

From: [redacted]
Sent: Wednesday, August 27, 2014 6:10 PM
T[redacted]
Subject: 2011 Fiesta - Romanoff Letter

Dave / Nick, I did a quick VIN search for the 2011 Fiesta detailed in the Romanoff / Ken Grody Ford Letter. The spreadsheet showing all CDR reports is enclosed.

Only 1 report mentions the door latch (at the bottom). It is highlighted in tan.

If you have any questions, please do not hesitate to call. Thanks.

<< File: Romanoff 1.xlsx >>

[redacted]

From: G[redacted].)
Sent: Thursday, August 28, 2014 8:50 AM
To: [redacted]
[redacted] [redacted]
Subject: RE: 2011-2014 Fiesta Door Latch Concern

OK, thanks Dave. Sorry for the confusion.

[redacted]

From: [redacted]
Sent: Wednesday, August 27, 2014 8:21 PM
[redacted]
[redacted]
Subject: RE: 2011-2014 Fiesta Door Latch Concern

Thanks C[redacted]

What I'd like to do is review the 25 not during CCRG but rather with just you, Bob, Nick and me, and then decide which ones we want complete VINS for from NHTSA (principally the 11 that allege door opening while driving.)

From: [redacted]
Sent: Wednesday, August 27, 2014 5:51 PM
[redacted]
[redacted]
Subject: 2011-2014 Fiesta Door Latch Concern

Bob, I had a brief meeting with Dave Ott this afternoon regarding the Fiesta door latch. I showed him your VOQ report, and he is comfortable working with it in this Thursday's CCRG Meeting.

When you get in Thursday morning, if possible, please put together the following:

- **Provide the team a list showing the details of all 25 of the VOQ reports Scott Yon referenced. Dave may want to review them individually during the meeting.**
- **Aside from the VOQs, Dave was aware of only 3 reports of doors allegedly opening while driving (all were from Arizona, and all supposedly came from one fleet source). If you know of those 3 reports, please have them available for the discussion as well. Thanks.**

Chris Gurney

From: [redacted]
Sent: Monday, July 21, 2014 2:35 PM
To: [redacted]
Subject: RE: 2014 Fiesta Door Opens in Operation/Door Will Not Close

Tracking:

Recipient	Read
[redacted]	Read: 7/21/2014 2:48 PM Read: 7/21/2014 2:35 PM Read: 7/21/2014 3:05 PM

Resending with attachment.

Fiesta Door latch - CQIS repor...

From [redacted]
Sent: lunes, 21 de julio de 2014 07:56 a.m.
To: [redacted]
Subject: RE: 2014 Fiesta Door Opens in Operation/Door Will Not Close

[redacted]
Attached please find the CQIS reports related to topic issue. They are sorted by vehicle build date.

Five of them are reported as door opened while driving.

Regards,
[redacted]

-----Original Appointment-----
From: [redacted]
Sent: viernes, 18 de julio de 2014 04:07 p.m.
To: [redacted]
Subject: 2014 Fiesta Door Opens in Operation/Door Will Not Close
When: lunes, 21 de julio de 2014 03:00 p.m.-04:00 p.m. (UTC-05:00) Eastern Time (US & Canada).
Where: Webex

As a follow up to the 4 PM meeting on Friday the 18th of July with CCRG (Kris, Joe, Noah, etc.) this meeting is being scheduled to review potential causes and establish a way forward for vehicle analysis. The meeting is being kept small for the initial conversation. A subsequent touch point will be scheduled for later in the week with the roster from the Friday 18th meeting.

[redacted]vites you to the following WebEx meeting:

WebEx meeting information

Meeting Link: https://ford.webex.com/ford/j.php?J=712157192
Meeting Number: 712 157 192
Meeting Password: This meeting does not require a password.

This meeting may include the option for video. The recording of meetings is prohibited. For company policies on using video click here:
https://comm.sp.ford.com/sites/digitalworker/Pages/HowiWorkItem.aspx?UCTitle=to%20use%20Video&UCID=&Page=2&Section=2.001

Audio conference information

[redacted]
Global call-in numbers: https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=299793032&tollFree=1
Toll-free dialing restrictions: http://www.webex.com/pdf/tollfree_restrictions.pdf

Access code:712 157 192

MC05

[redacted]com

```
RUN DATE:07/18/2014            FORD CUSTOMER SERVICE DIVISION     PAGE:    1
                     SERVICE, WARRANTY, AND FINANCIAL SYSTEMS DEPARTMENT
CS0115F1 06:42 050214          COMMON QUALITY INDICATOR SYSTEM
=================================================================================
TEP20                          CQIS Concern Folder
  Folder: 140073300000 2 FIESTA DOOR LATCH - ISSUES

  Status (T,A,C):    NO DESC FOUND   Status Date: 07/16/2014
  Follow-up Date: 12/31/9999        Owner:       JMONTAN4
  Index Points:                     Part Nbr:         -          -
  YTD Part Sales:                   Part Desc:
  Backorder:                        Resp Person:
  Total Reports:  66                Resp Phone:  ( 0                           )
                                  Folder Comments

     Date          Comments
```

```
Rpt#: BISAW031 RTDAHL                         Rpt: 09/19/2011  Odom:   8,015 M
Vehicle: 2011 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ6BM[redacted]                                    Bld: 06/24/2010
Engine: 1.6L SIGMA  Calb: BCH2A10A Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:USA 20686    Mahwah Ford Sales & Service, I Phone:201-529-3200
State:    New Jersey   City: Mahwah           Orig/Caller: JEFFERY PITT
Symptom: 8 81 2 45  SAFE/SEC,LATCHES/LOCKS ,DOOR,MANUAL FUNCT
Addl Sym: LF DOOR DOES NOT LOOK           Attchmnts:  0
Fix:    Caus. Comp: LATCH,FRT,DR        L         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   N1   Region Name:   New York


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   09/19/2011 02:22PM TZELECKI
         1) C/S DRIVERS DOOR WILL NOT LOCK. TECH VERIFIED AND STATES A VISUALLY
         INSPECTION OF THE LATCH TECH STATES THE LATCH CLIP IS BROKEN. TECH
         STATES THERE IS NO DAMAGE FROM AND OUTSIDE SOURCE.
RECOMM   09/19/2011 02:22PM TZELECKI
         REVIEWED AND APPROVED THE LF LATCH AND GAVE APPROVAL CODE PAA3R TO
         REPLACE
```

```
Rpt#: DKYC4003 NHL                            Rpt: 11/25/2013  Odom:  34,827 M
Vehicle: 2011 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ3BM[redacted]                                   Bld: 08/12/2010
Engine: 1.6L SIGMA  Calb: BCH2A10A Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:USA 09044    Darling's Bangor Ford        Phone:207-941-1330
State:    Maine       City: Bangor          Orig/Caller: KURTIS WHITE
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DRIVER DOOR WILL NOT LATCH      Attchmnts:  0
Fix:    Caus. Comp:                               --       Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    LNEWSOM    Phone: --3179333                    Dist Cd: N2 Boston
Engineering:                                Phone:                          TA
Dlr Contact:                                Phone:                          Ti

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   11/25/2013 09:52AM LAWRENCE NEWSOM      MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: INTERMITTENTLY, DRIVERS DOOR WILL NOT
         LATCH.    DIAGNOSTICS: ATTEMPTED TO OPEN AND CLOSE ABOUT 20+ TIMES,
         CANT GET CONCERN TO HAPPEN, CHECKED FOR TSB/SSM, NONE FOUND.    PARTS
         REPLACED: NONE    TECH QUESTION: HAVE YOU SEEN THIS CONCERN BEFORE?
RECOMM   11/25/2013 09:52AM LAWRENCE NEWSOM      MSS - FCSD - TECH SVC HOTLINE
         HELLO KURTIS,  A CONDITION AS TO WHICH THE DOOR WILL NOT LATCH CAN BE
         THE RESULT OF A LATCH ISSUE.  RECOMMEND TO CONTINUE TO ATTEMPT TO
         DUPLICATE THE CUSTOMERS COMPLAINT.  IF ABLE TO DUPLICATE THE CONCERN
         RECOMMEND TO INSPECT THE LATCH FOR DAMAGE/BINDING. IF BINDING IS
         PRESENT RECOMMEND TO LUBRICATE THE LATCH REFERENCING ONLINE WSM 501-14
         HANDLES, LOCKS, LATCHES AND ENTRY SYSTEMS > GENERAL PROCEDURES > LATCH
         LUBRICATION.   IF THERE IS LATCH FAILURE PRESENT ADVISE TO REPLACE THE
         LATCH REFERENCING ONLINE WSM 501-14 HANDLES, LOCKS, LATCHES AND ENTRY
         SYSTEMS > REMOVAL AND INSTALLATION PROCEDURE AS OUTLINED.
```

```
Rpt#: BCNAR002 RTDAHL                         Rpt: 03/14/2011  Odom:     429 M
Vehicle: 2011 FIESTA (NA)                  ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ1BM[redacted]                                    Bld: 08/16/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 07530    Performance Ford Lincoln       Phone:973-927-6700
State:    New Jersey   City: Randolph         Orig/Caller: ROBERT MARSZ
Symptom: 8 81 2 62  SAFE/SEC,LATCHES/LOCKS ,DOOR,POWER FUNCT
Addl Sym: PAADW            LATCH          Attchmnts:  0
Fix:    Caus. Comp: HOSE                          -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   N1   Region Name:   New York


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   03/14/2011 08:47AM PREGITS
         CUST REPORTS DRIVERS DOOR WILL NOT STAY CLOSED. TECH REPORTS DR DOOR
         GOES INTO THE LOCK POSITION AFTER OPENING THE DOOR. TECH REPORTS NO
         CONCERNS WITH LATCH LOCK ROD OR INSIDE CABLE CONCERN. TECH REPORTS
         ADJUSTED LOCK ROD CONCERN STILL PERSENT REQUESTING APPROVAL TO REPLACE
         THE LATCH PER CONCERN.
RECOMM   03/14/2011 08:47AM PREGITS
         REVIEWED. GAVE APPROVAL CODE PAADW TO REPLACE THE DR DOOR LATCH PER
         REPORTED CONCERN.
AUDIT    07/02/2011 11:04AM
         SYMPTOM    1 12 1 33         CHANGED TO 8 81 2 62         BY CS012093
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:41


Rpt#: EFMPF559 CREDSR--or-- Q  201491343919   Rpt: 06/13/2014  Odom:  53,191 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ1BM[redacted]                                   Bld: 09/03/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 20313    Earnhardt Ford Sales Company   Phone:480-838-4442
State:    Arizona      City: Chandler         Orig/Caller: DEE BUELOW
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


--------------------------------- C O M M E N T S -------------------------------
 Type   Comments
CONCER   06/13/2014 06:00PM
         RT. REAR DOOR FLEW OPEN
TECH/C   06/13/2014 06:00PM
         DOOR LATCH INOP DOOR WILL NOT CLOSE. HAVE TO REPLACE DOOR LATCH
         Refer to VIN 3FADP4BJ4CM[redacted] under Control # 201491343915  & Program
         Type:  Q  For further information.
```

```
Rpt#: BIHBI018 RTDAHL                         Rpt: 09/08/2011  Odom:   7,740 M
Vehicle: 2011 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ6BM[redacted]                                   Bld: 09/07/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 02890    Russ Milne Ford, Inc.          Phone:586-948-7700
State:    Michigan     City: Macomb           Orig/Caller: JOHN BARBIAN
Symptom: 8 81 2 45  SAFE/SEC,LATCHES/LOCKS ,DOOR,MANUAL FUNCT
Addl Sym: LR DOOR WILL NOT LATCH          Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          L         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   G2   Region Name:   Detroit


-------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   09/08/2011 01:30PM TZELECKI
         51) C/S LR DOOR WILL NOT LATCH. TECH STATES WHEN MANUALLY TRIED THE
         DOOR WILL CLOSE AND NOT LATCH. MANUALLY THE TECH CANNOT CLOSE THE
         LATCH TO THE SECOND DETENT.
RECOMM   09/08/2011 01:30PM TZELECKI
         REVIWED AND APPROVED THE RR LATCH AND GAVE APPROVAL CODE PAAKX TO
         REPLACE
```

```
Rpt#: BKNB3017 RTDAHL                         Rpt: 11/14/2011  Odom:   8,185 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ6BM[redacted]                          Bld: 09/14/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 11293    Camelback Ford Lincoln         Phone:602-264-1851
State:    Arizona      City: Phoenix          Orig/Caller: NICK LAMER
Symptom: 8 81 2 45  SAFE/SEC,LATCHES/LOCKS ,DOOR,MANUAL FUNCT
Addl Sym: R/R DOOR WILL NOT CLOSE         Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   11/14/2011 12:20PM GEORGE STAVROPOULUS  MSS - FCSD - TECH SVC HOTLINE
         A.) R/R DR WILL NOT CLOSE     TECH FOUND LATCH WILL NOT LATCH SHUT,
         TRIED TO USE SCREW DRIVER TO FORCE LATCH TO OIPERATE WITH NO LUCK,
         LATCH IS BOUND UP
RECOMM   11/14/2011 12:20PM GEORGE STAVROPOULUS  MSS - FCSD - TECH SVC HOTLINE
         APPROVED TO REPLACE R/R DOOR LATCH     AUTH CODE = PAASR
```

```
Rpt#: EA5LA416 CREDSR--or-- Q  201491258584   Rpt: 03/04/2014  Odom:  36,581 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FAKP4BK2BM[redacted]                             Bld: 09/25/2010
Engine: 1.6L FFV    Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:BRA 06170 SZ JF AUTOMOTORES                  Phone:55-088-21017575
Country:  BRAZIL       City: JUAZEIRO DO NORT Orig/Caller: Paulo Batista
Symptom: 8 81 2 00  SAFE/SEC,LATCHES/LOCKS ,DOOR,UNKNOWN
Addl Sym:                                Attchmnts:  0
Fix:    Caus. Comp: BRKT ANTI THEFT CNTL SYS ASY  -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   07   Region Name:   Regional 07 NORDESTE


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   01/31/2014 12:00PM
         VEICULO APRESENTA PROBLEMAS PROBLEMAS NO TRAVAMENTO DAS PORTAS,AO
         DESLOCAR COM O VEICULO O MESMO NAO TRAVA AS PORTAS.
TECH/C   01/31/2014 12:00PM
         DIAG. FOI CONSTATADO APOS INSPECAO E TESTE DE ESTRADA QUE O MODULO DE
         CONTROLE CENTRAL DAS PORTAS ESTA COM OP. INCORRETA FAZENDO COM QUE AO
         SAIR COM VEICULO E ATINGIR A MEDIA DE 10 A 20KM/H AS TRAVAS DAS PORTAS
         NAO TRAVEM AUTOMATICAMENTE. SOL. FOI SUBSTITUIDO O MODULO DE CONTROLE
         CENTRAL DAS PORTAS.
TRNSCD   03/04/2014 12:00PM
         VEHICLE PRESENTS PROBLEMS PROBLEMS IN THE TRAVAMENTO OF THE DOORS,
         WHEN DISLOCATING WITH THE VEHICLE THE SAME NOT DOES NOT LOCK THE
         DOORS.
TRNSTC   03/04/2014 12:00PM
         DIAG. IT WAS AFTER EVIDENCED INSP. AND TEST OF ROAD THAT MODULE DE
         CONTROLE CENTER OF THE DOORS THIS WITH OP. INCORRETO MAKING WITH THAT
         WHEN EXITING WITH VEHICLE AND REACHING the MEDIA OF 10 20KM/H the DOOR
         LATCHES NOT DO NOT LOCK AUTOMATICALLY. SUN. MODULE DE CONTROLE WAS
         SUBSTITUTED CENTER OF THE DOORS.
```

```
Rpt#: DHTBI009 NHL                            Rpt: 08/20/2013  Odom:  23,415 M
Vehicle: 2011 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ2BM[redacted]                                   Bld: 10/05/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 05471    Jim Burke Ford                Phone:661-328-3711
State:    California   City: Bakersfield     Orig/Caller: WALTER FELIX
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: RR LATCH FAILURE SEEN ON OTHER  Attchmnts:  0
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    BKUMMLER   Phone: 001-313-3177076         Dist Cd: W1 Los Angele
Engineering:                                Phone:                           TA
Dlr Contact:                                Phone:                           Ti

-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   08/20/2013 02:16PM BRADLEY KUMMLER      MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: RIGHT REAR DOOR WONT CLOSE.    DIAGNOSTICS:
         FOUND LATCH AT FAULT.    PARTS REPLACED: NONE    TECH QUESTION: IN THE
         PASS TWO WEEKS I HAD CAME ACROSS ABOUT 4 VEHICLES FOR THIS SAME
         CONCERN FOR THE SAME DOOR (RIGHT REAR) DOOR WONT CLOSE. AND ONE OF MY
         COWORKER HAD ONE ALSO AND HE REPLACE THE RR DOOR LATCH AND IT GOT FIX.
         I HAVE 3 CARS FOR SAME CONCER ODER PARTS AND THEY THE PARTS ARE
         BACKODER. MY QUESTION IS, IS THIS NORMAL FOR THIS TYPE OF CONCERN
         HAPPENS FOR THIS KIND OF VEHICLE FOR RR DOOR WONT CLOSE? I JUST WANTED
         TO BRING THIS OUT AND SEE IF YOU HAVE SEEN THIS BEFORE?
RECOMM   08/20/2013 02:16PM BRADLEY KUMMLER      MSS - FCSD - TECH SVC HOTLINE
         WALTER,  THANK YOU FOR THE DETAILED INFORMATION. THE DATABASE DOESN'T
         INDICATE ANY COMMON TRENDS FOR LATCH FAILURE THAT IS BEING DESCRIBED.
         THE INFORMATION THAT THE REQUIRED PART IS CURRENTLY ON BACKORDER MAY
         BE A GOOD INDICATOR OF A POSSIBLE QUALITY/MANUFACTURING CONCERN WITHIN
         THE COMPONENT OR THAT THE PROJECTED DEMAND/SUPPLY WAS NOT CALCULATED
         FOR ADEQUATE SUPPLY.    RECOMMEND THE SERVICE PART BE EMERGENCY
         ORDERED FOR VEHICLE DOWN.
RECOMM   08/20/2013 02:18PM BRADLEY KUMMLER      MSS - FCSD - TECH SVC HOTLINE
         SUGGEST USING THE LINK AT THE BOTTOM OF OASIS FOR REPORT A VEHICLE
         CONCERN ON EACH AFFECTED VIN TO HELP ENGINEERING IDENTIFY CONCERNS
         WITH VEHICLE COMPONENT CONCERNS.
```

```
Rpt#: DH4DN001 NHL                              Rpt: 08/30/2013  Odom:  16,000 M
Vehicle: 2011 FIESTA (NA)                     ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ5BM[redacted]                                    Bld: 10/11/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 09169    Redlands Ford                   Phone:909-793-3211
State:    California   City: Redlands           Orig/Caller: MICHAEL HAUSO
Symptom: 8 81 2 45  SAFE/SEC,LATCHES/LOCKS ,DOOR,MANUAL FUNCT
Addl Sym: REPEAT DOOR LATCH FAILURE       Attchmnts:  0
Fix:    Caus. Comp:                                     --      Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    CSYSOCK    Phone: -                      Dist Cd: W1 Los Angele
Engineering:                                  Phone:                        TA
Dlr Contact:                                  Phone:                        Ti

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   08/30/2013 10:15AM CHRISTOPHE SYSOCK    MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: REAR DOOR WILL NOT LATCH
         CLOSED.    DIAGNOSTICS: VERIFIED LATCH DOES NOT LATCH CLOSED    PARTS
         REPLACED: LATCH    TECH QUESTION: I HAVE HAD TO REPLACE THIS LATCH
         TWICE IN THE LAST YEAR. I HAVE ALSO HAD TO REPLACE THE FRONT DOOR
         LATCH ON THE SAME SIDE ONCE TOO. IS THIS AN ISSUE YOU HAVE SEEN, OR
         SHOULD I BE SUSPECT THAT THE CUSTOMER IS DOING SOMETHING WRONG TO THE
         VEHICLE?
RECOMM   08/30/2013 10:15AM CHRISTOPHE SYSOCK    MSS - FCSD - TECH SVC HOTLINE
         MICHAEL,    AFTER FURTHER RESEARCH, THERE DOES NOT APPEAR TO BE ANY
         MESSAGES INDICATING REPEAT LATCH FAILURE. HOWEVER A CONCERN OF THE
         LATCH ASSEMBLY FAILING TO LATCH COULD BE CAUSED BY A REPEAT LATCH
         FAILURE, DUST/DIRT INTRUSION IN THE LATCH ASSEMBLY, OR A POSSIBLE DOOR
         ALIGNMENT CONCERN.    RECOMMEND INSPECTING THE LATCH ASSEMBLY FOR
         SIGNS OF DUST/DIRT INTRUSION. IF SO, THOROUGHLY CLEAN AND LUBRICATE
         THE LATCH VIA THE LATCH LUBRICATION PROCEDURE OUTLINED IN SECTION
         501-14 OF THE ONLINE WORKSHOP MANUAL. ONCE CLEANED AND LUBRICATED,
         RE-EVALUATE OPERATION. NOTE IT MAY BE NECESSARY TO ADVISED THE
         CUSTOMER THAT THE LATCH WILL NEED TO BE CLEANED AND LUBRICATED
         ANNUALLY.    IF THE CONCERN IS STILL PRESENT, SUGGEST PERFORMING THE
         DOOR ALIGNMENT PROCEDURE OUTLINED IN SECTION 501-03 OF THE WORKSHOP
         MANUAL. WHEN DOING SO, BE SURE TO PERFORM THE STRIKER ADJUSTMENT
         PROCEDURE. ONCE ADJUSTED, RE-EVALUATE LATCH OPERATION. IF THE CONCERN
         CONTINUES, PROCEED WITH LATCH ASSEMBLY REPLACEMENT. REFER TO SECTION
         501-14 FOR REMOVAL AND INSTALLATION INSTRUCTIONS.
```

```
Rpt#: BEBCE019 RTDAHL                         Rpt: 05/02/2011  Odom:  15,363 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ0BM[redacted]                                   Bld: 10/27/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 05534    Friendly Ford                  Phone:702-877-6541
State:    Nevada       City: Las Vegas        Orig/Caller: MICHLE SUAREZ
Symptom: 8 81 2 62  SAFE/SEC,LATCHES/LOCKS ,DOOR,POWER FUNCT
Addl Sym: DRIVERS DOOR WILL NOT CLOSE     Attchmnts:  0
Fix:    Caus. Comp: LATCH,FRT,DR        R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   05/02/2011 06:06PM JMITCH63
         CUSTOMER CONCERN DRIVERS DOOR WILL NOT CLOSE,VERIFIED,NO PPT RESULTS
RECOMM   05/02/2011 06:06PM JMITCH63
         ADVISED TECH TO PERFORM PPT P1
REPAIR   05/02/2011 06:31PM JMITCH63
         P1 DOES NOT   OPEN NORMALLY FROM ONE OF THE DOOR HANDLE,P2   DOES THE
         LATCH RELEASE EASILY LATCH DOES NOT RELEASE EASY,P3 LUBED,NOT EASY
         REPLACE LATCH
RECOMM   05/02/2011 06:31PM JMITCH63
         ADVISED TECH TO REPLACE DRIVERS DOOR LATCH,APPROVAL GIVEN BASED ON
         TECHS TEST RESULTS
AUDIT    07/02/2011 11:06AM
         SYMPTOM    1 12 1 33         CHANGED TO 8 81 2 62         BY CS012093
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:42


Rpt#: ALHA7012 NHL                            Rpt: 12/08/2010  Odom:        6 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ5BM[redacted]                                  Bld: 11/12/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:CAN B2535    Prestige Ford                  Phone:450-371-0711
Province  Quebec       City: Valleyfield      Orig/Caller: DANIEL DION
Symptom: 8 81 2 62  SAFE/SEC,LATCHES/LOCKS ,DOOR,POWER FUNCT
Addl Sym: RIGHT REAR DOOR LATCH ISSUE     Attchmnts:  0
Fix:    Caus. Comp:                               --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    SLAMOND1   Phone:                           Dist Cd: 02 02 Quebec
Engineering:                                Phone:                           TA
Dlr Contact: DANIEL DION                    Phone: 450-3710711               Ti

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   12/08/2010 04:58PM SEBASTIEN LAMONDE    FCSD - TSO - TECH SUPP OPER
         WEB FORM DATA -  CONCERN: PORTE ARRIERE DROITE BARRE
         PAS.    DIAGNOSTICS: QUAND ON DEBARRE LES PORTE A FROID PORTE A PAS
         DEBARRER ARRIERE GAUCHE ET RENTRER ET JE L AI RENTRER DANS LE GARAGE
         ET IL ONT MARCHER APRES (INTERMITTENT PROBABLE LE FROID. LUBRIFIER
         LATCH.    PARTS REPLACED:: RIEN    TECH QUESTION: AVEZ VOUS DES CAS
         SIMILAIRE ET UNE SOLUTION
RECOMM   12/08/2010 04:58PM SEBASTIEN LAMONDE    FCSD - TSO - TECH SUPP OPER
         SALUT DANIEL,   LE SYMPT…ME N'EST PAS COMMUN. NOUS SUSPECTONS UNE
         CONTAMINATION D'EAU QUI FAIT QUE LE LATCH G±LE. ESSAIE DE DˆCOUVRIR SI
         IL Y A DE L'INTRUSION D'EAU ET LUBRIFIE LE TOUT PROPREMENT. REMPLACE
         LE LATCH SEULEMENT SI NˆCESSAIRE.
AUDIT    07/02/2011 11:00AM
         SYMPTOM    1 12 1 33         CHANGED TO 8 81 2 62         BY CS012093
```

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Page: 01                CQIS Indicator Summary              07/18/14  19:00:42


Rpt#: BLWBH009 RTDAHL                         Rpt: 12/23/2011  Odom:  21,766 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ8BM[redacted]                               Bld: 12/07/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 08741    All American Ford of Old Bridg Phone:732-591-1111
State:    New Jersey   City: Old Bridge       Orig/Caller: MIKE KOLLER
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: R/F DR HARD TO CLOSE            Attchmnts:  0
Fix:    Caus. Comp: LATCH,FRT,DR        R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   N1   Region Name:   New York


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   12/23/2011 11:08AM GEORGE STAVROPOULUS  MSS - FCSD - TECH SVC HOTLINE
         A.) C/S R/F DR LATCH NOT LATCHING   TECH CONTACTED HOTLINES SEE REPORT
         BLTA003   REQUEST TO REPLACE LATCH
RECOMM   12/23/2011 11:08AM GEORGE STAVROPOULUS  MSS - FCSD - TECH SVC HOTLINE
         APPROVED TO REPLACE R/F DR LATCH AS PER HOTLINE    BLTDA003   PAABU
         ISSUED
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:42


Rpt#: BF4BJ020 RTDAHL                         Rpt: 06/30/2011  Odom:     121 M
Vehicle: 2011 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ5BM[redacted]                                Bld: 12/15/2010
Engine: 1.6L SIGMA  Calb: BCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 07742    Big Valley Ford Lincoln       Phone:209-956-5244
State:    California   City: Stockton         Orig/Caller: SOK KERM
Symptom: 8 81 2 62  SAFE/SEC,LATCHES/LOCKS ,DOOR,POWER FUNCT
Addl Sym: LR DOOR WILL NOT CLOSE          Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          L         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W2   Region Name:   San Francisco


-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   06/30/2011 03:09PM JMITCH63
         CUSTOMER CONCERN LR DOOR WILL NOT CLOSE,VERIFIED,INSPECTED
         LATCH,PUSHED SCREWDRIVER THRU ARMS,WILL NOT LOCK
RECOMM   06/30/2011 03:09PM JMITCH63
         ADVISED TECH TO REPLACE LD DOOR LATCH,APPROVAL GIVEN BASED ON TECHS
         INFO,PAALR
AUDIT    07/02/2011 11:08AM
         SYMPTOM    1 12 1 33         CHANGED TO 8 81 2 62         BY CS012093
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:42


Rpt#: EFMPF558 CREDSR--or-- Q  201491343918   Rpt: 06/13/2014  Odom:    7,198 M
Vehicle: 2011 FIESTA (NA)                  ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ8BM[redacted]                            Bld: 06/15/2011
Engine: 1.6L SIGMA  Calb: BCH2A10A Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:USA 20313    Earnhardt Ford Sales Company   Phone:480-838-4442
State:    Arizona     City: Chandler        Orig/Caller: DEE BUELOW
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   06/13/2014 06:00PM
         RT. REAR DOOR FLEW OPEN
TECH/C   06/13/2014 06:00PM
         DOOR LATCH INOP DOOR WILL NOT CLOSE. HAVE TO REPLACE DOOR LATCH
         Refer to VIN 3FADP4BJ4CM[redacted] under Control # 201491343915  & Program
         Type:  Q  For further information.
```

```
Rpt#: EFTEV005 FOMHTL                         Rpt: 06/20/2014  Odom:  26,123 M
Vehicle: 2012 FIESTA (NA)                   ,SES    ,5 DOOR ,HATCH
Vin:3FADP4FJ5CM[redacted]                                   Bld: 07/28/2011
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2270    Automotriz del Valle de Baja C Phone:686-90-44-999
State:    Baja Califor City: Mexicali         Orig/Caller: ANTONIO SANCHEZ
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: PASSENGER DOOR DOESN'T CLOSE    Attchmnts:  0
Fix:    Caus. Comp:                               --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   06/20/2014 01:26PM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         TECH REPORT, PASSENGER DOOR DOESN'T CLOSE, WAS VERIFIED CUSTOMER
         CONCERN, DOOR LATCH WAS REMOVED FINDING THIS IS LOCKED
RECOMM   06/20/2014 01:26PM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         INSTALL A NEW PASSENGER DOOR LATCH
```

```
Rpt#: EAWGU001 NHL                               Rpt: 01/23/2014  Odom:  16,434 M
Vehicle: 2012 FIESTA (NA)                      ,S       ,4 DOOR ,SEDAN
Vin:3FADP4AJ9CM[redacted]                                    Bld: 10/19/2011
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 05458    El Cajon Ford                  Phone:619-579-8989
State:    California   City: El Cajon          Orig/Caller: MICHAEL ALFORD
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym: LOCK CYLINDER REMOVAL QUESTION  Attchmnts:  0
Fix:    Caus. Comp:                                 --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    KADAMSO3   Phone: 001-313-3179352          Dist Cd: W1 Los Angele
Engineering:                                   Phone:                        TA
Dlr Contact:                                   Phone:                        Ti

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   01/23/2014 11:39AM KEITH ADAMSON        MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: KEY DOES NOT WORK IN DOOR KEY
         CYLINDER    DIAGNOSTICS: READ SHOP MANUAL.    PARTS REPLACED:
         NONE    TECH QUESTION: SECTION 501-14 SAYS TO'SEPARATE THE DOOR LOCK
         CYLINDER FROM THE EXTERIOR FRONT DOOR HANDLE' MY CRYSTAL BALL IS NOT
         HELPING ME FIGURE THIS OUT. ALONG WITH 3 OTHER TECHS. CAN YOU PLEASE
         TELL US HOW TO RELEASE THIS LOCK CYLINDER?
RECOMM   01/23/2014 11:39AM KEITH ADAMSON        MSS - FCSD - TECH SVC HOTLINE
         MICHAEL,    BASED UPON ALL CURRENTLY PUBLISHED SERVICE INFORMATION ON
         THIS VEHICLE, IT APPEARS THAT THE DOOR LOCK CYLINDER IS A ß  SNAP
         FITß   TYPE OF COMPONENT AND ONCE THE EXTERIOR HANDLE IS REMOVED FROM
         THE DOOR THE RETAINING TAB(S) SHOULD BE VISIBLE. IT MAY BE NECESSARY
         TO US A SMALL PICK OR FLAT-HEAD SCREWDRIVER TO PRY THE TABS OUT OF THE
         WAY WHILE REMOVING THE LOCK CYLINDER FROM THE HANDLE.     IF IT IS
         DETERMINED WHILE SERVICING THE LOCK CYLINDER THAT THERE IS ADDITIONAL
         SERVICE STEPS NECESSARY BEFORE THE CYLINDER ASSEMBLY WILL RELEASE FROM
         THE EXTERIOR HANDLE, IT WOULD BE RECOMMENDED TO ACCESS THE SERVICE
         PROCEDURE ON THE PTS WEBSITE, AND CLICK THE ß  REPORT A PROBLEMß
         BUTTON IN THE UPPER RIGHT CORNER OF THE PROCEDURE PAGE. THIS WILL
         DIRECT YOU TO A FORM THAT ALLOWS ANY MISSING/ADDITIONAL STEPS,
         INCORRECT DESCRIPTIONS, OR RECOMMENDED CHANGES TO BE ADDRESSED AND
         SUBMITTED DIRECTLY TO THE ENGINEERING DEPARTMENT SO THE PROCEDURE CAN
         BE REVIEWED AND CORRECTED. IF THERE ARE STEPS THAT ARE BETTER
         ILLUSTRATED WITH AN IMAGE THERE IS ALSO A LINK FOR UPLOADING DIGITAL
         IMAGES AS WELL.
REPAIR   01/27/2014 05:11PM CHRISTOPHE SYSOCK    MSS - FCSD - TECH SVC HOTLINE
         I HAVE MANAGED TO REPAIR THE LATCH ROD ASSY AND THE DOOR KEY WORKS
         FROM THE OUTSIDE NOW. I HAVE RUN UP AGAINST A WALL THOUGH. I MUST
         ROTATE THE KEY IN THE DOOR CLINDER TWICE TO THE RIGHT TO GET THE DOOR
         TO UNLOCK. CHECKED THE PASSENGER DOOR AND ONLY NEED TO TURN IT ONE
         TIME. CHECKED ANOTHER CAR AND ONLY TAKES ONE TIME. THIS IS A BASIC CAR
         WITH NO FOB SO STEPPED LOCK/UNLOCK IS NOT AVALIBLE. ANY IDEAS AS THE
         WSM HAS NOT BEEN ANY HELP
RECOMM   01/27/2014 05:11PM CHRISTOPHE SYSOCK    MSS - FCSD - TECH SVC HOTLINE
         MICHAEL,    THANK YOU FOR THE UPDATE AND ADDITIONAL INFORMATION. A
         CONDITION IN WHICH THE LOCK CYLINDER REQUIRES TO BE CYCLED TWO TIMES
```

```
Rpt#: EAWGU001 NHL                              Rpt: 01/23/2014

--------------------------------- C O M M E N T S ------------------------------
 Type   Comments
         TO ALLOW THE DOOR TO UNLOCK CAN BE A RESULT OF THE LOCK ROD BEING
         INCORRECTLY ADJUSTED OR A FAULTY LATCH ASSEMBLY.    IF AN ADJUSTMENT
         IS AVAILABLE, RECOMMEND RE-ADJUSTING THE LOCK ROD ENSURING THE LOCK
         CYLINDER IS IN THE CENTER (UNLOCKED POSITION). IF THE CONCERN
         CONTINUES AND/OR THERE IS NOT AN ADJUSTMENT PROCEDURE AVAILABLE, A
         FAULTY LATCH ASSEMBLY WOULD BE SUSPECTED.    PLEASE REFERENCE SECTION
         501-14 OF THE ONLINE WSM, AS NEEDED, FOR REMOVAL AND INSTALLATION
         INSTRUCTIONS.
REPAIR   01/28/2014 10:20AM BRIAN BREISACHER     MSS - FCSD - TECH SVC HOTLINE
         THANKS, NO LATCH ROD ASJUSTMENT BUT ADJUSTED DOOR STRIKER AND FIXED
         PROBLEM. GREAT CALL THANKS!
RECOMM   01/28/2014 10:20AM BRIAN BREISACHER     MSS - FCSD - TECH SVC HOTLINE
         MICHAEL,    THANK YOU FOR THE UPDATE. PLEASE COMPLETE THE ONLINE
         SURVEY SO THIS FIX INFORMATION CAN BE USED TO ASSIST OTHER TECHNICIANS
         IN THE FUTURE.
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:42


Rpt#: EETHN120 EXPORT--or-- K  201491327042   Rpt: 05/20/2014  Odom:  30,069 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ5CM[redacted]                               Bld: 02/11/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

---------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:43


Rpt#: EFMPF555 CREDSR--or-- Q  201491343915   Rpt: 06/13/2014  Odom:  41,704 M
Vehicle: 2012 FIESTA (NA)                          ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ4CM[redacted]                                 Bld: 02/28/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 20313    Earnhardt Ford Sales Company   Phone:480-838-4442
State:    Arizona      City: Chandler         Orig/Caller: DEE BUELOW
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   06/13/2014 06:00PM
         RT. REAR DOOR FLEW OPEN
TECH/C   06/13/2014 06:00PM
         DOOR LATCH INOP DOOR WILL NOT CLOSE. HAVE TO REPLACE DOOR LATCH
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:43


Rpt#: EF1IG001 FCSDFS                         Rpt: 06/27/2014  Odom:  28,138 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ5CM[redacted]                                   Bld: 02/29/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 20443    Alexander Ford              Phone:928-344-2200
State:    Arizona      City: Yuma             Orig/Caller: MITCH PICKENS
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: RR LATCH FAILURE                Attchmnts:  0
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
OWNER    06/27/2014 01:54PM MITCH PICKENS(FSE)   MSS - FCSD - REG PHOEN-DEN-SEA
         C/S RIGHT REAR DOOR WILL NOT CLOSE
ADD-ON   06/27/2014 01:54PM MITCH PICKENS(FSE)   MSS - FCSD - REG PHOEN-DEN-SEA
         FSE DOCUMENTING INVOLVEMENT FROM DEALER AND REGION. DEALER CONTACTED
         THE REGION TO RAISE AWARENESS OF THIS ISSUE. REGION CONTACTED FSE FOR
         ADDITIONAL INFORMATION. FSE IS OPENING CQIS REPORTS FOR THE UNITS THAT
         THE DEALER HAS PROVIDED AND FORWARDED REPORTS TO PCE ANDY BRANDT.
         DEALER DOES NOT NEED TECHNICAL ASSISTANCE TO REPLACE THE LATCH, BUT
         HAS NOTED THAT LATCHES ARE ON BACK ORDER. FSE RECOMMENDED THAT DEALER
         FOLLOW APPROPRIATE PARTS ESCALATION PROCESS. REFERENCE VINS
         3FADP4AJ0DM[redacted] 3FADP4EJ5CM[redacted] 3FADP4AJ5DM[redacted].
```

```
Rpt#: EFGBO001 NHL                               Rpt: 06/07/2014  Odom:  13,602 M
Vehicle: 2012 FIESTA (NA)                      ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ9CM[redacted]                                   Bld: 03/01/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 09081    Lawley's Team Ford            Phone:520-458-8140
State:    Arizona      City: Sierra Vista     Orig/Caller: JOHN BRANDL
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: RR LATCH FAILING TO OPERATE     Attchmnts:  0
Fix:    Caus. Comp:                                 --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    RGUTH1     Phone: 001-313-3179376          Dist Cd: W3 Phoenix
Engineering:                                   Phone:                          TA
Dlr Contact:                                   Phone:                          Ti

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   06/07/2014 03:34PM RONLEY GUTH          MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: RIGHT/REAR DOOR LATCH WILL NOT LATCH,
         THERFORE DOOR STAYS OPEN.    DIAGNOSTICS: VERIFIED CONCERN. PHYSICAL
         OPERATION OF DOOR LATCH USING SCREW DRIVER. REM DOOR PANEL, TESTED
         CABLE FOR BINDING, NO BINDING NOTED.    PARTS REPLACED: R/S/F DOOR
         LATCH WAS REPLACED PREVIUOSLY.    TECH QUESTION: HAVING ALREADY
         REPLACED THE RIGHT SIDE FRT DOOR LATCH ON THIS CAR, NOW HAVING A DOOR
         LATCH MALFUNCTION ON THE REAR OF THE CAR, JUST WONDERING; IS THERE A
         PROBLEM WITH THE LATCHES BEING INVESTIGATED? IT SEEMS AS IF THE DOOR
         LATCH WANTS/TRIES TO OPERATE, BUT CAN NOT LATCH. THE LADY HAS CHILDREN
         THAT SIT IN THE BACK.
RECOMM   06/07/2014 03:34PM RONLEY GUTH          MSS - FCSD - TECH SVC HOTLINE
         JOHN,    IF THE VEHICLE IS OPERATED FREQUENTLY IN A DUSTY ENVIRONMENT,
         THE DOOR LATCHES CAN STICK IN THE OPEN POSITION. THE LATCHES ARE
         LUBRICATED WITH  WET  GREASE AND CAN COLLECT DUST AND DIRT OVER TIME.
         THE LATCHES SHOULD BE CLEANED AND LUBRICATED EVERY 6 MONTHS TO INSURE
         THAT THEY CONTINUE TO OPERATE WITHOUT INCIDENT. WHEN YOU ARE
         LUBRICATING THE LATCH LUBRICANT XG-4 OR XL-5 OR EQUIVALENT /
         ESB-M1C93-B SHOULD BE USED.     PLEASE USE SHOP AIR AND CLEAN THE
         LATCH. ONCE YOU HAVE CLEANED THE LATCH, PLEASE USE XG-4 OR XL-5 OR
         EQUIVALENT / ESB-M1C93-B AND THEN OPERATE THE LATCH SEVERAL TIMES. IF
         THIS RESTORES OPERATION, NO FURTHER REPAIRS ARE NEEDED. IF YOU ARE NOT
         ABLE TO RESTORE LATCH OPERATION, PLEASE REPLACE THE LATCH TO CORRECT
         THIS CONCERN. AFTER LATCH OPERATION HAS BEEN RESTORED, PLEASE PROVIDE
         THE CUSTOMER WITH SOME LUBRICANT AND ADVISE THEM TO USE IT
         PERIODICALLY TO MAINTAIN OPERATION.
```

```
Rpt#: EFTK1002 FOMHTL                         Rpt: 06/20/2014  Odom:  22,683 M
Vehicle: 2012 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FAFP4AJ7CM[redacted]                              Bld: 04/13/2012
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2270    Automotriz del Valle de Baja C Phone:686-90-44-999
State:    Baja Califor  City: Mexicali         Orig/Caller: ANTONIO SANCHEZ
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: LATCH RIGHT FRONT INOPERATIVE   Attchmnts:  1
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   06/20/2014 07:17PM MARCOANTO OLIVA      VO - FOM - CUST SERV TECH/QLTY
         TECH STS LATCH RIGHT FRONT INOPERATIVE, THE LATCH GETS STUCK, NOT OPEN
         OR CLOSE
RECOMM   06/20/2014 07:17PM MARCOANTO OLIVA      VO - FOM - CUST SERV TECH/QLTY
         REPLACE LATCH RIGHT FRONT
```

```
Rpt#: DJUHU376 EXPORT--or-- K  201391194163   Rpt: 10/21/2013  Odom:   5,684 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ5CM[redacted]                              Bld: 04/21/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0S01    Autogrupo Ford                  Phone:
Country:  PUERTO RICO  City: Toa Baja         Orig/Caller: Carlos Balzac
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: A     Survey? N
EO:                                                               EC:
ER:                                                               CB:

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   10/21/2013 01:07PM
         Right Rear Door don't closed propperlly. Door stay open.
TECH/C   10/21/2013 01:07PM
         Is necessary replace the lock assy. The plastic part that go into the
         latch broken and don,t closed the door against if the four case of
         this in this three months.
         Refer to VIN 3FADP4AJXCM[redacted] under Control # 201391194162  & Program
         Type:  K  For further information.
```

```
Rpt#: DJUHU377 EXPORT--or-- K  201391194164   Rpt: 10/21/2013  Odom:  10,564 M
Vehicle: 2012 FIESTA (NA)                        ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJXCM[redacted]                                  Bld: 04/23/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:              A/C: YES
Dealer ID:PRI F0S01    Autogrupo Ford                      Phone:
Country:  PUERTO RICO  City: Toa Baja          Orig/Caller: Carlos Balzac
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: A     Survey? N
EO:                                                                EC:
ER:                                                                CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   10/21/2013 01:07PM
         Right Rear Door don't closed propperlly. Door stay open.
TECH/C   10/21/2013 01:07PM
         Is necessary replace the lock assy. The plastic part that go into the
         latch broken and don,t closed the door against if the four case of
         this in this three months.
         Refer to VIN 3FADP4AJXCM[redacted] under Control # 201391194162  & Program
         Type:  K  For further information.
```

```
Rpt#: EETHN124 EXPORT--or-- K  201491327046   Rpt: 05/20/2014  Odom:  24,232 M
Vehicle: 2012 FIESTA (NA)                   ,S       ,4 DOOR ,SEDAN
Vin:3FADP4AJ1CM[redacted]                              Bld: 04/23/2012
Engine: 1.6L SIGMA  Calb: CCH2A10A Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                               EC:
ER:                                                               CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: DJUHU375 EXPORT--or-- K  201391194162   Rpt: 10/21/2013  Odom:   9,341 M
Vehicle: 2012 FIESTA (NA)                  ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJXCM[redacted]                             Bld: 04/24/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0S01    Autogrupo Ford                  Phone:
Country:  PUERTO RICO  City: Toa Baja         Orig/Caller: Carlos Balzac
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: A     Survey? N
EO:                                                               EC:
ER:                                                               CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   10/21/2013 01:07PM
         Right Rear Door don't closed propperlly. Door stay open.
TECH/C   10/21/2013 01:07PM
         Is necessary replace the lock assy. The plastic part that go into the
         latch broken and don,t closed the door against if the four case of
         this in this three months.
```

```
Rpt#: DJUHU378 EXPORT--or-- K  201391194165   Rpt: 10/21/2013  Odom:  17,904 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ9CM[redacted]                              Bld: 04/24/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0S01    Autogrupo Ford                  Phone:
Country:  PUERTO RICO  City: Toa Baja         Orig/Caller: Carlos Balzac
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: A     Survey? N
EO:                                                               EC:
ER:                                                               CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   10/21/2013 01:07PM
         Right Rear Door don't closed propperlly. Door stay open.
TECH/C   10/21/2013 01:07PM
         Is necessary replace the lock assy. The plastic part that go into the
         latch broken and don,t closed the door against if the four case of
         this in this three months.
         Refer to VIN 3FADP4AJXCM[redacted] under Control # 201391194162  & Program
         Type:  K  For further information.
```

```
Rpt#: EETHN123 EXPORT--or-- K  201491327045   Rpt: 05/20/2014  Odom:  14,683 M
Vehicle: 2012 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ6CM[redacted]                           Bld: 04/24/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Page: 01                CQIS Indicator Summary               07/18/14  19:00:43


Rpt#: EETHN125 EXPORT--or-- K  201491327047   Rpt: 05/20/2014  Odom:  22,195 M
Vehicle: 2012 FIESTA (NA)                     ,S       ,4 DOOR ,SEDAN
Vin:3FADP4AJ2CM[redacted]                               Bld: 04/24/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:              A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                    Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R          -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:            MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

--------------------------------- C O M M E N T S -----------------------------
 Type    Comments
CONCER    05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C    05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EETHN126 EXPORT--or-- K  201491327048   Rpt: 05/20/2014  Odom:  37,964 M
Vehicle: 2012 FIESTA (NA)                  ,S       ,4 DOOR ,SEDAN
Vin:3FADP4AJ0CM[redacted]                               Bld: 04/24/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EDWNU420 CREDSR--or-- Q  201491309838   Rpt: 04/23/2014  Odom:   8,413 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ2CM[redacted]                          Bld: 04/25/2012
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00893 SZ Motovalle                      Phone:0924883000
Country:  COLOMBIA     City: CALI             Orig/Caller: ALFONSO SARRIA
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: CHAPA TRASERA DERECH          -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z3   Region Name:   Occidente


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   04/23/2014 04:30PM
         THE CUSTOMERS REPORTS THAT THE VEHICLE MARK OPEN DOOR AND SHE DOES NOT
         LOCK THE STANDING PUERTATRASERA
TRNSTC   04/23/2014 04:30PM
         FAULT: STANDING REAR DOOR DOES NOT LOCK. CAUSE: To the
         inspection/check I DEMONSTRATE MYSELF THAT PLATE from the REAR DOOR RH
         ACIONA the MECHANISM OF ANCHORAGE OF the SHUT-OFF INSURANCE NOT BEING
         THIS UNLOCKED GENERATING INSECURITY To the VEHICLE AND a RISK When
         GOING IN MOVEMENT. SOLUTION: TO DISASSEMBLE TO PORTFOLIO DOOR RH
         REPLACE PLATES DOOR TRSERA RH
```

```
Rpt#: EETHN132 EXPORT--or-- K  201491327054   Rpt: 05/20/2014  Odom:  17,414 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ0CM[redacted]                                   Bld: 04/25/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EETHN129 EXPORT--or-- K  201491327051   Rpt: 05/20/2014  Odom:  18,859 M
Vehicle: 2012 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ4CM[redacted]                          Bld: 04/27/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EETHN130 EXPORT--or-- K  201491327052   Rpt: 05/20/2014  Odom:   30,101 M
Vehicle: 2012 FIESTA (NA)                        ,SE      ,5 DOOR ,HATCH
Vin:3FADP4EJ0CM[redacted]                                   Bld: 05/02/2012
Engine: 1.6L SIGMA  Calb: CCH2A10A Trans: 5SP IB5     Axle:              A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.              Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                  Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R           -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:            MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

----------------------------------- C O M M E N T S -----------------------------
 Type    Comments
CONCER    05/20/2014 04:10PM
          RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C    05/20/2014 04:10PM
          REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
          Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
          Type:  K  For further information.
```

```
Rpt#: EETHN131 EXPORT--or-- K  201491327053   Rpt: 05/20/2014  Odom:  11,494 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ3CM[redacted]                             Bld: 05/03/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

-------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EETHN122 EXPORT--or-- K  201491327044   Rpt: 05/20/2014  Odom:   8,120 M
Vehicle: 2012 FIESTA (NA)                    ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ1CM[redacted]                               Bld: 05/14/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:             A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:            MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
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Rpt#: EDIL8411 CREDSR--or-- Q  201491301349   Rpt: 04/09/2014  Odom:  15,813 M
Vehicle: 2012 FIESTA (NA)                   ,SES    ,5 DOOR ,HATCH
Vin:3FADP4FJ0CM[redacted]                          Bld: 05/15/2012
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00993 SZ Central Motor America          Phone:6313001
Country:  COLOMBIA     City: BUCARAMANGA      Orig/Caller: Leonardo Suarez
Symptom: 8 81 2 62  SAFE/SEC,LATCHES/LOCKS ,DOOR,POWER FUNCT
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z2   Region Name:   Norte


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   04/09/2014 02:00PM
         CUSTOMERS REPORTS THAT THE DOOR RH DO NOT LOCK
TRNSTC   04/09/2014 02:00PM
         IS THE LOCK/LATCH INTERNALLY PRESENTS OPEN CIRCUIT LEAVING IGNITED
         OPEN WITNESS OF PURTA REVIEW CONCNTORES ENCUENTRSAN IN GOOD STATE
         REQUIRES DESPISAR TO CARRY OUT THE PURTA GEARBOX FROM THE LOCK/LATCH
```

```
Rpt#: EDUHZ367 CREDSR--or-- Q  201491308331   Rpt: 04/21/2014  Odom:  14,506 M
Vehicle: 2012 FIESTA (NA)                       ,SE      ,4 DOOR ,SEDAN
Vin:3FADP4BJ3CM[redacted]                                   Bld: 05/18/2012
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00993 SZ Central Motor America          Phone:6313001
Country:  COLOMBIA     City: BUCARAMANGA      Orig/Caller: Leonardo Suarez
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LATCH,FRT,DR        R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z2   Region Name:   Norte


-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   04/21/2014 04:30PM
         CUSTOMERS REPORTS THAT THE DOOR RH DO NOT LOCK
TRNSTC   04/21/2014 04:30PM
         FIND THAT THE LOCK/LATCH INTERNALLY IN OPEN CIRCUIT MANTENIENTO THE
         ALWAYS UNLOCKED SUGORO
```

```
Rpt#: ED2KI550 CREDSR--or-- Q  201491313081   Rpt: 04/28/2014  Odom:  13,171 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ9CM[redacted]                              Bld: 05/19/2012
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00997 SZ Janna Motors                     Phone:5728070
Country:  COLOMBIA     City: VALLEDUPAR       Orig/Caller: ADRIANA RAMIREZ
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:        Region Name:   ??????????????????????????????


-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   04/28/2014 07:00PM
         Declares customers standing rear door do not lock
TRNSTC   04/28/2014 07:00PM
         Vehicle presents difficulty to the lock the standing rear door,
         because of flaw at/in/on the internal mechanism of the lock/latch, is
         necessary to replace it.
```

```
Rpt#: EFYP9522 CREDSR--or-- Q  201491352154   Rpt: 06/25/2014  Odom:   8,747 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ4CM[redacted]                              Bld: 05/19/2012
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00912 SZ Janna Motors                   Phone:0953444434
Country:  COLOMBIA     City: BARRANQUILLA     Orig/Caller: BLANCA GELVES
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z2   Region Name:   Norte


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
TRNSCD   06/25/2014 12:00PM
         STANDING REAR DOOR DOES NOT LOCK.
TRNSTC   06/25/2014 12:00PM
         STANDING REAR DOOR INTO ACCOUNT DOES NOT BLOCK, REALISES FAULT CHECK,
         REALISES MEASURED OF SIGNALS AND CONTINUITY HAVING ELECTRICAL DIAGRAMS
         PROVIDED BY PTS, DETECTS INTERNAL DAMAGE AT/IN/ON THE MECHANISM FROM
         THE LOCK/LATCH, REALISES GEARBOX OF LOCK/LATCH.
```

```
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Rpt#: EETHN121 EXPORT--or-- K  201491327043   Rpt: 05/20/2014  Odom:   4,593 M
Vehicle: 2012 FIESTA (NA)                     ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ5CM[redacted]                              Bld: 05/25/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR         R          -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?     Prt St:            MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EFUDA003 NHL                            Rpt: 06/21/2014  Odom:  32,377 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ1CM[redacted]                          Bld: 05/25/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 06985    Mac Haik's Southway Ford      Phone:210-922-2222
State:    Texas        City: San Antonio      Orig/Caller: ERIC PEREZ
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: RR DOOR WILL NOT CLOSE          Attchmnts:  0
Fix:    Caus. Comp:                               --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    GSHIMSHO   Phone: 001-313-3176321           Dist Cd: C2 Houston
Engineering:                                Phone:                           TA
Dlr Contact:                                Phone:                           Ti

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   06/21/2014 01:19PM GREG SHIMSHOCK       MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: RIGHT REAR DOOR WILL NOT
         CLOSE.    DIAGNOSTICS: INSPECTED DOOR LATCH DOES NOT LATCH TO STRIKER.
         NO SIGNS OF DAMAGE    PARTS REPLACED: NONE    TECH QUESTION: HAD
         SEVERAL FIESTAS WITH REAR DOOR NOT LATCHING PAST FREW MONTHS. ANY FIX
         TO THIS CONCERN AVAILABLE OTHER THAN REPLACING LATCH TO FIX PROBLEM?
         THANK YOU.
RECOMM   06/21/2014 01:19PM GREG SHIMSHOCK       MSS - FCSD - TECH SVC HOTLINE
         ERIC,<BR><BR>THE ONLY CURRENT REPAIR IN SECTION 501-14 OF THE ONLINE
         WORKSHOP MANUAL IS LATCH LUBRICATION. IF THE FUNCTION OF THE LATCH IS
         NOT RESTORED WITH LUBRICATION, REPLACEMENT OF THE LATCH IS THE ONLY
         REPAIR. PLEASE PROCEED WITH LATCH REPLACEMENT IS LUBRICATING THE
         COMPONENT DOES NOT CORRECT THE CONCERN.
```

```
Rpt#: EETHN127 EXPORT--or-- K  201491327049   Rpt: 05/20/2014  Odom:  12,123 M
Vehicle: 2012 FIESTA (NA)                   ,S       ,4 DOOR ,SEDAN
Vin:3FADP4AJ2CM[redacted]                           Bld: 05/30/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.            Phone:
Country:  PUERTO RICO  City: Ponce           Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

-------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: DJDBL008 NHL                            Rpt: 10/04/2013  Odom:  10,911 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ6CM[redacted]                              Bld: 05/31/2012
Engine: 1.6L SIGMA  Calb: CCH2A10A Trans: 5SP IB5    Axle:          A/C: YES
Dealer ID:USA 02479    AutoNation Ford Fort Worth     Phone:817-370-5244
State:    Texas        City: Ft Worth         Orig/Caller: JASON HISEY
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym: REAR DOOR LATCH IS STUCK OPEN   Attchmnts:  0
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    RGARY4     Phone: --3177041                   Dist Cd: C1 Dallas
Engineering:                                Phone:                              TA
Dlr Contact:                                Phone:                              Ti

-------------------------------- C O M M E N T S -----------------------------
 Type   Comments
REPAIR   10/04/2013 11:35AM ROBERT GARY          MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: RIGHT REAR DOOR LATCH WILL NOT LATCH, DOOR
         SWINGS OPEN FREELY.    DIAGNOSTICS: INSPECTED AND FOUND LATCH
         FAILING    PARTS REPLACED: NONE YET    TECH QUESTION: IS THERE ANY
         MESSAGES OR BULLETINS FOR THE RIGHT REAR DOOR LATCH FAILURE, THIS IS
         THE SECOND OR THIRD ONE I HAVE SEEN AND IS A HUGE SAFETY ISSUE.
RECOMM   10/04/2013 11:35AM ROBERT GARY          MSS - FCSD - TECH SVC HOTLINE
         JASON,  IF THE VEHICLE IS USED PRIMARILY USED IN RURAL AREAS THAT
         CONTAIN A SIGNIFICANT AMOUNT OF DIRT ROADS, IT IS POSSIBLE FOR THE
         LATCH ASSEMBLIES TO BECOME CONTAMINATED WITH DIRT AND WILL EVENTUALLY
         CAUSE THE LATCH ASSEMBLY TO STICK OPEN OR CLOSED.    TO HELP KEEP THIS
         CONDITION FROM OCCURRING, IT IS RECOMMENDED TO REPLACE THE DAMAGED
         LATCH ASSEMBLIES THEN CLEAN THE LATCH ASSEMBLY AT EVERY OIL CHANGE
         WITH A GARDEN HOSE THEN USE A DRY-TYPE LUBRICANT(SILICONE SPRAY) ON
         THE LATCH ASSEMBLES TO PREVENT THE CONDITION FROM RE-OCCURRING.
             HOWEVER IF IT IS DETERMINED THAT THE VEHICLE IS NOT USED IN A
         RURAL AREA, IT IS RECOMMENDED TO REPLACE THE DAMAGED LATCH ASSEMBLIES
         THEN START LUBRICATING THE LATCH ASSEMBLIES AT EVERY OIL CHANGE WITH A
         DRY-TYPE LUBRICANT(SILICONE SPRAY) IS STILL RECOMMENDED TO PREVENT THE
         CONDITION FROM RE-OCCURRING.
```

```
Rpt#: EETHN119 EXPORT--or-- K  201491327041   Rpt: 05/20/2014  Odom:  22,411 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ8CM[redacted]                                Bld: 06/01/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
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Rpt#: EETHN128 EXPORT--or-- K  201491327050   Rpt: 05/20/2014  Odom:  30,753 M
Vehicle: 2012 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ7CM[redacted]                                   Bld: 06/01/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EFZFV002 FOMHTL                         Rpt: 06/26/2014  Odom:  24,601 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FAFP4AJ6DM[redacted]                                   Bld: 06/06/2012
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2270    Automotriz del Valle de Baja C Phone:686-90-44-999
State:    Baja Califor City: Mexicali         Orig/Caller: LUIS SALDIVAR
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DOOR LATCH IS LOCKED IN OPEN    Attchmnts:  0
Fix:    Caus. Comp:                               --       Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   06/26/2014 10:22AM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         TECH REPORT, RIGHT REAR DOOR DOES NOT CLOSE, WAS VERIFIED CUSTOMER
         CONCERN, THE MECHANISM WAS DISMOUNTED, FINDING THE DOOR LATCH IS
         LOCKED IN OPEN
RECOMM   06/26/2014 10:22AM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         ACCORDING TO WORKSHOP, THE RECOMMENDATION IS: INSTALL A NEW DOOR LATCH
```

```
Rpt#: EGOEP001 FOMHTL                         Rpt: 07/15/2014  Odom:  12,647 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FAFP4AJ5DM[redacted]                              Bld: 06/09/2012
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2633    Autos de Hermosillo, S.A. de C Phone:662-2892-029
State:    Sonora       City: Hermosillo       Orig/Caller:
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DOOR CAN NOT BE CLOSE          Attchmnts:  0
Fix:    Caus. Comp:                               --       Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   07/15/2014 10:06AM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         TECH STS CUSTOMER IS REPORTING THAT FRONT RIGHT DOOR EXHIBITS BOUNCING
         BACK DOOR CONDITION (NOT CLOSING). TECH CONFIRMED THIS AND INSPECTED
         HINGES AND HANDLE ASSEMBLY BUT ALL IS OK. LATCH ASSEMBLY BUILD DATE:
         30/05/12
RECOMM   07/15/2014 10:06AM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         REPLACE FRONT RIGHT LATCH.
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:44


Rpt#: EFZFV001 FOMHTL                         Rpt: 06/26/2014  Odom:  16,655 M
Vehicle: 2013 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ0DM[redacted]                         Bld: 07/19/2012
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2270    Automotriz del Valle de Baja C Phone:686-90-44-999
State:    Baja Califor City: Mexicali         Orig/Caller: LUIS SALDIVAR
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp:                               --       Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   06/26/2014 10:12AM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         TECH REPORT, FRONT RIGHT DOOR DOES NOT CLOSE, WAS VERIFIED CUSTOMER
         CONCERN, THE MECHANISM WAS DISMOUNTED, FINDING THE DOOR LATCH IS
         LOCKED
RECOMM   06/26/2014 10:12AM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         ACCORDING TO WORKSHOP, THE RECOMMENDATION IS: INSTALL A NEW DOOR LATCH
```

```
Rpt#: DL4CB002 NHL                             Rpt: 12/30/2013  Odom:   3,867 M
Vehicle: 2013 FIESTA (NA)                    ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJXDM[redacted]                                   Bld: 07/28/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 01345    Bill Marsh Ford, Inc          Phone:215-968-3806
State:    Pennsylvania City: Newtown           Orig/Caller: MICHAEL EGGEN
Symptom: 8 81 2 22  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF OPEN
Addl Sym: DOOR HANDLE STICKS                Attchmnts:  0
Fix:    Caus. Comp:                                 --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    KADAMSO3   Phone: 001-313-3179352          Dist Cd: N3 Philadelph
Engineering:                                 Phone:                          TA
Dlr Contact:                                 Phone:                          Ti

--------------------------------- C O M M E N T S ------------------------------
 Type   Comments
REPAIR   12/30/2013 09:19AM KEITH ADAMSON        MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: CUSTOMER STATES DRIVERS DOOR WILL NOT LATCH
         TO CLOSE    DIAGNOSTICS: CHECK LATCH    PARTS REPLACED: NONE    TECH
         QUESTION: ANY KNOWN CONCERNS WITH DRIVERS DOOR LATCH NOT LATCHING AT
         TIMES .. SEEMS TO BE INTERMITTENT.
RECOMM   12/30/2013 09:19AM KEITH ADAMSON        MSS - FCSD - TECH SVC HOTLINE
         MICHAEL,    AFTER REVIEWING THE MOST CURRENTLY PUBLISHED SERVICE AND
         BULLETIN INFORMATION AVAILABLE, IT DOES NOT APPEAR THAT THERE ARE ANY
         BULLETINS PUBLISHED FOR THIS CONCERN ON THIS VEHICLE, OR A SIGNIFICANT
         NUMBER OF REPORTED ISSUES THAT WOULD INDICATE THE CONCERN SHOULD BE
         REVIEWED AND A BULLETIN POSSIBLY PUBLISHED. HOWEVER THERE HAS BEEN AN
         INCREASE IN SIMILAR REPORTS ON OTHER MODELS THAT USE A SIMILAR
         HANDLE/CABLE/LATCH SETUP TO OPERATE THE LATCH AND OPEN/CLOSE THE
         DOORS. WHAT HAS BEEN DISCOVERED IS THAT THAT WATER MAY ENTER THE DOOR
         LATCH CABLE (BETWEEN THE OUTSIDE HANDLE AND LATCH) AND IT THEN BEGINS
         TO FREEZE WHICH CAUSES THE HANDLE AND/OR LATCH ASSEMBLY TO STICK/BIND
         WHEN USED. THIS IS COMMON ESPECIALLY IN AREAS THAT CAN GET BELOW
         FREEZING (32  F) AND THEN WARM UP ABOVE FREEZING WITHIN A PERIOD OF
         SEVERAL HOURS (CONSISTENT FREEZE/WARM CYCLES). IT WOULD BE RECOMMENDED
         TO REMOVE AND INSPECT THE DOOR LATCH CABLE ASSEMBLY TO ENSURE THAT
         THERE ARE DAMAGED OR VISIBLY WORN OR DEFECTIVE SPOTS ON THE CABLE THAT
         MAY BE CONTRIBUTING TO THIS CONCERN. ONCE VERIFIED THAT THE CABLE IS
         IN GOOD WORKING ORDER IT IS RECOMMENDED TO CLEAN THE CABLE ASSEMBLY IF
         NECESSARY TO REMOVE ANY DIRT, DEBRIS, OR SURFACE RUST THAT MAY BE
         STARTING TO FORM. ONCE CLEAN USE XG-3-A SILICONE BRAKE GREASE TO
         LIBERALLY LUBE THE CABLE ASSEMBLY, IF POSSIBLE ATTEMPT TO GET THE
         GREASE INTO THE CABLE AREA TO PREVENT WATER INTRUSION AND FREEZING. IT
         IS ALSO RECOMMENDED TO CLEAN AND LUBE THE LATCH ASSEMBLY WIT XL-5
         MULTI-PURPOSE SPRAY GREASE, THE REASSEMBLE AND VERIFY PROPER
         OPERATION. IF THE VEHICLE RETURNS AND INDICATES THAT THE SAME SYMPTOMS
         ARE REOCCURRING THEN IT IS RECOMMENDED TO REPLACE THE CABLE ASSEMBLY
         AND LUBE IT IN THE SAME MANNER WITH XG-3-A BRAKE GREASE BEFORE
         INSTALLATION.
```

```
Rpt#: EETHN113 EXPORT--or-- K  201491327035   Rpt: 05/20/2014  Odom:  11,908 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ6DM[redacted]                                  Bld: 08/31/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
```

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Page: 01                CQIS Indicator Summary              07/18/14  19:00:44


Rpt#: ECUQH655 CREDSR--or-- Q  201491289426   Rpt: 03/21/2014  Odom:  11,093 M
Vehicle: 2013 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BK6DM[redacted]                                  Bld: 09/04/2012
Engine: 1.6L FFV    Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:BRA 04249 SZ DIVEM                          Phone:55-019-36352000
Country:  BRAZIL       City: SAO JOAO DA BOA  Orig/Caller: ALBERT SANTANA OLIVE
Symptom: 8 81 2 00  SAFE/SEC,LATCHES/LOCKS ,DOOR,UNKNOWN
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   08   Region Name:   Regional 08 SP INTERIOR


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
TRNSCD   03/21/2014 11:00AM
         REAR DOOR DIR SIDE NOT PARA WHICH CLOSED.
TRNSTC   03/21/2014 11:00AM
         HAD DEFECT IN THE INTERNAL COMPONENDES OF THE LOCK (SUPPOSED IT
         BREAK), INCURRING NOT THE CLOSING OF THE DOOR. ARMORED PART DISABLING
         BETTER I DIAGNOSE.
```

```
Rpt#: EFTK2002 FOMHTL                         Rpt: 06/20/2014  Odom:  10,639 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FAFP4AJ8DM[redacted]                                    Bld: 09/07/2012
Engine: 1.6L SIGMA  Calb:         Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2270    Automotriz del Valle de Baja C Phone:686-90-44-999
State:    Baja Califor City: Mexicali        Orig/Caller: ANTONIO SANCHEZ
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: LATCH DOOR INOPERATIVE          Attchmnts:  1
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   06/20/2014 07:33PM MARCOANTO OLIVA      VO - FOM - CUST SERV TECH/QLTY
         TECH STS THE LATCH OF THE RIGHT REAR DOOR DOES NOT WORK CORRECTLY,
RECOMM   06/20/2014 07:33PM MARCOANTO OLIVA      VO - FOM - CUST SERV TECH/QLTY
         REPLACE THE LATCH OF THE REAR RIGHT DOOR
```

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Rpt#: EFBE7004 NHL                            Rpt: 06/02/2014  Odom:  16,202 M
Vehicle: 2013 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ9DM[redacted]                                  Bld: 09/18/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:           A/C: YES
Dealer ID:USA 06192    Town East Ford                Phone:972-270-6441
State:    Texas        City: Mesquite         Orig/Caller: CHRIS CONTRERAS
Symptom: 8 81 2 42  SAFE/SEC,LATCHES/LOCKS ,DOOR,LOOSE/ATTACH
Addl Sym: REAR DOOR OPENED WHILE DRIVING  Attchmnts:  0
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    BBREISAC   Phone: -                        Dist Cd: C1 Dallas
Engineering:                                Phone:                          TA
Dlr Contact:                                Phone:                          Ti

-------------------------------- C O M M E N T S ---------------------------
 Type   Comments
REPAIR   06/02/2014 11:56AM BRIAN BREISACHER     MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: PASSENGER REAR DOOR OPENED WHILE DRIVING.
         WILL NOT LATCH SHUT    DIAGNOSTICS: VERIFIED CONCERN. DOOR WILL NOT
         LATCH. MADE SURE LATCH WAS IN OPEN POSITION BEFORE CLOSING DOOR. NO
         SIGNS OF LATCH BINDING OR STICKING. NO SIGNS OF FOREIGN MATERIAL IN
         LATCH    PARTS REPLACED: NONE    TECH QUESTION: HAVE THERE BEEN ANY
         PAST REPORTS WITH DOORS COMING OPEN AND NOT CLOSING? ANY KNOWN
         PROBLEMS WITH LATCHES ON THIS VEHICLE? IS LATCH REPLACEMENT THE ONLY
         NECESSARY REPAIR?
RECOMM   06/02/2014 11:56AM BRIAN BREISACHER     MSS - FCSD - TECH SVC HOTLINE
         CHRIS,    THIS CONCERN CAN BE CAUSED BY A FAULTY DOOR LATCH, STICKING
         DOOR HANDLE, STICKING DOOR HANDLE ACTUATING CABLE, OR A MISADJUSTED
         DOOR.     IT IS RECOMMENDED TO CONTINUE TO TRY TO DUPLICATE THE
         CONCERN TO ALLOW FOR TESTING TO BE PERFORMED WITH THE CONCERN PRESENT.
         IF THE CONCERN IS NOT EASILY DUPLICATED, IT MAY BE HELPFUL TO INQUIRE
         WITH THE CUSTOMER ABOUT THE EXACT CONDITIONS OF WHEN THE CONCERN
         OCCURS, OR HAVE THE CUSTOMER DUPLICATE THE CONCERN FOR YOU.    ONCE
         THE CONCERN HAS BEEN DUPLICATED, IT IS RECOMMENDED TO REMOVE THE DOOR
         PANEL AND INSPECT THE INTERIOR AND EXTERIOR DOOR HANDLES FOR BINDING
         AND DAMAGE, INSPECT THE DOOR HANDLE ACTUATING CABLES FOR DAMAGE AND
         BINDING, AND INSPECT THE LATCH AGAIN FOR DAMAGE AND BINDING. ONCE THE
         STICKING, BINDING, OR DAMAGED COMPONENT IS IDENTIFIED, REPAIR AS
         NECESSARY AND REEVALUATE FOR NORMAL OPERATION. REFER TO SECTION 501-14
         OF THE ONLINE WORKSHOP MANUAL FOR AN EXPLODED VIEW OF ALL REAR DOOR
         HANDLE/LATCH COMPONENTS AS WELL AS REPLACEMENT INFORMATION.    DEALERS
         ARE ABLE TO VIEW THE TECHNICAL HOTLINE'S PAST REPORTS WITH THE SELF
         HELP TOOL. WHEN SUBMITTING A HOTLINE ASSISTANCE REQUEST, AFTER
         COMPLETING THE FOURTH SYMPTOM CODE, A CLICK HERE TO REVIEW PREVIOUS
         HOTLINE ASSISTANCE REQUESTS LINK WILL APPEAR. IF THE LINK DOES NOT
         APPEAR AFTER THE FOURTH SYMPTOM CODE IS COMPLETED, THERE ARE NO
         PREVIOUS REPORTS WITH THE SAME SYMPTOM CODING. THERE ARE NO PREVIOUS
         REPORTS FOR THE SYMPTOM CODING PROVIDED WITH THIS CONTACT.
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:44


Rpt#: EETHN133 EXPORT--or-- K  201491327055   Rpt: 05/20/2014  Odom:   5,492 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ4DM[redacted]                                   Bld: 09/27/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EGCH4003 FOMHTL                         Rpt: 07/03/2014  Odom:  12,955 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FAFP4AJ5DM[redacted]                          Bld: 10/03/2012
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:MEX M2633    Autos de Hermosillo, S.A. de C Phone:662-2892-029
State:    Sonora       City: Hermosillo       Orig/Caller:
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DOOR CANNOT BE CLOSE            Attchmnts:  0
Fix:    Caus. Comp:                               --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   07/03/2014 12:39PM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         TECH STS CUSTOMER IS REPORTING THAT CANNOT CLOSE THE FRONT RIGHT SIDE
         DOOR, TECH CONFIRMED THIS CONDITION AND INSPECTED LATCH/HANDLE AND
         HINGES ASSEMBLY BUT DID NOT FIND SOMETHING ABNORMAL. TECH COMMENTS
         THIS VEHICLE PRESENTED SAME CONCERN WHEN HAD 7090 KM (SEE OASIS WEB
         SITE), TECH IS ASKING FOR DIRECTIONS.
RECOMM   07/03/2014 12:39PM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         I WILL SEND AN EMAIL TO QUALITY ENGINEERS AND PVT TEAM TO KNOW IF IT
         IS NECESSARY TO RETRIEVE THIS ASSEMBLY. ADV TO REPLACE IT.
```

```
Page: 01                 CQIS Indicator Summary              07/18/14  19:00:45


Rpt#: EETHN135 EXPORT--or-- K  201491327057   Rpt: 05/20/2014  Odom:  12,172 M
Vehicle: 2013 FIESTA (NA)                     ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ5DM[redacted]                                Bld: 10/19/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:              A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                   Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R          -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:            MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                                EC:
ER:                                                                CB:

--------------------------------- C O M M E N T S -----------------------------
 Type    Comments
CONCER    05/20/2014 04:10PM
          RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C    05/20/2014 04:10PM
          REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
          Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
          Type:  K  For further information.
```

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Page: 01                CQIS Indicator Summary              07/18/14  19:00:45


Rpt#: EETHN134 EXPORT--or-- K  201491327056   Rpt: 05/20/2014  Odom:  10,838 M
Vehicle: 2013 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJXDM[redacted]                          Bld: 10/23/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:PRI F0R45    Ford Del Sur, Inc.             Phone:
Country:  PUERTO RICO  City: Ponce            Orig/Caller: Julymar Colon
Symptom: 8 81 2 71  SAFE/SEC,LATCHES/LOCKS ,DOOR,STICK/BIND
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Cust Sat?      Prt St:           MIL?      ABA?      Air Temp: 4     Survey? N
EO:                                                              EC:
ER:                                                              CB:

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   05/20/2014 04:10PM
         RIGHT REAR DOOR DOES NOT CLOSE PROPERLY
TECH/C   05/20/2014 04:10PM
         REAR RIGHT DOOR PANEL REMOVED TO VERIFY, FOUND DOOR LATCH RESTRICTED.
         Refer to VIN 3FADP4AJ6DM[redacted] under Control # 201491327035  & Program
         Type:  K  For further information.
```

```
Rpt#: EFLDJ002 NHL                            Rpt: 06/12/2014  Odom:  20,619 M
Vehicle: 2013 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ2DM[redacted]                                 Bld: 10/23/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 09511    Visalia Ford                  Phone:559-625-1000
State:    California   City: Visalia          Orig/Caller: BRANDON MACIAS
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DOOR LATCH SEIZED                 Attchmnts:  0
Fix:    Caus. Comp:                                 --       Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:
Hotliner:    LNEWSOM    Phone: --3179333                Dist Cd: W2 San Franci
Engineering:                                Phone:                           TA
Dlr Contact:                                Phone:                           Ti

--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
REPAIR   06/12/2014 08:47AM LAWRENCE NEWSOM      MSS - FCSD - TECH SVC HOTLINE
         WEB FORM DATA -  CONCERN: THE VEHICLE CAME IN A WEEK BACK WITH THE
         RIGHT FRONT DOOR LATCH INOPERATIVE IT WOULD NOT LATCH AT ALL AND WAS
         STUCK OPEN. REPLACED THE LATCH ASSEMBLY AND ALL WAS FINE. VEHICLE
         RETURNED WITH THE RIGHT REAR DOOR LATCH DOING THE SAME THING WOULD NOT
         LATCH AND WAS STUCK OPEN. BOTH LATCHES HAD INTERNAL FAILURE AND WOULD
         NOT OPERATE PROPERLY. BOTH HAVE BEEN REPLACED.    DIAGNOSTICS:
         REPLACED BOTH RF AND RR DOOR LATCH ASSEMBLYS    PARTS REPLACED: RF AND
         RR DOOR LATCH    TECH QUESTION: IS THIS A COMMON CONCERN? HAVE ANY
         OTHER LATCHES HAD FAILURE? CUSTOMER IS CONCERNED ABOUT SAFETY OF
         VEHICLE.
RECOMM   06/12/2014 08:47AM LAWRENCE NEWSOM      MSS - FCSD - TECH SVC HOTLINE
         HELLO BRANDON,    A REVIEW OF THE HOTLINE DATA BASE DOES NOT SUPPORT
         BINDING/SEIZED DOOR LATCHES AS BEING A COMMON CONCERN.    IT IS
         POSSIBLE FOR A DOOR LATCH TO BIND OR SEIZED DOOR IF THE LATCH IS NOT
         CLEANED AND LUBRICATED AS OUTLINED IN THE OWNERS SCHEDULED MAINTENANCE
         SECTION PAGE 271.    IT INDICATED THAT DORO LATCH SHOULD BE CHECKED
         AND LUBRICATED IF NECESSARY EVERY SIX MONTHS.    THE LUBRICATION
         PROCEDURE CAN ALSO BE FOUND IN THE WSM 501-14 HANDLES, LOCKS, LATCHES
         AND ENTRY SYSTEMS > GENERAL PROCEDURES > LATCH LUBRICATION.
REPAIR   06/13/2014 08:10AM JEFF FERRAIUOLO      MSS - FCSD - TECH SVC HOTLINE
         I DON'T BELIEVE IT WAS AN ISSUE WITH LUBRICATION. WHEN YOU WOULD
         OPERATE LATCH MANUALLY USING A SCREWDRIVER THERE WAS NO TENSION FELT
         IN THE LATCH ASSEMBLY. AS IF SOMETHING INTERNALLY HAS FAILED.
RECOMM   06/13/2014 08:10AM JEFF FERRAIUOLO      MSS - FCSD - TECH SVC HOTLINE
         BRANDON,    SINCE THERE WAS NOT TENSION IN THE LATCHES THEN YOU ARE
         CORRECT IN SUSPECTING THAT THE LATCHES DID INTERNALLY FAIL.     IT IS
         UNCLEAR AS TO WHAT EXACTLY CAUSED THE INTERNAL FAILURE YET THIS IS NOT
         A COMMON ISSUE THAT OCCURS ON THIS VEHICLE OR ANY MODEL LINE.     IF
         AN ISSUES HAD BEEN IDENTIFIED WITH LATCHES INTERNALLY FAILING THEN
         THIS INFORMATION WOULD HAVE BEEN RELEASED TO THE FIELD IN THE FORM OF
         AN SSM, TSB OR FSA. AS THIS IS NOT THE CASE AND THE LATCHES HAVE BEEN
         REPLACED TO RESOLVE THE ISSUE THEN IT IS RECOMMENDED TO RELEASE THE
         VEHICLE TO THE CUSTOMER.
REPAIR   06/13/2014 04:21PM KAREN SHEAHAN        MSS - FCSD - TECH SVC HOTLINE
         OKAY THANKS JUST CHECKING TO SEE IF THERE WAS ANY REPORTS ON YOUR END.
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```
Rpt#: EFLDJ002 NHL                              Rpt: 06/12/2014

--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
         THANKS AGAIN. HAVE A GOOD ONE.
RECOMM   06/13/2014 04:21PM KAREN SHEAHAN        MSS - FCSD - TECH SVC HOTLINE
         BRANDON,  YOU ARE WELCOME. PLEASE TAKE THE TIME TO FILL OUT THE ONLINE
         SURVEY. WHEN YOU FILL OUT THE ONLINE SURVEY, THIS INFORMATION CAN THEN
         BE MADE AVAILABLE TO OTHER TECHNICIANS WHO MAY ENCOUNTER A SIMILAR
         ISSUE THROUGH THE SELF HELP TOOL
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```
Rpt#: EF1IJ001 FCSDFS                         Rpt: 06/27/2014  Odom:  34,471 M
Vehicle: 2013 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ5DM[redacted]                                   Bld: 10/30/2012
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 20443    Alexander Ford               Phone:928-344-2200
State:    Arizona      City: Yuma             Orig/Caller: MITCH PICKENS
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: RF LATCH                        Attchmnts:  0
Fix:    Caus. Comp:                                --       Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


---------------------------------- C O M M E N T S ----------------------------
 Type   Comments
OWNER    06/27/2014 01:56PM MITCH PICKENS(FSE)   MSS - FCSD - REG PHOEN-DEN-SEA
         C/S RIGHT FRONT DOOR WILL NOT CLOSE
ADD-ON   06/27/2014 01:56PM MITCH PICKENS(FSE)   MSS - FCSD - REG PHOEN-DEN-SEA
         FSE DOCUMENTING INVOLVEMENT FROM DEALER AND REGION. DEALER CONTACTED
         THE REGION TO RAISE AWARENESS OF THIS ISSUE. REGION CONTACTED FSE FOR
         ADDITIONAL INFORMATION. FSE IS OPENING CQIS REPORTS FOR THE UNITS THAT
         THE DEALER HAS PROVIDED AND FORWARDED REPORTS TO PCE ANDY BRANDT.
         DEALER DOES NOT NEED TECHNICAL ASSISTANCE TO REPLACE THE LATCH, BUT
         HAS NOTED THAT LATCHES ARE ON BACK ORDER. FSE RECOMMENDED THAT DEALER
         FOLLOW APPROPRIATE PARTS ESCALATION PROCESS. REFERENCE VINS
         3FADP4AJ0DM[redacted] 3FADP4EJ5CM[redacted] 3FADP4AJ5DM[redacted].
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Page: 01                CQIS Indicator Summary              07/18/14  19:00:45


Rpt#: EDYF8003 FOMHTL                         Rpt: 04/25/2014  Odom:  14,170 M
Vehicle: 2013 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ9DM[redacted]                          Bld: 12/06/2012
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2270    Automotriz del Valle de Baja C Phone:686-90-44-999
State:    Baja Califor City: Mexicali         Orig/Caller: JUAN CAPIZ
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DOOR DOES NOT CLOSE             Attchmnts:  0
Fix:    Caus. Comp:                               --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S -----------------------------
 Type   Comments
CONCER   04/25/2014 11:40AM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         TECH REPORT, LEFT REAR DOOR DOES NOT CLOSE, WAS VERIFIED CUSTOMER
         COMPLAINT, THE MECHANISM WAS DISMOUNTED, FINDING THE DOOR LATCH LOCKED
         IN OPEN
RECOMM   04/25/2014 11:40AM ISRAEL GARCIA        VO - FOM - CUST SERV TECH/QLTY
         ACCORDING TO WORKSHOP, PINPOINT TEST P, THE RECOMMENDATION IS: INSTALL
         A NEW DOOR LATCH
```

```
Rpt#: ED3O1583 CREDSR--or-- Q  201491313985   Rpt: 04/29/2014  Odom:     518 M
Vehicle: 2013 FIESTA (NA)                   ,TITAN  ,5 DOOR ,HATCH
Vin:3FADP4FJXDM[redacted]                                   Bld: 01/05/2013
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00993 SZ Central Motor America          Phone:6313001
Country:  COLOMBIA     City: BUCARAMANGA      Orig/Caller: Leonardo Suarez
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z2   Region Name:   Norte


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   04/29/2014 03:00PM
         CUSTOMERS REPORTS THAT THE DOOR RH DO NOT LOCK
TRNSTC   04/29/2014 03:00PM
         FIND THAT THE LOCK/LATCH PRESENTS DAMAGE INTERNALLY LEAVING THE OPEN
         DOOR AND LEAVING TO WARNING LIGHT TURNED ON OF THE DOOR OPENED
         REQUIRES PLATE GEARBOX
```

```
Rpt#: EF1IB001 FCSDFS                              Rpt: 06/27/2014  Odom:  16,531 M
Vehicle: 2013 FIESTA (NA)                      ,S      ,4 DOOR ,SEDAN
Vin:3FADP4AJ0DM[redacted]                               Bld: 04/23/2013
Engine: 1.6L SIGMA  Calb: CCH1A10A Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:USA 20443    Alexander Ford                 Phone:928-344-2200
State:    Arizona      City: Yuma                Orig/Caller: MITCH PICKENS
Symptom: 8 81 2 42  SAFE/SEC,LATCHES/LOCKS ,DOOR,LOOSE/ATTACH
Addl Sym: RF AND RR LATCH FAILURE         Attchmnts:  0
Fix:    Caus. Comp:                                --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   W3   Region Name:   Phoenix


--------------------------------- C O M M E N T S ------------------------------
 Type   Comments
OWNER    06/27/2014 01:43PM MITCH PICKENS(FSE)   MSS - FCSD - REG PHOEN-DEN-SEA
         C/S HIS RIGHT FRONT LATCH FAILED ON 6/11 AND NOW HIS RR DOOR WILL NOT
         CLOSE.
ADD-ON   06/27/2014 01:43PM MITCH PICKENS(FSE)   MSS - FCSD - REG PHOEN-DEN-SEA
         FSE DOCUMENTING INVOLVEMENT FROM DEALER AND REGION. DEALER CONTACTED
         THE REGION TO RAISE AWARENESS OF THIS ISSUE. REGION CONTACTED FSE FOR
         ADDITIONAL INFORMATION. FSE IS OPENING CQIS REPORTS FOR THE UNITS THAT
         THE DEALER HAS PROVIDED AND FORWARDED REPORTS TO PCE ANDY BRANDT.
         DEALER DOES NOT NEED TECHNICAL ASSISTANCE TO REPLACE THE LATCH, BUT
         HAS NOTED THAT LATCHES ARE ON BACK ORDER. FSE RECOMMENDED THAT DEALER
         FOLLOW APPROPRIATE PARTS ESCALATION PROCESS. REFERENCE VINS
         3FADP4AJ0DM[redacted] 3FADP4EJ5CM[redacted] 3FADP4AJ5DM[redacted].
```

```
Rpt#: EGCH4004 FOMHTL                         Rpt: 07/03/2014  Odom:   2,482 M
Vehicle: 2014 FIESTA (NA)                   ,SE     ,5 DOOR ,HATCH
Vin:3FADP4EJ4EM[redacted]                          Bld: 05/18/2013
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:MEX M2633    Autos de Hermosillo, S.A. de C Phone:662-2892-029
State:    Sonora       City: Hermosillo       Orig/Caller:
Symptom: 8 81 2 42  SAFE/SEC,LATCHES/LOCKS ,DOOR,LOOSE/ATTACH
Addl Sym: DOOR CANNOT BE CLOSE            Attchmnts:  0
Fix:    Caus. Comp:                               --        Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S ------------------------------
 Type   Comments
CONCER   07/03/2014 12:56PM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         TECH STS CUSTOMER IS VERY UPSET DUE TO DRIVING AT LOW SPEED REAR RIGHT
         SIDE DOOR OPEN WHEN VEHICLE WAS TURNING. CUSTOMER SAID THAT SOMETIMES
         IT IS VERY HARD TO CLOSE THIS DOOR. TECH CONFIRMED THAT DOOR CANNOT BE
         CLOSE, INSPECTED LATCH/HANDLE ASSEMBLY AND HINGES BUT DID NOT FIND
         SOMETHING ABNORMAL ONLY A INTERNAL PART LOOSE.
RECOMM   07/03/2014 12:56PM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         I WILL SEND AN EMAIL TO QUALITY AND PVT TEAM TO KNOW IF IT IS POSSIBLE
         TO RETRIEVE THIS ASSEMBLY. ADV TO REPLACE IT.
```

```
Page: 01                CQIS Indicator Summary              07/18/14  19:00:45


Rpt#: ECNLK472 CREDSR--or-- Q  201491284277   Rpt: 03/14/2014  Odom:      85 M
Vehicle: 2014 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ6EM[redacted]                               Bld: 11/26/2013
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00912 SZ Janna Motors                   Phone:0953444434
Country:  COLOMBIA     City: BARRANQUILLA     Orig/Caller: BLANCA GELVES
Symptom: 8 81 2 00  SAFE/SEC,LATCHES/LOCKS ,DOOR,UNKNOWN
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          L         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z2   Region Name:   Norte


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   03/14/2014 06:30PM
         LEFT REAR DOOR IS NOT BLOCKED.
TRNSTC   03/14/2014 06:30PM
         LEFT REAR DOOR DOES NOT BLOCK, INTERNAL DAMAGE IN MOTOR LOCK/LATCH
         BLOCKADE LEFT REAR DOOR, GEARBOX FROM THE MOTOR LOCK/LATCH LEFT REAR
         DOOR.
```

```
Rpt#: EEJA7357 CREDSR--or-- Q  201491320842   Rpt: 05/12/2014  Odom:      88 M
Vehicle: 2014 FIESTA (NA)                   ,SE     ,4 DOOR ,SEDAN
Vin:3FADP4BJ8EM[redacted]                          Bld: 03/06/2014
Engine: 1.6L SIGMA  Calb:          Trans: 5SP IB5    Axle:            A/C: YES
Dealer ID:COL 00993 SZ Central Motor America          Phone:6313001
Country:  COLOMBIA     City: BUCARAMANGA      Orig/Caller: Leonardo Suarez
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym:                                 Attchmnts:  0
Fix:    Caus. Comp: LTCH RR DR          R         -- RPL    Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   Z2   Region Name:   Norte


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
TRNSCD   05/12/2014 06:00PM
         CUSTOMERS REPORTS THAT THE REAR DOOR RIGHT SIDE DO NOT LOCK AND LEAVE
         IGNITED WARNING LIGHT
TRNSTC   05/12/2014 06:00PM
         FIND THAT THE LOCK/LATCH PRESENTS OPEN CIRCUIT LEAVING IGNITED WARNING
         LIGHT OF THE DOOR OPENED REQUIRES GEARBOX SESTEAPIZA FOR THE PROCEDURE
```

```
Rpt#: EGGF2001 FOMHTL                         Rpt: 07/07/2014  Odom:      58 M
Vehicle: 2014 FIESTA (NA)                   ,S      ,4 DOOR ,SEDAN
Vin:3FAFP4AJ7EM[redacted]                                   Bld: 05/21/2014
Engine: 1.6L SIGMA  Calb:          Trans: 6SP PS195  Axle:            A/C: YES
Dealer ID:MEX M2633    Autos de Hermosillo, S.A. de C Phone:662-2892-029
State:    Sonora       City: Hermosillo       Orig/Caller:
Symptom: 8 81 2 15  SAFE/SEC,LATCHES/LOCKS ,DOOR,DIFF CLOSE
Addl Sym: DOOR CANNOT BE CLOSE            Attchmnts:  0
Fix:    Caus. Comp:                               --         Condition Code:
KOEO:
KOEO:
KOEC:
KOEC:
KOER:
KOER:

Region Code:   M3   Region Name:   FCSD REGION-M3


--------------------------------- C O M M E N T S ----------------------------
 Type   Comments
CONCER   07/07/2014 12:08PM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         TECH STS AFTER PERFORMING PRE DELIVERY INSPECTION TECH FOUND THAT REAR
         RIGHT SIDE DOOR CANNOT BE CLOSE, TECH INSPECTED HINGES AND
         LATCH/HANDLE ASSEMBLY BUT DID NOT FIND SOMETHING ABNORMAL. TECH IS
         ASKING FOR DIRECTIONS.
RECOMM   07/07/2014 12:08PM ERICK VELAZQUEZ      VO - FOM - CUST SERV TECH/QLTY
         I WILL SEND AN EMAIL TO QUALITY AND PVT TEAM TO KNOW IF IT IS
         NECESSARY TO VISIT THIS DEALER.
```

From: [redacted]
Sent: Friday, August 22, 2014 11:12 AM
To: [redacted]
[redacted] [redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]
Sorry I am at Magna for a P552 issue so I didn't hear the phone. It was communicated to me that at least the one non torn down latch was a door opens, she binned it with the original 5 bumping that quantity to 6. I am guessing it is something lost in translation here if we can't find any confirmation of such. I can look back at my notes when I am in the office to identify we're it was noted as door opens.

Matt

-----Original Message-----
From: [redacted]
Sent: Friday, August 22, 2014 11:00 AM Eastern Standard Time
To: [redacted]
Cc: [redacted]
Subject: FW: Análisis pieza retornada HSAP

Matt – tried calling but no answer.

Why does your note on the 19th say there are 2 latches for "door opens while driving"?

Nothing else seems to support that there are more claims for that nor are the latches in transit for that.

From: [redacted]
Sent: Friday, August 22, 2014 10:51 AM
To: [redacted]
[redacted] [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Both latches that Paul will receive next week have the same failure mode: customer open the door and then he was not able to close it again.

I have not received any claims complaining about suddenly getting doors open, while driving.

Regards.

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

[redacted]

From: B[redacted].)
Sent: Friday, August 22, 2014 7:46 AM
To: [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Thanks Guadalupe – but what I am really trying to confirm is if there was another claim for door coming open which is vastly different to us than door won't close.

From: [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Good morning Jerry,

Yesterday I called to the dealership and they told me that they have not upload the system. They did it until yesterday's afternoon. If you search in the system today, the door latch claim appears.

VIN AWS VL WERS VL MKT DER BODY CAB VER SERIES DRIVE TYPE PLANT CD TRANS CD ENG COD PROD DATE WARR DATE SELLING
DEALER SELL CNT TIS WCC PREF BASE SUFF VRT FUNCTION VFG CCC CD
3FA6P0G78D[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-
2013 2M2633 MEX 0 * * * * F09 F9 V00 * *
AWS Claim Key: 2573226 **Doc #:** 05428501 **Trx Code:** 13S04 **Labor Hrs:** 2.3 **Labor Cost:** 65.3235388 **Material Cost:** 92.3343083 **Total Cost:** 157.6578471
Dlr Cd-Sub Cd: M2633-* **Name:** AUTOS DE HERMOSILLO, S.A. DE C.V. **Ph:** 662-289-029 **St:** SO **Ctry Cd:** MEX **Reg Cd:** NA **Repr Date:**08-AUG-2013 **DIST(Mile):**727
Cust Comments: RV.- CAMPA�A 13S04
Tech Comments: SE REV.LA UHNIDAD ENCONTRNADO EN OASIS CAMPA�A 13S04 LA CUAL HACE MENCION DE RZO DE BOMBA DE COMBUSTIBLE, SE PROCEDIO A SEGUIR INDICACION DE CAMPA �A SE DESMONTO TANQUE DE GASOLINA Y SE REEMPLAZO BOMBA DE GASOLINA PARA CORREGIR EL PROBLEMNA.

3FA6P0G78D[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-
2013 2M2633 MEX 6 5C06 * 3B436 * F02 F2 V87 N58 42
AWS Claim Key: 5221113 **Doc #:** 05541702 **Trx Code:** 1 **Labor Hrs:** .9 **Labor Cost:** 26.5584553 **Material Cost:** 20.3329139 **Total Cost:** 46.8913692
Dlr Cd-Sub Cd: M2633-* **Name:** AUTOS DE HERMOSILLO, S.A. DE C.V. **Ph:** 662-289-029 **St:** SO **Ctry Cd:** MEX **Reg Cd:** NA **Repr Date:**10-FEB-2014 **DIST(Mile):**6213

Cust Comments: RV.- UNIDAD AL HACER ALTO Y GIRAR VOLANTE HACIA LA IZQ HACE RUIDO

Tech Comments: SE REV. LA UNIDAD ENCONTRNADO Q AL MOMENTO DE HACER ALTO Y GIRAR EL VOLANTE DE DIRECCION HACIA LA IZQ SE ESUCUCHA UN TRONIDO EN PTE DELANTERA, SE PROCEDIO A SU REV. DETECTANDO BOLETIN TEC.13-05-24 EL CUAL HACE MENCION DE ESTE PROB.SIENDO NECESARIO EL RZO DE ROLDANAS Y TUERCASO APRA CORREGIR EL PROBLEMA.

3FA6P0G78DR[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-2013 2M2633 MEX 6 6C06 DS7Z 54519A70 BD F07 F7 V71 B95 33

AWS Claim Key: 5237179 **Doc #:** 05541701 **Trx Code:** 1 **Labor Hrs:** .2 **Labor Cost:** 5.9020416 **Material Cost:** 308.5309812 **Total Cost:** 314.4330228

Dlr Cd-Sub Cd: M2633-* **Name:** AUTOS DE HERMOSILLO, S.A. DE C.V. **Ph:** 662-289-029 **St:** SO **Ctry Cd:** MEX **Reg Cd:** NA **Repr Date:**10-FEB-2014 **DIST(Mile):**6213

Cust Comments: RV,- CONSULA CENTRAL SUPERIOR ESTA SUELTO

Tech Comments: SE REV. LA UNIDA ENCONTRANDO Q CONSOLA CENTRAL SUPERIOR ESTA SUELTA, POR LO Q SE PROCEDIO A SU REVISION DETECTANDO MAL ENSAMBLADO POR LO Q SE PROC EDIO A RZAR CONSOLA PARA CORREGIR EL PROBLEMA.

3FA6P0G78DR[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-2013 2M2633 MEX 12 6J02 MBE8Z 5426412 B F08 F8 V07 L15 42

AWS Claim Key: 8382727 **Doc #:** 05773901 **Trx Code:** E84 **Labor Hrs:** 1 **Labor Cost:** 29.5094761 **Material Cost:** 141.1520383 **Total Cost:** 170.6615144

Dlr Cd-Sub Cd: M2633-* **Name:** AUTOS DE HERMOSILLO, S.A. DE C.V. **Ph:** 662-289-029 **St:** SO **Ctry Cd:** MEX **Reg Cd:** NA **Repr Date:**15-AUG-2014 **DIST(Mile):**17519

Cust Comments: RV.- PUERTA DELANTERA DERECHA NO CIERRA

Tech Comments: SE REV.LA UNDIAD ENCONTRNADO Q PUERTA DELANTERA DERECHA NO CIERRA POR LO Q SE PROCEDIO A REVISAR ALIMENTACION CON MULTIMETRO DETECTNADO Q SI LE LLEGA CORRIENTE SE PROC.A DESMONTAR TAPICERIA DE PTA DETECTNADO PROBLEMA INTERNO EN ACTUADOR DE DESMONTO Y SE RZO ACTUADOR DELANTERO DERECHO PARA CORREGIR EL PROBLEMA.

Regards.

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

[redacted]

[redacted]

From: B[redacted]
Sent: Thursday, August 21, 2014 11:02 AM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Somewhere in the note it says it was for “the rare condition of door came open” not “door won’t latch”

From: [redacted]
Sent: Thursday, August 21, 2014 2:00 PM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

None of them, this part was removed this Monday, maybe it’s not yet uploaded. But, the failure mode was door latch won’t latch again. At the AWS report comes the dealership contact information, Autos de Hermosillo. Maybe, if you want more detail, we can contact them.

Regards.

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

Phone: +52 (662) 259 8000, Ext. 8903 | ✉: ggamez3@ford.com

Mobile: +52 (662) 173 0990, +52 (662) 167 1750

From: B[redacted])
Sent: Thursday, August 21, 2014 10:58 AM
To: [redacted]I.)
Subject: RE: Análisis pieza retornada HSAP

There are 2 claims with 6213 miles – please translate the one related to the door latch for us:

Cust Comments: RV.- UNIDAD AL HACER ALTO Y GIRAR VOLANTE HACIA LA IZQ HACE RUIDO

Tech Comments: SE REV. LA UNIDAD ENCONTRNADO Q AL MOMENTO DE HACER ALTO Y GIRAR EL VOLANTE DE DIRECCION HACIA LA IZQ SE ESUCUCHA UN TRONIDO EN PTE DELANTERA, SE PROCEDIO A SU REV. DETECTANDO BOLETIN TEC.13-05-24 EL CUAL HACE MENCION DE ESTE PROB.SIENDO NECESARIO EL RZO DE ROLDANAS Y TUERCASO APRA CORREGIR EL PROBLEMA.

Cust Comments: RV,- CONSULA CENTRAL SUPERIOR ESTA SUELTO

Tech Comments: SE REV. LA UNIDA ENCONTRANDO Q CONSOLA CENTRAL SUPERIOR ESTA SUELTA, POR LO Q SE PROCEDIO A SU REVISION DETECTANDO MAL ENSAMBLADO POR LO Q SE PROC EDIO A RZAR CONSOLA PARA CORREGIR EL PROBLEMA.

From: [redacted]
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Good morning Jerry,

We have recovered 2 latches.

The first latch was removed from a Ford employee 2013MY Fusion, no claim key available in the system. Right front door was opened and after that it could not get closed. This latch was sent to Miriam Morales, to Kiekert Puebla, who provided to us the analysis of this part last week. This latch was disassembled.

<< File: CERROJO_NO_RETIENE.PPS >>

The second latch VIN number is: 3FA6P0G78DR[redacted]. We recovered this latch in a local dealership, through our FCS engineer. This latch was sent to Kiekert Puebla by mistake, but **both** latches will be sent to KUSA on Monday. No teardown will be done to this part.

Arturo Robles will provide to the team the tracking # on Monday.

Ford PD, have we requested a Request Order for all-time in service door latches with this failure mode? At least, to be requesting 10 parts per week. Has this been done? If not, we can contact Iris Washington to support.

Regards.

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 9:28 AM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Does anybody have the VIN # from which this latch came from so we can look up the warranty report?

From: [redacted]
Sent: Thursday, August 21, 2014 12:11 PM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Understood, the latch will probably be turned around on Friday as that is the day it is expected to be received at KdM from HSAP. ETA Kiekert Wixom Monday/Tuesday of next week.

Regards,

[redacted]

Senior Manager

Customer/Supplier Quality

Keykert USA, Inc.

46941 Liberty Drive

Wixom, MI 48393 United States

T: +1 248 960 5306

M: +1 248 798 9759

F: +1 248 960 5390

Ernie.Mullins@kiekert.com

www.kiekert.com

From: [redacted]
Sent: Thursday, August 21, 2014 12:08 PM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

No teardowns on this at all until CCRG gives us the OK.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson
Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 9:23 AM
To: '[redacted]
Subject: RE: Análisis pieza retornada HSAP

Thanks Paul, very much appreciated.

Matt

-----Original Message-----
From: [redacted]
Sent: Thursday, August 21, 2014 08:49 AM Eastern Standard Time
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Yes Matt I will.

Paul Childs

Customer Quality Engineer

Keykert USA, Inc.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 8:16 AM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]
I don't suppose it is a problem it ended up routed there, but I don't want them to tear the latch down under any circumstances. I want it to come to Wixom so Kosta can be involved in the tear down. Can you please stress to them not to tear it down for review?

[redacted]

-----Original Message-----
From: [redacted]]
Sent: Thursday, August 21, 2014 08:06 AM Eastern Standard Time
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Team,

I received an email letting me know that the suspect latch was sent to Kiekert de Mexico Team (Miriam and Arturo) .

Here is the tracking number for this latch M2378328193 by UPS.

[redacted]

Customer Quality Engineer

Keykert USA, Inc.

[redacted]

From: G[redacted]
Sent: Tuesday, August 19, 2014 5:51 PM

To: Ch[redacted]riam
Cc: Okeh, Christopher (C.); Mullen, Bradley (T.); Gilabert, Julian (J.)
Subject: RE: Análisis pieza retornada HSAP

Please provide the FedEx tracking number when we have one to this team – This is an important latch since it will be the first intact latch described as “door opens while driving” we have had an opportunity to conduct an engineering review upon. Thanks for all your help on this Maria.

Regards,

[redacted]

STA – Latches/Door Systems

From: C[redacted]
Sent: Tuesday, August 19, 2014 2:14 PM
To: [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Maria,

My shipping information is listed below.

[redacted]

Customer Quality Engineer

Keykert USA, Inc.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 2:12 PM
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Thank you Matt.

Paul, could you please provide to me the information to be able to ship the part with the failure mode that was recovered yesterday from a 2013MY Fusion and the part that Miriam has in Puebla?

Regards.

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

[redacted]

[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 10:54 AM

To: [redacted]
[redacted] [redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]

I unfortunately think Ernie Mullins is out of the office right now, so in order to co-ordinate the shipment of the latch I have added Paul Childs to the email.

[redacted]

Please assist Maria in getting both latches returned to Wixom, these are significant latches as they are of the very rare population of "door opens while driving"

Thanks,

[redacted]

STA – Latches/Door Systems

From: Gamez, Guadalupe (G.)
Sent: Monday, August 18, 2014 12:56 PM
To: [redacted]
[redacted] [redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Good morning [redacted]

Thank you for your quick response.

I am adding [redacted] from [redacted] [redacted].

[redacted], can you please send the part that was analyzed to Kiekert Wixom? Could you please provide the tracking number?

The part that I am recovering from the dealership today I will send it directly to Kiekert Wixom.

I will wait for Ernie's instructions to send it to them.

Thanks for your support!

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

[redacted]

[redacted]

From: [redacted]
Sent: Monday, August 18, 2014 9:22 AM
To: [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]

Kosta is out of the office at a technical conference I believe till Thursday. I will make certain that you are included in the future meetings. I am assuming you plan to send the latch to Kiekert Puebla? By any chance could you send that latch to Kiekert Wixom (the NA Headquarters) here in Michigan? It would make it easier for Kosta and Myself to meet with Kiekert to review the latch if we had it sent to them up here.

I have included Ernie Mullins from Kiekert on this message (he is the Director of Quality for Kiekert) so that he can co-ordinate with you the shipping of the new latch up to Wixom.

Thanks,

[redacted]

STA – Latches/Door Systems

From: [redacted])
Sent: Monday, August 18, 2014 11:14 AM
To: [redacted]
[redacted] [redacted], David (DAO.); Gilabert, Julian (J.)
Subject: FW: Análisis pieza retornada HSAP
Importance: High

Good morning [redacted]

Could you please inform to me which is the latest update of this issue.

We found a 2013MY Fusion that suddenly the right front door latch was not holding. Attach is Kiekert analysis where they found a component cracked.

Miriam Morales, from Kiekert, told me that this high-time in service failure mode was reported to her almost one month ago.

According to our FCSD engineer, we have reports of 5 vehicles 2013MY and 1 vehicle 2014MY.

Today I will pick-up at the dealership another latch with the same failure mode. I will send it to Kiekert.

Could you please keep me posted on your meetings?

Thank you.

Maria Guadalupe Gamez Lopez

PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant

[redacted]

[redacted]

From: M[redacted]
Sent: Friday, August 15, 2014 12:15 PM
To: Gamez, Guadalupe (G.)
Cc: L[redacted]
Subject: Análisis pieza retornada HSAP

Buen día Guadalupe

Adjunto la presentación del análisis realizado a la pieza retornada de HSAP por cerrojo no retiene.

Arturo Robles (Garantías) fue informado respecto a esta pieza.

La investigación de este tema esta cargo de Calidad Ford Matt Greenisen , Calidad Kiekert Ernie Mullins, Ingeniería Ford Costa Papanicolaou e Ingeniería Kiekert Héctor Verde.

Saludos

Ing.Miriam Morales Romero
Quality
Kiekert de México S.A de C.V
Km 14.5 Autopista Puebla-Orizaba
Parque Industrial,Chachapa,Amozoc Puebla México
[redacted]

From: [redacted]
Sent: Thursday, August 21, [redacted]
[redacted] [redacted]
Subject: RE: Análisis pieza retornada HSAP

Agree – she said it is not in the system yet. Then she said this latch is from "door won't close" – not "door came open" - getting tired of chasing the red herrings.

From: C[redacted]
Sent: Thursday, August 21, 2014 3:23 PM
To: Bonnici, Jerry (J.P.)
Subject: FW: Análisis pieza retornada HSAP

[redacted]

I did a Google Spanish to English translation parts of this note string that is in Spanish (English in red). Some of it is not particularly clear.

[redacted]

From: E[redacted])
Sent: Thursday, August 21, 2014 2:02 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Somewhere in the note it says it was for "the rare condition of door came open" not "door won't latch"

[redacted]
Sent: Thursday, August 21, 2014 2:00 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

None of them, this part was removed this Monday, maybe it's not yet uploaded. But, the failure mode was door latch won't latch again. At the AWS report comes the dealership contact information, Autos de Hermosillo. Maybe, if you want more detail, we can contact them.

Regards.

[redacted]z
PVT | Handles, Locks & Mechanisms Engineer

Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted])
Sent: Thursday, August 21, 2014 10:58 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

There are 2 claims with 6213 miles – please translate the one related to the door latch for us:

Cust Comments:	RV.- UNIDAD AL HACER ALTO Y GIRAR VOLANTE HACIA LA IZQ HACE RUIDO RV.- UNIT WHEN FLYING HIGH AND TURN LEFT TO MAKE NOISE
Tech Comments:	SE REV. LA UNIDAD ENCONTRNADO Q AL MOMENTO DE HACER ALTO Y GIRAR EL VOLANTE DE DIRECCION HACIA LA IZQ SE ESUCUCHA UN TRONIDO EN PTE DELANTERA, SE PROCEDIO A SU REV. DETECTANDO BOLETIN TEC.13-05-24 EL CUAL HACE MENCION DE ESTE PROB.SIENDO NECESARIO EL RZO DE ROLDANAS Y TUERCASO APRA CORREGIR EL PROBLEMA. SE REV. Q ENCONTRNADO UNIT AT TIME OF HIGH AND TURN THE STEERING WHEEL TO LEFT IS A Thunderclap ESUCUCHA IN FRONT PTE, proceeded to REV. BULLETIN TEC.13-05-24 DETECTING WHICH MAKES THIS STATEMENT REQUIRED PROB.SIENDO RZO OF PULLEYS AND CORRECT THE PROBLEM TUERCASO APRA.

Cust Comments:	RV,- CONSULA CENTRAL SUPERIOR ESTA SUELTO RV - LOOSE THIS SUPERIOR CENTRAL CONSULA
Tech Comments:	SE REV. LA UNIDA ENCONTRANDO Q CONSOLA CENTRAL SUPERIOR ESTA SUELTA, POR LO Q SE PROCEDIO A SU REVISION DETECTANDO MAL ENSAMBLADO POR LO Q SE PROC EDIO A RZAR CONSOLA PARA CORREGIR EL PROBLEMA SE REV. Q FINDING THE UNITED TOP CONSOLE IS LOOSE, SO IS THE TIME Q DETECTING A BAD REVIEW YOUR ASSEMBLY IS SO Q PROC EDIO A CONSOLE RZAR TO CORRECT THE PROBLEM..

From:[redacted])
Sent: Thursday, August 21, 2014 1:42 PM
[redacted]
Importance: High

Good morning [redacted]

We have recovered 2 latches.

The first latch was removed from a Ford employee 2013MY Fusion, no claim key available in the system. Right front door was opened and after that it could not get closed. This latch was sent to Miriam Morales, to Kiekert Puebla, who provided to us the analysis of this part last week. This latch was disassembled.

<< File: CERROJO_NO_RETIENE.PPS >>
The second latch VIN number is: 3FA6P0G78DR[redacted]. We recovered this latch in a local dealership, through our FCS engineer. This latch was sent to Kiekert Puebla by mistake, but **both** latches will be sent to KUSA on Monday. No teardown will be done to this part.

Arturo Robles will provide to the team the tracking # on Monday.

Ford PD, have we requested a Request Order for all-time in service door latches with this failure mode? At least, to be requesting 10 parts per week. Has this been done? If not, we can contact Iris Washington to support.

Regards.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 9:28 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Does anybody have the VIN # from which this latch came from so we can look up the warranty report?

From: [redacted]
Sent: Thursday, August 21, 2014 12:11 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Understood, the latch will probably be turned around on Friday as that is the day it is expected to be received at KdM from HSAP. ETA Kiekert Wixom Monday/Tuesday of next week.

Regards,

Ernie Mullins
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
46941 Liberty Drive
Wixom, MI 48393 United States
[redacted]

From: [redacted]]
Sent: Thursday, August 21, 2014 12:08 PM
[redacted]);

C[redacted]
Subject: RE: Análisis pieza retornada HSAP

No teardowns on this at all until CCRG gives us the OK.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson
Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 9:23 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Thanks Paul, very much appreciated.

[redacted]

-----Original Message-----
From: Childs, Paul [Paul.Childs@kiekert.com]
Sent: [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Yes Matt I will.

Paul Childs
Customer Quality Engineer
Keykert USA, Inc.
46941 Liberty Drive
[redacted]

From:[redacted]
Sent: Thursday, August 21, 2014 8:16 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]
I don't suppose it is a problem it ended up routed there, but I don't want them to tear the latch down under any circumstances. I want it to come to Wixom so Kosta can be involved in the tear down. Can you please stress to them

not to tear it down for review?

Matt

-----Original Message-----
From: [redacted]
Sent: Thursday, August 21, 2014 08:06 AM Eastern Standard Time
To: [redacted]
Cc: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Team,

I received an email letting me know that the suspect latch was sent to Kiekert de Mexico Team (Miriam and Arturo) .

Here is the tracking number for this latch M2378328193 by UPS.

Paul Childs
Customer Quality Engineer
Keykert USA, Inc.
46941 Liberty Drive
[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 5:51 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Please provide the FedEx tracking number when we have one to this team – This is an important latch since it will be the first intact latch described as "door opens while driving" we have had an opportunity to conduct an engineering review upon. Thanks for all your help on this Maria.

Regards,
[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Tuesday, August 19, 2014 2:14 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Maria,

My shipping information is listed below.

Paul Childs
Customer Quality Engineer
Keykert USA, Inc.
46941 Liberty Drive
Wixom, MI 48393 United States
[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 2:12 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Thank you Matt.

Paul, could you please provide to me the information to be able to ship the part with the failure mode that was recovered yesterday from a 2013MY Fusion and the part that Miriam has in Puebla?

Regards.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 10:54 AM
To: [redacted]
Cc: [redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]
I unfortunately think Ernie Mullins is out of the office right now, so in order to co-ordinate the shipment of the latch I have added Paul Childs to the email.

[redacted]
Please assist Maria in getting both latches returned to Wixom, these are significant latches as they are of the very rare population of “door opens while driving”

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Monday, August 18, 2014 12:56 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Good morning [redacted]

Thank you for your quick response.

I am adding Miriam Morales from Kiekert Puebla.

Miriam, can you please send the part that was analyzed to Kiekert Wixom? Could you please provide the tracking number?

The part that I am recovering from the dealership today I will send it directly to Kiekert Wixom.

I will wait for Ernie's instructions to send it to them.

Thanks for your support!

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

[redacted]
Sent: Monday, August 18, 2014 9:22 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted],
Kosta is out of the office at a technical conference I believe till Thursday. I will make certain that you are included in the future meetings. I am assuming you plan to send the latch to Kiekert Puebla? By any chance could you send that latch to Kiekert Wixom (the NA Headquarters) here in Michigan? It would make it easier for Kosta and Myself to meet with Kiekert to review the latch if we had it sent to them up here.

I have included Ernie Mullins from Kiekert on this message (he is the Director of Quality for Kiekert) so that he can co-ordinate with you the shipping of the new latch up to Wixom.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Monday, August 18, 2014 11:14 AM
[redacted]

Subject: FW: Análisis pieza retornada HSAP
Importance: High

Good morning [redacted]

Could you please inform to me which is the latest update of this issue.

We found a 2013MY Fusion that suddenly the right front door latch was not holding. Attach is Kiekert analysis where they found a component cracked.

Miriam Morales, from Kiekert, told me that this high-time in service failure mode was reported to her almost one month ago.

According to our FCSD engineer, we have reports of 5 vehicles 2013MY and 1 vehicle 2014MY.

Today I will pick-up at the dealership another latch with the same failure mode. I will send it to Kiekert.

Could you please keep me posted on your meetings?

Thank you.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted]
Sent: Friday, August 15, 2014 12:15 PM
[redacted]
Subject: Análisis pieza retornada HSAP

Buen día Guadalupe

Adjunto la presentación del análisis realizado a la pieza retornada de HSAP por cerrojo no retiene. Deputy presenting the analysis to the returned piece by HSAP bolt does not hold.

Arturo Robles (Garantías) fue informado respecto a esta pieza. Arturo Robles (Trial) was informed about this piece.

La investigación de este tema esta cargo de Calidad Ford Matt Greenisen , Calidad Kiekert Ernie Mullins, Ingeniería Ford Costa Papanicolaou e Ingeniería Kiekert Héctor Verde. The investigation of this topic is over Greenisen Matt Ford Quality, Quality Kiekert Ernie Mullins, Ford Engineering and Engineering Kiekert Pap Costa Verde Hector.

Saludos

Ing.Miriam Morales Romero
Quality
Kiekert de México S.A de C.V
[redacted]

Tel: [redacted]
[redacted]

From: [redacted]
Sent: Monday, August 25, 2014 6:46 PM
To: [redacted]
[redacted] [redacted]
Subject: RE: Análisis pieza retornada HSAP

Hola [redacted]

Paul and the team at KUSA are aware of the latches shipping

Tracking Number is 1Z0568680442940987. Expected delivery date is this coming Tuesday 26-Aug-14 by the afternoon

Best regards

Arturo Robles | Warranty Engineer | Kiekert de Mexico | Chachapa Industrial Park | Amozoc, Pba [redacted] Mexico
Phone: +[redacted]

Please consider printing only if necessary.

From: [redacted]
Sent: lunes, 25 de agosto de 2014 05:12 p.m.
[redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Good afternoon Arturo,

Could you please provide the tracking # of the following parts so Paul can track them?

Thank you for your support!

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted]
Sent: Friday, August 22, 2014 8:23 AM

[redacted]

Subject: RE: Análisis pieza retornada HSAP

Thanks for the info Lupita,

Latch was delivered yesterday night at KdM and it is leaving KdM today at noontime CST.
2 parts will be at KUS before closing the business day on Monday 25-Aug-14 as well as the previous latch brought back by Luis Cordova
Latch build date is 27-Aug-2012 and identified with KdM# F408-13
The previous one Luis Cordova brought back from HSAP was built on 27-Apr-2013 and identified with KdM# F408-03

Best regards

Arturo [redacted] 72990 Mexico
Phone:

Please consider printing
only if necessary.

From: [redacted]
Sent: viernes, 22 de agosto de 2014 09:45 a.m.
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Good morning Jerry,

Yesterday I called to the dealership and they told me that they have not upload the system. They did it until yesterday's afternoon. If you search in the system today, the door latch claim appears.

VIN	AWS VL	WERS VL	MKT DER	BODY CAB	VER SERIES	DRIVE TYPE	PLANT CD	TRANS CD	ENG COD	PROD DATE	WARR DATE	SELLING DEALER	SELL CNT	TIS	WCC	PREF	BASE	SUFF	VRT	FUNCTION	VFG	CCC	C
3FA6P0G78DR[redacted]	DE	C/C7	F	C/FC	C/DA	C/A	A3	C/W6	C/S7	22-SEP-2012	03-SEP-2013	2M2633	MEX	0	*	*	*	*	F09	F9	V00	*	*

AWS Claim Key: 2573226 **Doc #:** 05428501 **Trx Code:** 13S04 **Labor Hrs:** 2.3 **Labor Cost:** 65.3235388 **Material Cost:** 92.3343083 **Total Cost:** 157.6578471

Dlr Cd-Sub Cd: M2633-* **Name:** AUTOS DE HERMOSILLO, S.A. DE C.V. **Ph:** 662-289-029 **St:** SO **Ctry Cd:** MEX **Reg Cd:** NA **Repr Date:**08-AUG-2013 **DIST(Mile):**727

Cust Comments: RV.- CAMPA�A 13S04

Tech Comments: SE REV.LA UHNIDAD ENCONTRNADO EN OASIS CAMPA�A 13S04 LA CUAL HACE MENCION DE RZO DE BOMBA DE COMBUSTIBLE, SE PROCEDIO A SEGUIR INDICACION DE CAMPA �A SE DESMONTO TANQUE DE GASOLINA Y SE REEMPLAZO BOMBA DE GASOLINA PARA CORREGIR EL PROBLEMNA.

3FA6P0G78DR[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-2013 2M2633 MEX 6 5C06 * 3B436 * F02 F2 V87 N58 42

AWS Claim Key: 5221113 **Doc #:** 05541702 **Trx Code:** 1 **Labor Hrs:** .9 **Labor Cost:** 26.5584553 **Material Cost:** 20.3329139 **Total Cost:** 46.8913692

Dlr Cd-Sub Cd:	M2633-*	**Name:**	AUTOS DE HERMOSILLO, S.A. DE C.V.	**Ph:**	662-289-029	**St:**	SO	**Ctry Cd:**	MEX	**Reg Cd:**	NA	**Repr Date:**10-FEB-2014	**DIST(Mile):**6213

Cust Comments:	RV.- UNIDAD AL HACER ALTO Y GIRAR VOLANTE HACIA LA IZQ HACE RUIDO
Tech Comments:	SE REV. LA UNIDAD ENCONTRNADO Q AL MOMENTO DE HACER ALTO Y GIRAR EL VOLANTE DE DIRECCION HACIA LA IZQ SE ESUCUCHA UN TRONIDO EN PTE DELANTERA, SE PROCEDIO A SU REV. DETECTANDO BOLETIN TEC.13-05-24 EL CUAL HACE MENCION DE ESTE PROB.SIENDO NECESARIO EL RZO DE ROLDANAS Y TUERCASO APRA CORREGIR EL PROBLEMA.

3FA6P0G78DR[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-2013 2M2633 MEX 6 6C06 DS7Z 54519A70 BD F07 F7 V71 B95 33

AWS Claim Key:	5237179	**Doc #:**	05541701	**Trx Code:**	1	**Labor Hrs:**	.2	**Labor Cost:**	5.9020416	**Material Cost:**	308.5309812	**Total Cost:**	314.4330228
Dlr Cd-Sub Cd:	M2633-*	**Name:**	AUTOS DE HERMOSILLO, S.A. DE C.V.	**Ph:**	662-289-029	**St:**	SO	**Ctry Cd:**	MEX	**Reg Cd:**	NA	**Repr Date:**10-FEB-2014	**DIST(Mile):**6213

Cust Comments:	RV,- CONSULA CENTRAL SUPERIOR ESTA SUELTO
Tech Comments:	SE REV. LA UNIDA ENCONTRANDO Q CONSOLA CENTRAL SUPERIOR ESTA SUELTA, POR LO Q SE PROCEDIO A SU REVISION DETECTANDO MAL ENSAMBLADO POR LO Q SE PROC EDIO A RZAR CONSOLA PARA CORREGIR EL PROBLEMA.

3FA6P0G78DR[redacted] DE C/C7 F C/FC C/DA C/A A3 C/W6 C/S7 22-SEP-2012 03-SEP-2013 2M2633 MEX 12 6J02 MBE8Z 5426412 B F08 F8 V07 L15 42

AWS Claim Key:	8382727	**Doc #:**	05773901	**Trx Code:**	E84	**Labor Hrs:**	1	**Labor Cost:**	29.5094761	**Material Cost:**	141.1520383	**Total Cost:**	170.6615144
Dlr Cd-Sub Cd:	M2633-*	**Name:**	AUTOS DE HERMOSILLO, S.A. DE C.V.	**Ph:**	662-289-029	**St:**	SO	**Ctry Cd:**	MEX	**Reg Cd:**	NA	**Repr Date:**15-AUG-2014	**DIST(Mile):**17519

Cust Comments:	RV.- PUERTA DELANTERA DERECHA NO CIERRA
Tech Comments:	SE REV.LA UNDIAD ENCONTRNADO Q PUERTA DELANTERA DERECHA NO CIERRA POR LO Q SE PROCEDIO A REVISAR ALIMENTACION CON MULTIMETRO DETECTNADO Q SI LE LLEGA CORRIENTE SE PROC.A DESMONTAR TAPICERIA DE PTA DETECTNADO PROBLEMA INTERNO EN ACTUADOR DE DESMONTO Y SE RZO ACTUADOR DELANTERO DERECHO PARA CORREGIR EL PROBLEMA.

Regards.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
Phone: +[redacted]
Mobile: +

From [redacted]
Sent: Thursday, August 21, 2014 11:02 AM
To: [redacted]
Cc:
Rob
Subject: RE: Análisis pieza retornada HSAP

Somewhere in the note it says it was for “the rare condition of door came open” not “door won’t latch”

From [redacted]
Sent: Thursday, August 21, 2014 2:00 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

None of them, this part was removed this Monday, maybe it’s not yet uploaded. But, the failure mode was door latch won’t latch again. At the AWS report comes the dealership contact information, Autos de Hermosillo. Maybe, if you want more detail, we can contact them.

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PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
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Sent: Thursday, August 21, 2014 10:58 AM
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From: [redacted]
Sent: Thursday, August 21, 2014 1:42 PM
[redacted]

Subject: RE: Análisis pieza retornada HSAP
Importance: High

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Ford PD, have we requested a Request Order for all-time in service door latches with this failure mode? At least, to be requesting 10 parts per week. Has this been done? If not, we can contact Iris Washington to support.

Regards.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 9:28 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

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From: [redacted]
Sent: Thursday, August 21, 2014 12:11 PM
[redacted]
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Understood, the latch will probably be turned around on Friday as that is the day it is expected to be received at KdM from HSAP. ETA Kiekert Wixom Monday/Tuesday of next week.

Regards,

Ernie Mullins
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Thursday, August 21, 2014 12:08 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

No teardowns on this at all until CCRG gives us the OK.

Do not go where the path may lead, go instead
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Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]
Sent: Thursday, August 21, 2014 9:23 AM
[redacted]

Thanks Paul, very much appreciated.

[redacted]

-----Original Message-----
From: [redacted]
Sent: Thursday, August 21, 2014 08:49 AM Eastern Standard Time
To: [redacted]
Subject: RE: Análisis pieza retornada HSAP

Yes Matt I will.

Paul Childs
Customer Quality Engineer
Keykert USA, Inc.
46941 Liberty Drive

[redacted]

From: G[redacted]]
Sent: Thursday, August 21, 2014 8:16 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]
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[redacted]

-----Original Message-----
From: Childs, Paul [Paul.Childs@kiekert.com]
Sent: [redacted]
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Team,

I received an email letting me know that the suspect latch was sent to Kiekert de Mexico Team (Miriam and Arturo) .

Here is the tracking number for this latch M2378328193 by UPS.

Paul Childs
Customer Quality Engineer
Keykert USA, Inc.
[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 5:51 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

Please provide the FedEx tracking number when we have one to this team – This is an important latch since it will be the first intact latch described as "door opens while driving" we have had an opportunity to conduct an engineering review upon. Thanks for all your help on this Maria.

Regards,
Matt Greenisen
STA – Latches/Door Systems

From: C[redacted]
Sent: Tuesday, August 19, 2014 2:14 PM
To:[redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]

My shipping information is listed below.

Paul Childs
Customer Quality Engineer
Keykert USA, Inc.
[redacted]

From: G[redacted]
Sent: Tuesday, August 19, 2014 2:12 PM
[redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Thank you Matt.

Paul, could you please provide to me the information to be able to ship the part with the failure mode that was recovered yesterday from a 2013MY Fusion and the part that Miriam has in Puebla?

Regards.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: Greenisen, Matt (M.J.)
Sent: Tuesday, August 19, 2014 10:54 AM

To: [redacted]
Cc: [redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted]
I unfortunately think Ernie Mullins is out of the office right now, so in order to co-ordinate the shipment of the latch I have added Paul Childs to the email.

[redacted]
Please assist Maria in getting both latches returned to Wixom, these are significant latches as they are of the very rare population of "door opens while driving"

Thanks,
[redacted]
STA – Latches/Door Systems

From: Gamez, Guadalupe (G.)
[redacted]
Subject: RE: Análisis pieza retornada HSAP
Importance: High

Good morning [redacted]

Thank you for your quick response.

I am adding [redacted] la.

Miriam, can you please send the part that was analyzed to Kiekert Wixom? Could you please provide the tracking number?

The part that I am recovering from the dealership today I will send it directly to Kiekert Wixom.

I will wait for Ernie's instructions to send it to them.

Thanks for your support!

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From: [redacted]
Sent: Monday, August 18, 2014 9:22 AM
[redacted]
Subject: RE: Análisis pieza retornada HSAP

[redacted],
Kosta is out of the office at a technical conference I believe till Thursday. I will make certain that you are included in the future meetings. I am assuming you plan to send the latch to Kiekert Puebla? By any chance could you send that latch to Kiekert

Wixom (the NA Headquarters) here in Michigan? It would make it easier for Kosta and Myself to meet with Kiekert to review the latch if we had it sent to them up here.

I have included Ernie Mullins from Kiekert on this message (he is the Director of Quality for Kiekert) so that he can co-ordinate with you the shipping of the new latch up to Wixom.

Thanks,
[redacted]
STA – Latches/Door Systems

From: G[redacted]
Sent: Monday, August 18, 2014 11:14 AM
[redacted]
Subject: FW: Análisis pieza retornada HSAP
Importance: High

Good morning[redacted],

Could you please inform to me which is the latest update of this issue.

We found a 2013MY Fusion that suddenly the right front door latch was not holding. Attach is Kiekert analysis where they found a component cracked.

Miriam Morales, from Kiekert, told me that this high-time in service failure mode was reported to her almost one month ago.

According to our FCSD engineer, we have reports of 5 vehicles 2013MY and 1 vehicle 2014MY.

Today I will pick-up at the dealership another latch with the same failure mode. I will send it to Kiekert.

Could you please keep me posted on your meetings?

Thank you.

Maria Guadalupe Gamez Lopez
PVT | Handles, Locks & Mechanisms Engineer
Ford Motor Company | Hermosillo Stamping and Assembly Plant
[redacted]

From:[redacted]
Sent: Friday, August 15, 2014 12:15 PM
To: [redacted]
[redacted]
Subject: Análisis pieza retornada HSAP

Buen día Guadalupe

Adjunto la presentación del análisis realizado a la pieza retornada de HSAP por cerrojo no retiene.

Arturo Robles (Garantías) fue informado respecto a esta pieza.

La investigación de este tema esta cargo de Calidad Ford Matt Greenisen , Calidad Kiekert Ernie Mullins, Ingeniería Ford Costa Papanicolaou e Ingeniería Kiekert Héctor Verde.

Saludos

Ing.Miriam Morales Romero
Quality
Kiekert de México S.A de C.V
Km 14.5 Autopista Puebla-Orizaba
Parque Industrial,Chachapa,Amozoc Puebla México
C.P 72990
Cell: [redacted]
[redacted]

Headquarters: Kiekert AG, Hoeseler Platz 2, 42579 Heiligenhaus/Germany
T: +49-2056-15-0; www.kiekert.com
Registered in Heiligenhaus; Company Register Wuppertal HRB No 17915
Executive Board: Dr. Karl Krause (Chairman), Stephan Espelage, Ulrich-Nicolaus Kranz, Juergen Wenzel
Supervisory Board: Xizeng Li (Chairman)
IBAN : DE72 3307 0090 0484 1300 01
BIC : DEUTDEDWXXX
>
This email contains confidential and/or privileged information. If you are not the intended recipient or have received this email in error, please notify the sender and destroy this email. Any unauthorized copying, disclosure or distribution of this email is strictly forbidden.

From: [redacted]
Sent: Monday, August 04, 2014 11:09 AM
To: [redacted])
Subject: RE: C1 Pawl Post Investigation and Analysis

[redacted]

It's OK to share the information.

Thanks,

Best Regards
Project Team Manager - Latches

Maria Urriola

[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 7:02 PM
To: [redacted]
Subject: FW: C1 Pawl Post Investigation and Analysis

[redacted]

This is what I was planning on sending out to everyone, but since Brose has put together so much data so quickly I wanted to give you first right of refusal if there is something I shouldn't share with Keykert. Let me know and I will adjust accordingly before I send it out to the distributed working team of Brose/Ford/Keykert.

[redacted]

Ladies/Gentlemen,
I have included everyone on this email so as to provide an open book as to where we are at collectively with the analysis. All of the files are uploaded in Dropbox and shared via links (Folder sharing doesn't work well at Ford). I have gone ahead and shared all the documentation I have, if there is something that I have shared that you would like taken down please just let me know I don't want openly share something someone may have an issue with. I am pretty certain at this point that everyone knows at least 85% of the details around this issue.

The first Dropbox link is just the Action Tracker with R/Y/G Status for Keykert/Brose/Ford, if there is an item that I have omitted please let me know and I will add it into the tracker. The tracker is basically Keykert's tracker that I just added some tabs and additional lines to in order to add Brose and Ford.

https://www.dropbox.com/s/lpyjyf53hseplt7/C1A%20Pawl%20Post%20Action%20Tracker%207_31_2014.xlsx

The second file is the Regression/8D presentation that I think everyone has already seen but I wanted to make it available electronically for background purposes.

https://www.dropbox.com/s/9ucmv84ulzyvc57/C1A%20Pawl%20Post%20Analysis%20Regression%20and%20Original%20Keykert%208D.pdf

The third file is the just the 5 vehicle VINs that have the claimed condition of door opening while driving (not yet confirmed to be different than door will not close).

https://www.dropbox.com/s/jx0yyojfoyvjcg8/VINs%20for%205%20Vehicles%20Claimed%20as%20Door%20Opens%20While%20Driving.pdf

The fourth file is so Frozen charts most of which are updates from the original regression/8D but some new charts and new insights into environment vs. spring change influence, and also notably the addition of Mexico in detail to the analysis (high impacts in Baja most notably – 7% failure rate statewide).

https://www.dropbox.com/s/uuxgx1indl8mudo/Pivot%20Table%20Frozen%20Charts%20AWS%20C1A%20Claims%20Cuautitlan%20and%20Hermosillo%20Total%20Claims%202014%2007%2031.pdf

The fifth file is the POM Mechanical Property charts that include performance across the functional temperature range along with elongations to failure and some flexure modulus data. Included are charts for Hostaform 9021 and Celcon M90.

https://www.dropbox.com/s/mpdv82czww4aupe/POM%20Mechanical%20Property%20Data%20Celcon%20M90%20and%20Hostaform%209021%20%28Mech%20Prop%20at%20Temps%29..pdf

Files six, seven and eight are just short videos of the assembly process. The videos are shared just to note the difference in assembly processes not to make a value judgment of one vs. the other.

https://www.dropbox.com/s/g8thhenddmtz9rp/Brose%20Spring%20Assembly.mp4
https://www.dropbox.com/s/cs7bn4ny4mk89j1/Keykert%20Spring%20Assembly%20Video%201.wmv
https://www.dropbox.com/s/uvke6dzkr091v15/Keykert%20Spring%20Assembly%20Video%202.wmv

File nine is the dimensional scans provided by Brose for their pawl post feature (Once we get Keykert's dimensional scans for the feature it these will provide an important comparison if there is any notable difference and in turn gain/loss in comparative strength).

https://www.dropbox.com/s/qzvpzjj3d777td6/Brose%20Blue%20Light%20Scans%20of%20Pawl%20Post%20Cavities%201%20through%204.pdf

I have not provided a link for the raw claims data as I think all the people that wanted to do analysis on the raw claims have done so already. I will provide the raw sales volumes for Fiesta and Fusion 2010-2014 as they may be useful if there is some aspect that has not been normalized that needs done still (link below for file ten).

https://www.dropbox.com/s/tzu7tbbuzhvz34p/2010-14%20Fiesta-Fusion-MKZ%20Volumes%20by%20Dealer%20Code%2C%20Zip%20Code%2C%20Paint%20Color.xlsx

Again I want to comment that I am sharing all of this between all involved parties largely due to the potential impact of the issue. If anyone has any issue with what is being shared I will be happy to remove some of the 9 files provided above. In that same spirit if there is some deliverable or data I have neglected to include that we have already traded between us please don't hesitate to point it out. Brose and Keykert as well have been excellent in putting so much information together on such short notice and as usual you have my gratitude. It will be interesting to see what we end up with for measured in door temperature data for the southwest environments along with how the various FEAs that are in process also turn out.

Best Regards,
M[redacted]
STA – Latches/Door Systems
3[redacted]

[redacted]

From: [redacted]
Sent: Wednesday, August 27, 2014 12:29 PM
To: C[redacted]
[redacted] [redacted]
Subject: RE: C1A Issue
Attachments: C1A Latch Toolsets and Configurations.xlsx

[redacted]

after our phone conversation yesterday, I discussed with Kosta & he said that they have asked the other regions to see if they are having the same problem (door will not close/latch) and the responses he has received is that they "have not seen it". So, to be sure, can your team of analysts look into this?

See attached matrix for breakdown of supplier & toolsets for common C1A door latch design.

From: [redacted].)
Sent: Wednesday, August 27, 2014 11:10 AM
To: [redacted])
Subject: RE: C1A Issue

Does look Like what we need?

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson
Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
([redacted]
[redacted]

From: [redacted]
Sent: Wednesday, August 27, 2014 10:09 AM
To: [redacted]
Subject: RE: C1A Issue

What vehicle lines use C1A globally that we want them to look for?

The goal is a matrix showing:

Supplier vs. supplier regional tool set vs vehicle line (subsets) and if they show the problem or not.

From: P[redacted]
Sent: Tuesday, August 26, 2014 5:16 PM
To: [redacted])
Subject: C1A Issue

We are looking for "Will Not Close" issues, especially in hot regions.

Do not go where the path may lead, go instead where there is no path and leave a trail. - Ralph Waldo Emerson

[redacted]

Technical Specialist -Latching Body Hardware

Body Engineering

[redacted]

[redacted]

Latch	C1A						
Region	EU		NA		APA		
Suppliers	Brose	Kiekert	Brose	Kiekert	Xing Guang	Brose	Kiekert
Lower Housing Tier 2	?	?	Intec	Intec	?	?	?
Vehicles							
B299		X		X	X		
C346	X		X				X
C344	X			X			
C520	X		X				X
T6							X
B515				X		X	X
CD391		X		X			X
CD533		X		X			X

<---In APA, Kiekert till March 2015

From: [redacted]
Sent: Wednesday, July 16, 2014 11:47 AM
To: [redacted]
[redacted] [redacted]
Subject: RE: Engineering Discussion - 2014 Fiesta Side Door Latching

Sensitivity: Private

[redacted]

See if there is a spot open for tomorrow. If not hold with the Friday meeting and we can tie in with Kosta at a later date. Moving to next week does not work since I will be out all week.

Also key to have...

- Either Mickey White or Matt Greenisen
- Dave Burgess
- Bhupendra Patel

Regards,

[redacted]
Small Car & Utility Vehicles
Critical Concern Manager
[redacted]

From: [redacted])
[redacted]
Subject: FW: Engineering Discussion - 2014 Fiesta Side Door Latching
Sensitivity: Private

fyi

-----Original Appointment-----
From: [redacted]
Sent: Wednesday, July 16, 2014 9:25 AM
To: M[redacted]
Subject: Declined: Engineering Discussion - 2014 Fiesta Side Door Latching
When: Friday, July 18, 2014 3:30 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: WebEx/WebEx Audio
Sensitivity: Private

I am on vacation Friday. Can we reschedule to tomorrow or Monday?

From: [redacted]
Sent: Friday, July 18, 2014 4:41 PM
To: [redacted]
[redacted] [redacted]
Subject: RE: Engineering Discussion - 2014 Fiesta Side Door Latching

Sensitivity: Private

[redacted],
Any discussion about Kiekert supplier (EBKTA), please add me on your distribution list, I am STA Site Engineer for.

Regards
[redacted]
STA Site Engineer

-----Original Appointment-----
From: [redacted]
Sent: viernes, 18 de julio de 2014 03:19 p.m.
To: [redacted]
Subject: FW: Engineering Discussion - 2014 Fiesta Side Door Latching
When: viernes, 18 de julio de 2014 03:30 p.m.-04:00 p.m. (UTC-05:00) Eastern Time (US & Canada).
Where: WebEx/WebEx Audio
Sensitivity: Private

-----Original Appointment-----[redacted]
[redacted]
Sent: Friday, 18 de July de 2014 09:13 a.m.
[redacted]
Subject: FW: Engineering Discussion - 2014 Fiesta Side Door Latching
When: Friday, 18 de July de 2014 03:30 p.m.-04:00 p.m. (UTC-05:00) Eastern Time (US & Canada).
Where: WebEx/WebEx Audio
Sensitivity: Private

Please attend to discuss the actions with supplier at CSAP.

-----Original Appointment-----
From: [redacted])
Sent: miércoles, 16 de julio de 2014 05:38 p.m.
[redacted])
Subject: FW: Engineering Discussion - 2014 Fiesta Side Door Latching
When: viernes, 18 de julio de 2014 03:30 p.m.-04:00 p.m. (UTC-05:00) Eastern Time (US & Canada).
Where: WebEx/WebEx Audio
Sensitivity: Private

-----Original Appointment-----
From: [redacted]
Sent: T[redacted]
[redacted]
Subject: Engineering Discussion - 2014 Fiesta Side Door Latching
When: Friday, July 18, 2014 3:30 PM-4:00 PM (UTC-05:00) Eastern Time (US & Canada).
Where: WebEx/WebEx Audio
Sensitivity: Private

[redacted]
Small Car, Small/Medium SUV & Commercial Vehicle
Product Problem Analyst
[redacted]
Dave McClenaghan invites you to the following WebEx meeting:

WebEx meeting information

Meeting Link: https://ford.webex.com/ford/j.php?J=714313656
Meeting Number: 714 313 656
Meeting Password: This meeting does not require a password.

This meeting may include the option for video. The recording of meetings is prohibited. For company policies on using video click here:
https://comm.sp.ford.com/sites/digitalworker/Pages/HowiWorkItem.aspx?UCTitle=to%20use%20Video&UCID=&Page=2&Section=2.001

Audio conference information

[redacted]
Global call-in numbers: https://ford.webex.com/ford/globalcallin.php?serviceType=MC&ED=299084327&tollFree=1
Toll-free dialing restrictions: http://www.webex.com/pdf/tollfree_restrictions.pdf

Access code:714 313 656

MC05

http://www.webex.com

From: [redacted]
Sent: Monday, August 18, 2014 6:54 AM
To: [redacted]
Subject: RE: Engineering Review in the Morning @ 8:30

Well, I see Kosta is out at a conference in Buffalo.m The meeting will probably only be 1/2 hour

---

From: [redacted]
Sent: Monday, August 18, 2014 6:49 AM
To: [redacted]
Subject: RE: Engineering Review in the Morning @ 8:30

Matt, thanks for the update & work involved. For the 1st 1/2 hour - let's concentrate on the link from the spring to the door opening while driving.

From: [redacted]
Sent: Sunday, August 17, 2014 9:00 PM
[redacted]
Subject: Engineering Review in the Morning @ 8:30

[redacted]
I have a conflict during the second half of the meeting so I won't be available for the full duration, but I did go ahead and merge the various work streams into one presentation. It is rather long at 110 slides now and the only thing that I think it doesn't currently include is the task given to conduct stack up analysis. The presentation is just a rough draft but I think it captures most of what we have worked through so far. I'll put the links below since I will be driving to Key Plastics Northville during the meeting for their inside handle recall issue.

PowerPoint
https://www.dropbox.com/s/n7dig7tdbc3tlxh/C1A%20Pawl%20Post%20Spring%20Retention%20Feature%20Merged%20Presentation%208_17_2014.pptx

PDF
https://www.dropbox.com/s/jlzolljgdfb2vlz/C1A%20Pawl%20Post%20Spring%20Retention%20Feature%20Merged%20Presentation%208_17_2014.pdf

The files are too big to send via email now (37 megs for the PPT and 12 megs for the PDF). You should get another email that is the link share just in case the copied and pasted links above don't work for you. Take a look ahead of the meeting if you have time and want to review it in the meeting. Remember it is a rough first cut of merging things together, not a polished anything.

Best Regards,
Matt Greenisen
STA – Latches/Door Systems
[redacted]

From: [redacted]
Sent: Wednesday, September 10, 2014 2:48 PM
To: [redacted])
Subject: RE: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

Ok – I am on a conference call – once completed I can walk down and tell them what you need

[redacted] [redacted] [redacted]
FCSD-PS&L-Supply Chain
Field Fix/Critical Parts/Production Liaison
Phone [redacted]
[redacted]

From: [redacted]
Sent: Wednesday, September 10, 2014 2:46 PM
To: [redacted]
Subject: RE: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

Thanks Rob,

Unfortunately, I'm in a meeting and Preston tried calling me. So I will follow-up with him.. Thanks for your help

Nicholas Baracos Jr.
Ford Motor Company
Automotive Safety Office
[redacted]
[redacted]

From: [redacted])
Sent: Wednesday, September 10, 2014 2:44 PM
To:[redacted])
Subject: RE: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

[redacted]

It makes sense to me – but I understand the lingo. I would have Joe get you a complete breakdown – as it is his group's responsibility to follow up. Joe can tell you the Off backorder date with some accuracy – expedite parts – etc. If you cannot reach Joe – then Preston will help – or I can go down to that group and find out the analyst who works with this supplier and have them provide a update.

[redacted] [redacted] [redacted]
FCSD-PS&L-Supply Chain
Field Fix/Critical Parts/Production Liaison

Phone Number:([redacted]

[redacted]

From: B[redacted]
Sent: Wednesday, September 10, 2014 2:41 PM
To: [redacted]
Subject: FW: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

Rob,

Does this make sense per our conversation? I'm still waiting on a call back from Joe…

Thanks

Nicholas Baracos Jr.
Ford Motor Company
Automotive Safety Office
[redacted]

From: [redacted]
Sent: Wednesday, September 10, 2014 2:33 PM
[redacted]
Subject: RE: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

[redacted]s,
Just finished speaking with Maureen on the phone and I think she has been really helpful getting us started understanding the situation. As it stands for Fiesta (B299) using the right rear door (67% of the failures concentrated to it):

- 1 Unit in stock
- None in Transit between FCSD and the Service Depots
- 76 Units in Transit to FCSD from the Packager
- 238 Units in Transit to the Packager from Kiekert Puebla
- 194 Units on Backorder

Forecasted demand

- Previously 150 Units/Month
- Adjusted to 175 Units/Month
- Maureen is currently pursuing a further increase to catch up to demand
  - July total demand – 196 Units
  - August total demand – 200+ Units
  - September demand to date (Sept 9th) – 89 Units

Again I am not certain how the process works, but it would look to be that even if we adjust the forecast up to 200 Units/Month (assuming our releases are made to match the forecast) it will be multiple months to catch up the Backorder. I am not sure if there is an opportunity to do something like an emergency release to catch up the Backorder? I would assume that would be the desire from NHTSA at this point of the investigation?

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Wednesday, September 10, 2014 2:09 PM
[redacted]
Subject: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder
Importance: High

[redacted],
Due to an issue associated with a combination of environmentally hot states and the C1A side door latch we have a relatively large amount of vehicles requiring replacement side door latches from service. The dealers are stating that the latches are on backorder, but when a number of us have inquired as to the production status of the supplier (included in this email) we are by no means running at maximum production. I was wondering if you could help us figure out and correct this issue. It would appear that for some reason the supplier is not receiving uplifted releases? Is it possible there is some issue where the service depots are not ordering more? I am not 100% sure of the process but given the magnitude of the issue (>3000 warranty claims) we are experiencing significant customer dissatisfaction.

NHTSA (National Highway Transportation Safety Administration) has inquired as to why we are unable to fill the service part replacements and we owe them an expedient answer. If you could please make looking into this a priority I would personally appreciate it, along with I am sure appreciation from ASO (Automotive Safety Office) and OGC (Office of General Counsel). Due to the safety nature of this NHSTA has begun a dialogue around this issue, and as such it is under significant scrutiny here at Ford. NHTSA is looking for a response back on the issue of unfulfilled supply ASAP and unfortunately were looking for an answer by today.

[redacted]
If Maureen needs the service parts numbers for Fiesta (B299) and Fusion (CD391) side door latches could you please provide them to her?

Best Regards,
[redacted]
STA – Latches/Door Systems
[redacted]

From: [redacted]
Sent: Thursday, September 11, 2014 11:03 AM
To: [redacted]
Subject: RE: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

Thx

From: [redacted]
Sent: Thursday, September 11, 2014 10:58 AM
To: [redacted]
Subject: FW: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

[redacted]
Should have included you in the discussion but I was asked to look into the backorder situation. You can read the chain below, there really isn't much positive to say how we processes this, it would appear the system doesn't have any mechanisms in place to compensate for shifts in demand (no safety stock, doesn't order to match usage, forecasts used to order are manually adjusted, unknown lead times, unknown supply chain time from start to end, etc.). Guess I'll work to get this addressed for at least door systems.

Thanks,

[redacted]
STA – Latches/Door Systems

From: [redacted])
Sent: Thursday, September 11, 2014 7:32 AM
To: [redacted]
[redacted]
Subject: FW: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

[redacted]
This is related to the email I sent you yesterday on the B299 latch. Can you answer Matt's questions?

Maureen Pickard
FCSD Buyer
Interior Purchasing Dept.
[redacted]

From: [redacted]
Sent: Wednesday, September 10, 2014 5:33 PM
[redacted]
Subject: FW: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

[redacted]
When I look at the current inventory state it begs a couple of questions from me that hopefully you can answer.

- Do we have no minimum target for safety stock? Or if we do what level do we set that at? Unfortunately that safety stock calculation is going to involve [1. Length of the supply chain, 2. Reliability of each of the supply chain legs for lead time consistency 3. Variability of unit demand etc.] things you may not have insight into (maybe there are domestic contacts to add to the discussion). I guess it would be worthwhile maybe to gather up the players involved and have a short meeting as most likely a Field Service Action will follow this and it would be nice not to go into that with 0 Units on hand and a backorder quantity.
- Is there a mechanism to do a one-time buy in order to provide stock in light of having a backordered quantity?
- Do we make releases solely based on forecasts rather than actual usage?
- If we make releases solely based on forecasts I am going to guess we have no predictive method outside of manual calculations for how long it takes to catch up on backorder quantities?

I really genuinely appreciate all your help on this issue, I think at minimum I will come out on the other side with a better understanding and possibly a plan to improve things for events like this going forward.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted])
Sent: Wednesday, September 10, 2014 2:33 PM
[redacted].)
Subject: RE: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder

[redacted]
Just finished speaking with Maureen on the phone and I think she has been really helpful getting us started understanding the situation. As it stands for Fiesta (B299) using the right rear door (67% of the failures concentrated to it):

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    - August total demand – 200+ Units
    - September demand to date (Sept 9th) – 89 Units

Again I am not certain how the process works, but it would look to be that even if we adjust the forecast up to 200 Units/Month (assuming our releases are made to match the forecast) it will be multiple months to catch up the Backorder. I am not sure if there is an opportunity to do something like an emergency release to catch up the Backorder? I would assume that would be the desire from NHTSA at this point of the investigation?

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted])
Sent: Wednesday, September 10, 2014 2:09 PM
[redacted]
Subject: Fiesta (B299) Side Door Latches for Service - Dealers Citing Backorder
Importance: High

[redacted],
Due to an issue associated with a combination of environmentally hot states and the C1A side door latch we have a relatively large amount of vehicles requiring replacement side door latches from service. The dealers are stating that the latches are on backorder, but when a number of us have inquired as to the production status of the supplier (included in this email) we are by no means running at maximum production. I was wondering if you could help us figure out and correct this issue. It would appear that for some reason the supplier is not receiving uplifted releases? Is it possible there is some issue where the service depots are not ordering more? I am not 100% sure of the process but given the magnitude of the issue (>3000 warranty claims) we are experiencing significant customer dissatisfaction.

NHTSA (National Highway Transportation Safety Administration) has inquired as to why we are unable to fill the service part replacements and we owe them an expedient answer. If you could please make looking into this a priority I would personally appreciate it, along with I am sure appreciation from ASO (Automotive Safety Office) and OGC (Office of General Counsel). Due to the safety nature of this NHSTA has begun a dialogue around this issue, and as such it is under significant scrutiny here at Ford. NHTSA is looking for a response back on the issue of unfulfilled supply ASAP and unfortunately were looking for an answer by today.

[redacted]
If Maureen needs the service parts numbers for Fiesta (B299) and Fusion (CD391) side door latches could you please provide them to her?

Best Regards,
[redacted]

From: [redacted]
Sent: Tuesday, July 29, 2014 12:38 PM
To: [redacted]
[redacted] [redacted]
Subject: RE: Fiesta C1A Latch Returns - Specifically "Door Opens While Driving"

[redacted]
Thanks for the response, I was afraid that might be the confirmation (I know we had discussed it a little during one of the calls). Until we get back parts I am sure there is going to be a great deal of theories people will try to assert then going forward. I look forward to getting one of these back, not that I want the occurrence to happen but we really do need a return here to know if they are correlated or not, I can't stress it enough.

Thanks,
[redacted]
STA – Latches/Door Systems

From[redacted]
Sent: Tuesday, July 29, 2014 12:27 PM
To:[redacted]
Subject: RE: Fiesta C1A Latch Returns - Specifically "Door Opens While Driving"

Matt,
Since those parts were not requested via WPRC process within 2 days of the repair the parts cannot be recovered at this time.

If you recall I initiated the Find a Vehicle on July 18 and you will receive the mail from the dealer when a latch criteria is meet.

I talked to the dealer in Hermosillo last week to get the latches on a Fiesta that arrives for any other cause but I need to provide them with a replacement latch since there is an apparent availability issue of latches in service. Kiekert will support this plan with certified parts by 7/31.

Javier Montaño
Ford Fiesta FCSD & Quality Program Manager
[redacted]

Go Further

From: [redacted]
Sent: martes, 29 de julio de 2014 09:43 a.m.
[redacted]
Subject: RE: Fiesta C1A Latch Returns - Specifically "Door Opens While Driving"

Gentleman,
I did not receive a response or confirmation back that we are actively pursuing the retrieval of at least one of these 5 latches. Please confirm back the status of the deliverable as it is imperative to understanding the connection between "Door will not close" and "Door opens while driving", this is not an optional deliverable.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted])
Sent: Saturday, July 26, 2014 9:01 PM
[redacted]
Subject: Fiesta C1A Latch Returns - Specifically "Door Opens While Driving"

Gentlemen,
As it is vital that we have some number of the 5 latches that failed in the field with the condition of "door opens while driving" I wanted to make certain that someone is pursuing retrieval of those latches as we discussed. If you could please respond back and let me know we have done everything and anything we can do in working towards retrieving these latches I would appreciate it.

In addition to the field failures has anyone pursued a discussion with the dealership in Peoria, AZ and the possibility of in service but not failed latches (say when a Fiesta comes in for an oil change – change the latch in the right rear door and return it to Dearborn)?

Thanks for your help and please let me know the status by COB on Tuesday July 29th.

Best Regards,
[redacted]
STA – Latches/Door Systems
[redacted]

From: [redacted])
Sent: Wednesday, September 17, 2014 5:41 PM
To: [redacted]
Cc: [redacted]
Subject: RE: Fiesta Door

As indicated in our Monday GCCRG, NHTSA has opened a Preliminary Evaluation inquiry on the Fiesta door latch concern. We have received the resume. The actual inquiry is forthcoming.

Mark Tuneff, the person who replaced Dave Ott as the ASO External Investigation Manager will be taking lead on the inquiry and investigation. He will be assigning it to one of his people to administer.

Regards,

[redacted]
Small Car & Utility Vehicles
Critical Concern Manager
[redacted]

From: [redacted]
Sent: Wednesday, September 17, 2014 2:35 AM
To: [redacted]
Subject: RE: Fiesta Door

Hi [redacted] – This is on the Global CCRG agenda. Investigation is being led by US team. The investigation still needs to confirm if this is a local US concern or may affect other regions.

[redacted] Above is the latest I have on this concern. Any other detail you can add?

Regards,
Bill

From: [redacted]
Sent: Wednesday, 17 September 2014 1:07 PM
To: B[redacted]
Subject: FW: Fiesta Door

Any background to this guys?

From: [redacted])
Sent: Wednesday, September 17, 2014 6:59 AM
To: [redacted].)
Subject: FW: Fiesta Door

Guys,
Any idea what is being investigated and how the implication to AP is?
Thanks.

Best regards,
Terry Huang

From: [redacted]
(S.)
Sent: 16 September 2014 08:27
To: [redacted]
Subject: US: 205,000 Ford Fiestas investigated for door-latching issue

Is this affecting ours and AP?

Thomas Fann

205,000 Ford Fiestas investigated for door-latching issue

September 15, 2014 - 11:43 am ET

DETROIT (Reuters) -- U.S. safety regulators have opened an investigation into an estimated 205,000 Ford Fiesta small cars after receiving consumer complaints that doors failed to properly latch or stay closed.

The U.S. National Highway Traffic Safety Administration opened a preliminary evaluation into the issue in 2011-13 Fiestas after it received 61 complaints.

A spokeswoman at Ford Motor Co. said that it was cooperating with the NHTSA investigation.

In several cases, the "door ajar" warning light on the dash appeared, according to documents filed on the NHTSA website. In 12 cases, the door opened after it was shut and the drivers started their routes. One injury was reported.

NHTSA said in the documents filed online that it was opening the investigation to further analyze the scope, frequency and consequences of the reported incidents.

A preliminary investigation is the first step in a process that could lead to a recall if regulators determine that a manufacturer needs to address a safety issue.

Contact Automotive News

Thomas Fann
President, Ford Lio Ho
[redacted]

From: [redacted]
Sent: Friday, September 05, 2014 1:09 PM
To: [redacted]
Subject: RE: Fiesta Door latch

Just made a new folder and added you (invite should be in your inbox) – the presentation is there. Like I referenced in my invite though you need to access it through the web browser as Ford IT permissions will not let you install the dropbox application. Let me know if you need anything else.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Friday, September 05, 2014 1:06 PM
To: [redacted]
Subject: RE: Fiesta Door latch

[redacted]

No worries, I ended up getting a copy from Kosta. I am still trying to get a copy of the animation.

Thanks

[redacted]

-----Original Message-----
From: [redacted]J.)
Sent: Friday, September 05, 2014 12:58 PM Eastern Standard Time
[redacted]
Subject: RE: Fiesta Door latch

[redacted]
Sorry for the delay, sending the presentation is difficult it is currently around 42 megabytes. If you have Dropbox I can provide the file to you that way, would that work? I will setup a folder in my dropbox and add you and I together so that you can retrieve it from that location. Look for a folder sharing invite shortly.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted].)
Sent: Wednesday, September 03, 2014 10:32 AM

To: [redacted].)
Subject: Fiesta Door latch

[redacted]

Can you send me a copy of the presentation that you gave last week regarding this subject matter? Thanks

Nicholas Baracos Jr.
Ford Motor Company
Automotive Safety Office
[redacted]

From: [redacted]
Sent: Thursday, September 11, 2014 9:23 AM
To: [redacted]
Subject: RE: Fiesta Door Latches
Attachments: FW: Part Numbers

Yes. Left you a voicemail earlier this morning. Ref the attached.

Kiekert was contacted about outstanding orders (ref 96 parts) – warehouse front office and up to the plant manager at the manufacturing plant are aware and prioritized.
The thinking is parts missing may be after Kiekert at the packager and on the way to Ford. This is being confirmed

In addition Preston has orders going into the system – the new order essentially is the next 6 months requirements – against which a rate and flow for all will be established as per normal.

Kiekert is aware, supporting, and prioritizing.

From: [redacted]
Sent: Thursday, September 11, 2014 9:16 AM
To: [redacted]
Subject: Fiesta Door Latches

[redacted]

Did you get a chance to talk to Preston Liddle last night about this issue? Any updates? Thanks

Nicholas Baracos Jr.
Ford Motor Company
Automotive Safety Office
[redacted]

From: [redacted]
Sent: Thursday, September 11, 2014 8:03 AM
To: [redacted]
Subject: FW: Part Numbers

Here are the quantities we're requesting.

From: H[redacted]
Sent: Thursday, September 11, 2014 7:28 AM
To: [redacted]
Subject: RE: Part Numbers

[redacted]

I've input fixed demands (6 months of forecast) for the following parts/quantities per your request.. I have it set up to send the inventory to PRC, if you'd like me to have it disaggregate down to the child points, I can do that as well. I've also bumped the forecasts on these parts a bit, and updated the parms so they are more reactive to the incoming sales. The releases should go out this weekend.

	6 months of Fcst
BE8Z5426413B	1,620
BE8Z5421812B	3,879
BE8Z5426412B	10,828
BE8Z5421812C	365
BE8Z5421813B	600

Regards,

Christie Hahn
Forecasting Team Supervisor
Ford Customer Service Division
[redacted]

Please consider your environmental responsibility before printing this e-mail.

From: [redacted])
Sent: Thursday, July 03, 2014 10:49 AM
To: [redacted]
[redacted] [redacted]
Subject: RE: Fiesta Door Latches

Tracking:

Recipient	Read
[redacted]	[redacted]
[redacted]	
[redacted]	[redacted]
[redacted]	
[redacted]	
[redacted]	[redacted]
[redacted]	Read: 7/3/2014 10:49 AM

[redacted]
The original note from the dealer states that there is a supply issue at the supplier as your note also confirms no availability in 3 out of 5 parts.

Do you know who may help understand the supplier supply issue and when we will have enough stock in service?

Thanks,

Javier Montaño
Ford Fiesta FCSD & Quality Program Manager
T +[redacted]
[redacted]
[redacted]

From: [redacted]
Sent: jueves, 03 de julio de 2014 08:25 a.m.
To: [redacted]
[redacted]
Subject: FW: Fiesta Door Latches

Inspection results are as follows:

BE8Z- 5421812-B (AE8A 5421812 BF) – No stock
BE8Z- 5421813-B (AE8A 5421813 BF) – Stocks check correct to print
BE8Z- 5421812-C (AE8A 5421812 CF) – Stock checks correct to print
BE8Z- 5426412-B (AE8A 5426412 BF) - No stock

BE8Z- 5426413-B (AE8A 5426413 BF) - No stock

Thanks,

[redacted]

From: S[redacted])
Sent: Tuesday, July 01, 2014 12:58 PM
To: S[redacted])
Cc: B[redacted]
Subject: RE: Fiesta Door Latches

Eric - can you please inspect these 5 as many date codes we can for tab integrity

Miriam – Can you please check with the supplier to see if there are any special markings on the certified stock and failure modes.

Thank You!

[redacted]
STA Engineer - Packaging
Ford Motor Company
North America Quality Office
Customer Service Division
[redacted]

From: M[redacted]
Sent: Tuesday, July 01, 201[redacted]
[redacted]
Cc: [redacted])
Subject: RE: Fiesta Door Latches

Kenen,
This is what I see from the parts catalog:

BE8Z- 5421812-B (AE8A 5421812 BF)
BE8Z- 5421813-B (AE8A 5421813 BF)
BE8Z- 5421812-C (AE8A 5421812 CF)
BE8Z- 5426412-B (AE8A 5426412 BF)
BE8Z- 5426413-B (AE8A 5426413 BF)

Thanks,

Javier Montaño
Ford Fiesta FCSD & Quality Program Manager
T[redacted]
[redacted]

From:[redacted]M.)
Sent: martes, 01 de julio de 2014 09:48 a.m.
[redacted]
Subject: RE: Fiesta Door Latches

[redacted]
I reviewed the 8D and part number mentioned in the 8D AE84-5421812-BD is not cross referencing to any service number. Can you please provide me with the service number for this part. I can forward it to our FCSD inspection supervisor for inspection.

Thank You!

[redacted]
STA Engineer - Packaging
Ford Motor Company
North America Quality Office
Customer Service Division
Phone:[redacted]

From: [redacted].)
Sent: Tuesday, July 01, 2014 10:23 AM
To:[redacted])
Subject: FW: Fiesta Door Latches

Please look into this.

T[redacted]

NA Service STA Manager
Part Supply and Logistics Quality O[redacted]

From: [redacted]
Sent: Tuesday, July 01, 2014 9:42 AM
[redacted]
Subject: RE: Fiesta Door Latches

Mitch,
Supplier provided an 8D last year for an issue they had in their process where they found the spring retainer tab broken. This caused the spring leg to get out of position affecting the latching function. The PCA was implemented on October 2012.

I'm cc'ing Tom as his team may be able help confirming the service parts we are receiving from the supplier is certified.

Javier Montaño
Ford Fiesta FCSD & Quality Program Manager
[redacted]

From: P[redacted]
Sent: lunes, 30 de junio de 2014 12:33 p.m.
To:[redacted]
Subject: FW: Fiesta Door Latches

Javier – Just forwarding as it looks like Andy Brandt is out today. Any additional info on this?

MITCH PICKENS
FORD CUSTOMER SERVICE DIVISION
FSE PHOENIX REGION
[redacted]

From: [redacted]
Sent: Monday, June 30, 2014 10:02 AM
To:[redacted]
Cc[redacted]
Subject: FW: Fiesta Door Latches

[redacted]

The region received another dealer contact this morning below. We are advising them to open hotline or GCR reports on each vin, and to open FMC 360 cases to facilitate rental and parts availability as they are on back order.

Please contact me when you return to the office.

[redacted]
FORD CUSTOMER SERVICE DIVISION
FSE PHOENIX REGION
[redacted]

From: [redacted]
Sent: Monday, June 30, 2014 9:34 AM
To: [redacted])
Cc: [redacted]
Subject: FW: Fiesta Door Latches

[redacted]

Additional concerns from Peoria Ford on the Fiesta Door Latch Issues. Matt Tonoli claims they have 8 vehicles at their Dealership right now awaiting parts. Brandon is working with him to assist with the process to provide the customers loaner vehicles, but it seems that this issue is growing exponentially. Can you contact Matt or have Brayan contact Matt and then get the information to provide to engineering so we can act quickly. We will have Matt enter the information into the Global Concern Reporting site so that there are more GCQUIS reports on this.

[redacted]
Parts & Service Operations Manager
Phoenix Region [redacted]
[redacted]

From: [redacted]
Sent: Monday, June 30, 2014 9:20 AM
[redacted]
Subject: Fiesta Door Latches

Gentlemen,

I am a little concerned about this Fiesta Door Latch product issue that we are seeing a lot of…

When I spoke to Brandon about this earlier today, he gave me the impression that Ford only knows about isolated cases of this problem.
HOW IS THIS POSSIBLE?? – THIS IS ALL OVER HE INTERNET AND IS A CONCERN WE ARE GETTING PHONE CALLS ON DAILY!

We have 8 of these here at our dealer RIGHT NOW!

THE CUSTOMER COMPLAINT IS – DOOR WILL NOT LATCH AND STAY CLOSED – this is obviously a HUGE safety concern. The parts are on intergalactic national back order with an estimated ETA of sometime in mid to late July…

Here are 2 examples of VIN'S WITH FM 360 CASES FROM EARLY THIS MONTH –

1. VIN # 3FADP4BJ1CM[redacted] – CASE #[redacted]-H5F0S3 – June 17th
2. VIN # 1FAHP3J25CL[redacted] – CASE #[redacted]-W2LOV8 – June 4th

In all of these cases – the customers cannot keep their door closed and latched, which could lead to somebody falling out of the vehicle if they were not belted in. In all of these cases, our customer is requesting alternate transportation since the vehicle cannot be driven safely….

HERE IS THE PROBLEM!!!!!

Ford says to write a repair order on the vehicle to get a FM360 case started to order the part – If Peoria Ford does this (WE "Peoria Ford") will need to provide alternate transportation to this customer immediately – not knowing whether or not we will be reimbursed for the rental…? Once the car has a repair order on it – WE CANNOT LET IT OUT OF OUR POSSESION WITH DOOR THAT WILL NOT STAY LATCHED!!! Huge Liability!!!!

WE HAVE DIRECTED ALL CUSTOMERS TO CALL THE FORD CONSUMER AFFAIRS HOTLINE – IN EACH CASE THEY ARE BEING TOLD THAT THE DEALERSHIP SHOULD BE PROVING RENTALS – WHY WOULD THEY BE TELLING THE CUSTOMER THIS???

Peoria Ford has ZERO tap Funds and will only be getting another $5000 tomorrow July 1st – COMPARE THAT TO "CAMLEBACK FORD -#11296" THE DEALER I JUST CAME FROM THAT WILL BE GETTING ANOTHER $35000+ -

IS THERE ANYTHING THAT CAN BE DONE ABOUT THIS SITUATION IMMEDIATELY ??

This is a CSI nightmare waiting to happen- PERCEPTION IS REALITY – the customer only sees that Peoria Ford is not helping them or providing another vehicle to drive while theirs is down for repair… WE HAVE RECEIVED THREE OF THESE VEHICLES JUST TODAY …

Thanks for your help in advance

Mathew Tonoli | Service Director
9130 W Bell Road | Peoria, AZ 85382
O: 623-977-8888 | D: 623-523-6180| F: 623-977-9168

"The most significant and lasting way to set ourselves apart, is the way we define and deliver hospitality, which exist when someone feels you are on their side."

From: [redacted].)
Sent: Tuesday, July 15, 2014 4:17 PM
To: [redacted]
Subject: RE: Fiesta Door Latches

[redacted]

I am in the process of having Dave McClenaghan set up an Engineering discussion on this with us, Engineering, and STA.

Regards,

[redacted]
Small Car & Utility Vehicles
Critical Concern Manager
MD 327 2BG80 PDC
Bus.: [redacted]
CDSID: kchrist1 E-[redacted]

From: [redacted]
Sent: Friday, July 11, 2014 5:19 PM
[redacted]
Subject: FW: Fiesta Door Latches
Importance: High

Hi Nick, I was on vacation when this email arrived, and I know Kris was too... can you follow up ?

From: [redacted]
Sent: Monday, June 30, 2014 1:24 PM
[redacted]
Subject: FW: Fiesta Door Latches

Kris and Joe, A potential CCRG concern. From talking briefly to Steve, some are surmising the concern to be heat related, and may potentially affect other vehicle lines.

Mark and Basil, Looks like another part shortage. Not an FSA... Any insight on who would be following to help provide the field with some relief?

From: [redacted])
Sent: Monday, June 30, 2014 1:06 PM
[redacted]
Subject: FW: Fiesta Door Latches

[redacted]–

This is the email I was referring to in my voice mail, can you call me when you have a chance? Thanks.

Steve Papanikolas
Cell: 425-417-3766

Fro[redacted]
Sent: Monday, June 30, 2014 9:34 AM
To: [redacted]
Cc:
Subject: FW: Fiesta Door Latches

[redacted]

Additional concerns from Peoria Ford on the Fiesta Door Latch Issues. Matt Tonoli claims they have 8 vehicles at their Dealership right now awaiting parts. Brandon is working with him to assist with the process to provide the customers loaner vehicles, but it seems that this issue is growing exponentially. Can you contact Matt or have Brayan contact Matt and then get the information to provide to engineering so we can act quickly. We will have Matt enter the information into the Global Concern Reporting site so that there are more GCQUIS reports on this.

[redacted]
Parts & Service Operations Manager
Phoenix Region
P[redacted]

From[redacted]
Sent: Monday, June 30, 2014 9:20 AM
To:[redacted]
Cc:
Subject: Fiesta Door Latches

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"The most significant and lasting way to set ourselves apart, is the way we define and deliver hospitality, which exist when someone feels you are on their side."

From: [redacted]
Sent: Wednesday, September 17, 2014 8:22 AM
To: [redacted]
[redacted] [redacted]
Subject: RE: Fiesta Door

Team,
Please call to Javier Montano or myself for more details.

Please handle it by phone.

[redacted]
CSAP PVT Manager
[redacted]

From: [redacted].)
Sent: Tuesday, September 16, 2014 8:39 PM
[redacted]
Subject: RE: Fiesta Door

Sergio Galindo is the PVT manager at CSAP-- he should be able to point you in the right direction....

Drive Quality-
Timothy Sterling
Timothy Sterling
Michigan Assembly Plant Vehicle Team Manager
Cell Phone- [redacted]
[redacted]

From: [redacted]
Sent: Tuesday, September 16, 2014 9:37 PM
To: [redacted]
Subject: FW: Fiesta Door

Hi Tim!

Not sure who I should direct this question to – do you know about the issue here? Or could you let me know who to contact?

Thank you! Hope you're well!

Kind regards,

Gillian Pogson
Interior & Exterior FTM PVT Manager
Ford Asia Pacific
[redacted]

From: N[redacted]
Sent: 17 September 2014 08:33
To: [redacted]
Subject: FW: Fiesta Door

[redacted]

Can you check with the team in FNA what the issue is ?

Thx

Ford Motor Company (THAILAND), LTD.
Nelis, Marc (M.)
FTM PVT Manager
[redacted]>
FTM
Heraraj Eastern Seaboard Industrial Estate

[redacted]

[redacted]

[redacted]

From: [redacted]
Sent: 17 September 2014 08:29
To: [redacted])
Subject: FW: Fiesta Door

Guys,
Any idea what is being investigated and how the implication to AP is?
Thanks.

Best regards,
T[redacted]

From: [redacted]
(S.)
Sent: 16 September 2014 08:27
To[redacted]
Subject: US: 205,000 Ford Fiestas investigated for door-latching issue

Is this affecting ours and AP?

Thomas Fann

205,000 Ford Fiestas investigated for door-latching issue

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A preliminary investigation is the first step in a process that could lead to a recall if regulators determine that a manufacturer needs to address a safety issue.

Contact Automotive News

[redacted]
President, Ford Lio Ho
[redacted]

From: [redacted]
Sent: Wednesday, September 03, 2014 4:58 PM
To: [redacted]
Subject: RE: Fiesta Side door latch

Sure.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson

Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted].)
Sent: Wednesday, September 03, 2014 4:08 PM
To: [redacted]
Subject: RE: Fiesta Side door latch

If I got a memory stick could I download it at your desk?

Nicholas Baracos Jr.
Ford Motor Company
Automotive Safety Office
[redacted]

From: [redacted]
Sent: Wednesday, September 03, 2014 3:01 PM
To[redacted]
Subject: RE: Fiesta Side door latch

Unfortunately it is massive, 45MB.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson

Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

[redacted])
Sent: Wednesday, September 03, 2014 1:02 PM
To[redacted]
Subject: Fiesta Side door latch

[redacted]

Do you have a copy of the Matt G presentation we went over in last thurs meeting? If so can you please send it to me. Thanks

Nicholas Baracos Jr.
Ford Motor Company
Automotive Safety Office
[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 11:07 AM
To: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

No. But we should confirm if it was a cracked tab or a broken one. I have both here.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson
Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]
[redacted]

From: G[redacted]
Sent: Thursday, July 31, 2014 11:00 AM
To: [redacted])
Subject: FW: Latch Return - CCRG wants to bring it back to PDC

Kosta, (see below) status of that latch CCRG is looking for, any interest in them re-assembling?

Thanks,

[redacted]
STA – Latches/Door Systems

From: [redacted]
Sent: Thursday, July 31, 2014 10:53 AM
To: [redacted]
Cc: Ok[redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

[redacted]
KdM has the latch but it has been disassembled to confirm the broken tab condition. Disassembly is the normal evaluation method to review the post and spring.

KdM states that they can reassemble the latch and send it to me but I don't think that is what CCRG wants.

Will any of the 7 latches given to Kosta suffice? Honestly they are all the same condition.

Regards,

E[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
46941 Liberty Drive
Wixom, MI 48393 United States
T[redacted]

[redacted]

From: [redacted]
Sent: Thursday, July 31, 2014 10:38 AM
To: [redacted]e
Cc: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

Yeah this is one of the 5 that was indicated as "door opens while driving" They want to understand as close to the simulated failure replication as possible how strong the indication would have been to the driver that the door did not close. Was the door ajar light on? Did the door chime work?

Bradley is coming with me and I am guessing I will get out of here and get out of there to snag the housings, and I was hoping this latch unfortunately, around 1 PM.

Thanks,
[redacted]
STA – Latches/Door Systems

From: [redacted]]
Sent: Thursday, July 31, 2014 9:51 AM
To: [redacted])
Cc: [redacted]
Subject: RE: Latch Return - CCRG wants to bring it back to PDC

[redacted],
I spoke to KdM about this specific latch. They are looking to see if they have this specific VIN return. I am not sure if this latch was intercepted by Hermosillo PVT , if it was returned to the Ford Warranty center in in Mexico, etc.

It has not been returned to WPRC in Michigan.

We delivered 7 latches to Kosta last week that exhibit this same condition. Is there any reason that they want this specific latch?

Regards,

[redacted]
Senior Manager
Customer/Supplier Quality
Keykert USA, Inc.
46941 Liberty Drive
Wixom, MI 48393 United States
[redacted]

From: Gr[redacted]]
Sent: Thursday, July 31, 2014 9:29 AM
To:[redacted]e
Subject: Latch Return - CCRG wants to bring it back to PDC

[redacted]
I am hoping Chris Okeh contacts you, but if not we need the latch listed below:

3FADP4EJ4EM[redacted] - Autos de Hermosillo Contact: Jorge Arredondo 662-2892-029 (this latch was delivered to Kiekert 2 weeks ago and found the same root cause of door not latching, couldn't reproduce the opening door condition)

CCRG wants to put it on a vehicle here and Dearborn to understand the intensity of indication (door chimes, door ajar?, only door bounceback?) associated with door will not close. I'll be on a call for the next 30 but email me back – I just got off the CCRG call.

Best Regards,
[redacted]
STA – Latches/Door Systems
[redacted]

Headquarters: Kiekert AG, Hoeseler Platz 2, 42579 Heiligenhaus/Germany
T: +49-2056-15-0; www.kiekert.com
Registered in Heiligenhaus; Company Register Wuppertal HRB No 17915
Executive Board: Dr. Karl Krause (Chairman), Stephan Espelage, Ulrich-Nicolaus Kranz, Juergen Wenzel
Supervisory Board: Xizeng Li (Chairman)
IBAN : DE72 3307 0090 0484 1300 01
BIC : DEUTDEDWXXX
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From: [redacted])
Sent: Wednesday, August 20, 2014 11:22 AM
To: [redacted]
Subject: RE: Latches to Dealer

I said "may" not "can". Too subtle? Yeah... if you read it as a demand I'm sure they will (did). I will spell it out to Ernie. Should I wait and talk to him when he is back tomorrow or email today?

From: [redacted]
Sent: Wednesday, August 20, 2014 11:12 AM
To: [redacted]
Subject: RE: Latches to Dealer

Haha careful, as far as it goes the primary motivation is to get those 4 latches back for that kid so we can better root cause the problem for the mutual benefit of Keykert and Ford. It lets us see the progressive failure potentially of the various times in service exposed to the same environmentals. I think if you just lay out the details and the motivation of mutual benefit they won't have an issue and it is less heavy handed than "Ill think about how you can demonstrate your gratitude". In the end though it is up to you.

[redacted]

-----Original Message-----
From: [redacted]
Sent: Wednesday, August 20, 2014 10:40 AM Eastern Standard Time
To: [redacted]
[redacted]
Subject: RE: Latches to Dealer

[redacted] Thank you. Please have them overnighted and send me the tracking number.

I will discuss with Ernie additional ways Kiekert may express gratitude to this small dealer; allowing us to just take a brand new Fiesta off his lot and put over 500 miles on it to help solve a supplier problem.

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | 313-806-5018 | bmullen9@ford.com

---

From: [redacted]]
Sent: Wednesday, August 20, 2014 10:18 AM
[redacted]
[redacted])
Subject: RE: Latches to Dealer

[redacted]

I talked to my General Manager and he has authorized 3 car sets.

[redacted]

Customer Quality Engineer
Keykert USA, Inc.
46941 Liberty Drive
Wixom, MI 48393 United States
[redacted]

From: [redacted]]
Sent: Wednesday, August 20, 2014 9:48 AM
To: [redacted]
[redacted]

Please send 12 pair (overnight at least 2 pair) to:

Attn: Bill Wilcox
[redacted]
Ridgecrest, CA [redacted]

[redacted]

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | 313-806-5018 | bmullen9@ford.com

---

From: [redacted]
Sent: Tuesday, August 19, 2014 1:07 PM
[redacted]
Subject: RE: Latches to Dealer

[redacted]

Please provide the Dealer address that you want the replacement latches sent to.

[redacted]
Customer Quality Engineer
Keykert USA, Inc.
46941 Liberty Drive
Wixom, MI 48393 United States
[redacted]

From: [redacted]
Sent: Tuesday, August 19, 2014 11:51 AM
[redacted]
Subject: Latches to Dealer

Hey E[redacted]
Can you send some latches to the Dealer that loaned us the black Fiesta for the measurements in Death Valley? Kind of as thank you but also to get some latches back that have not failed but saw the same environment as ones that did. I'd like to get back the front driver's side and both rear latches form the Fusion we reviewed and both front and rear driver's side latches of the kid's Fiesta (3 of 4 failed).

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company |[redacted]

Headquarters: Kiekert AG, Hoeseler Platz 2, 42579 Heiligenhaus/Germany

T: +49-2056-15-0; www.kiekert.com

Registered in Heiligenhaus; Company Register Wuppertal HRB No 17915

Executive Board: Dr. Karl Krause (Chairman), Stephan Espelage, Ulrich-Nicolaus Kranz, Juergen Wenzel

Supervisory Board: Xizeng Li (Chairman)

IBAN : DE72 3307 0090 0484 1300 01

BIC : DEUTDEDWXXX

>

From: [redacted]
Sent: Tuesday, September 02, 2014 7:02 AM
To: [redacted]
Cc: [redacted]
Subject: RE: Latest Fiesta Concerns
Attachments: Door Latch VOQs 8 27 14.xlsx

This file has the customer complaints received by NHTSA. These are what I discussed last week. Please contact me if you have any question.

Robert Girolamo

Automotive Safety Office
Fairlane Plaza South Suite 500
Phone: (313)84-58513 [redacted]

From: P[redacted]
Sent: Monday, September 01, 2014 10:25 PM
To: [redacted]
Subject: Latest Fiesta Concerns

[redacted]

Can you forward me the latest Fiesta door latch claims that were reviewed in the CCRG meeting?

Do not go where the path may lead, go instead where there is no path and leave a trail. - Ralph Waldo Emerson

Kosta Papanikolaou

Technical Specialist -Latching Body Hardware

Body Engineering

[redacted]

[redacted]

Fiesta / Fusion / MkZ Door Latch VOQs

data generated 8/27/14

Related VOQs by Vehicle Line / Model Year

Count of ODI No	Veh Line / MY				
	FIESTA			FUSION	Grand Total
Symptom	**2011**	**2012**	**2013**	**2013**	
Lost cargo - Open while driving	1				1
Open While Driving	4	5	2	2	13
Injury - Won't close		1			1
Won't Close	12	13	3	2	30
Grand Total	**17**	**19**	**5**	**4**	**45**

Note: - No "Accident" check boxes marked, 1 "Injured" box checked

- 28 of the 45 reports referred to the Rear door, 6 the Front, 3 Both Front and Rear, the remaining 8 were unspecific

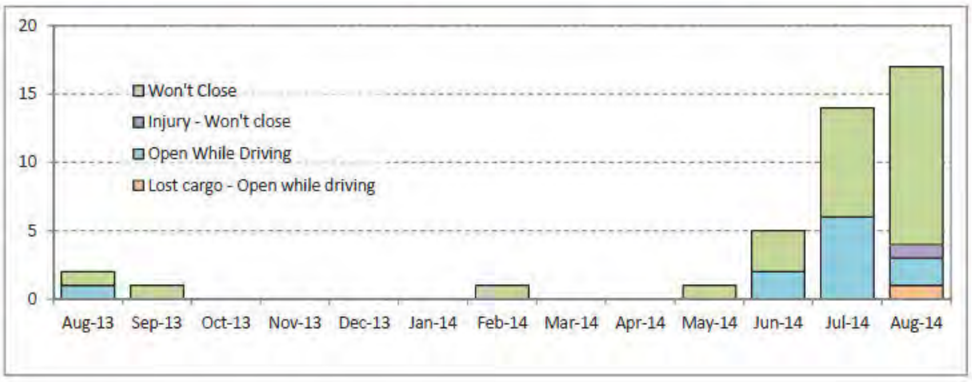
VOQ Injury

'12 Fiesta Letter date 8/24/14	***MY MOTHER (83 YO) WAS RIDING IN THE FRONT PASSENGER SEAT AND AS SHE WAS GETTING OUT OF THE CAR SHE CLOSED THE DOOR AND IT BOUNCED BACK AND HIT HER ON HER LEFT HIP.*** WHAT HAPPENED IS THAT THE DOOR LATCH BROKE BECAUSE THE PART THAT LATCHES IS MADE OF PLASTIC AND WE HAVE BEEN HAVING SOME HOT WEATHER THESE DAYS. I GUESS THE PLASTIC MUST HAVE GOT TOO HOT ONE TOO MANY TIMES AND IT GAVE OUT AND BENT OR BROKE. AS SHE CLOSED THE DOOR WITH HER LEFT HAND SHE PROCEEDED TO WALK TO THE FRONT OF THE CAR AND THIS IS WHEN THE DOOR HIT HER AND/OR GOT IN THE WAY AS SHE STARTED TO WALK TO THE FRONT OF CAR. ***MY MOTHER WAS IN PAIN FOR ABOUT A COUPLE WEEKS OR SO.*** THIS COULD HAVE BEEN A WORSE ACCIDENT IF MY MOTHER HAD BEEN A YOUNGER PERSON AND MOVING MUCH FASTER. ANYWAY THESE DOOR LATCHES SHOULD BE MADE OF STEEL SO THEY DON'T BREAK SO EASILY. PLEASE LOOK INTO IT BECAUSE THESE LATCHES SHOULD BE RECALLED. THIS IS THE SECOND LATCH THAT HAS BROKEN IN MY CAR. THESE LATCHES ARE GETTING BRITTLE WITH AGE AND UNFORTUNATELY MY CAR IS A DARK COLORED ONE WHICH AS YOU MAY WELL KNOW IT ATTRACTS A LOT OF HEAT FROM THE SUN. FURTHERMORE I WOULD LIKE TO ADD THAT THIS COULD BE ANOTHER SAFETY ISSUE IF SOMEONE IS TRYING TO BREAK INTO THE CAR IF THE LATCH IS BRITTLE ENOUGH A GOOD HARD PULL CAN BREAK IT AND WHAT IF THE DRIVER IS STILL IN THE CAR AND THE PERSON BREAKING IN WANTS TO HARM OR ROB HER/HIM. STOP PUTTING PLASTIC LATCHES IN CARS DOORS. FORD IS MAKING A MINT SELLING THESE LATCHES FOR $183.00 DOLLARS EACH AND THIS IS NOT TO MENTION THE INSTALLATION.

Related VOQs by Symptom / Letter Date (Fiesta only)

Model	FIESTA

Count of ODI No	Symptom				
Letter Date	**Lost cargo - Open while driving**	**Open While Driving**	**Injury - Won't close**	**Won't Close**	**Grand Total**
2013					
Aug		1		1	2
Sep				1	1
2014					
Feb				1	1
May				1	1
Jun		2		3	5
Jul		6		8	14
Aug	1	2	1	13	17
Grand Total	**1**	**11**	**1**	**28**	**41**



Related VOQs by Vehicle Line / Model Yr

Model	FIESTA
Related	(Multiple Items)

Count of ODI No	NHTSA e-mail			
Letter Date	**Special Mention**	**Yon list**	**not listed**	**Grand Total**
2013				
Aug		2		2
Sep			1	1
2014				
Feb			1	1
May		1		1
Jun		4	1	5
Jul		10	4	14
Aug	1	8	8	17
Grand Total	**1**	**25**	**15**	**41**

From: [redacted]
Sent: Tuesday, September 02, 2014 9:54 AM
To: [redacted]
Cc: [redacted].)
Subject: RE: Latest Fiesta Concerns

I was trying to understand if there was duplication between internal reports and the NHTSA VOQs. Up until these NHTSA VOQs I understood that we had 5 complaints on Fiesta. This was reported in the previous CCRG discussion.

When can you give me a complete list including both NHSTA VOQs and internal reports.

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson
Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted]
Sent: Tuesday, September 02, 2014 9:49 AM
[redacted]
Subject: RE: Latest Fiesta Concerns

Kosta, I'm not sure which "previous reports" you reference; but this summary represents all the customer complaints posted by NHTSA through 8/27/14 for these vehiclelines.

These are only the NHTSA VOQs and does not include any internal reports (i.e. AWS/CQIS). Internal reports have not been fully reviewed at this time.

Robert Girolamo
Automotive Safety Office
Fairlane Plaza South Suite 500
Phone: [redacted]

From: [redacted]
Sent: Tuesday, September 02, 2014 9:40 AM
[redacted]
Subject: RE: Latest Fiesta Concerns

Are these unique from previous reports?

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson
Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted])
Sent: Tuesday, September 02, 2014 7:02 AM
[redacted]
Subject: RE: Latest Fiesta Concerns

This file has the customer complaints received by NHTSA. These are what I discussed last week. Please contact me if you have any question.

Robert Girolamo

Automotive Safety Office
Fairlane Plaza South Suite 500
Phon[redacted]

From[redacted]
Sent:[redacted]
To: Girolamo, Robert (R.F.)
Subject: Latest Fiesta Concerns

[redacted],

Can you forward me the latest Fiesta door latch claims that were reviewed in the CCRG meeting?

Do not go where the path may lead, go instead where there is no path and leave a trail. -Ralph Waldo Emerson

Kosta Papanikolaou

Technical Specialist -Latching Body Hardware

Body Engineering

[redacted]

[redacted]

From: [redacted]
Sent: Wednesday, September 03, 2014 9:41 PM
To: [redacted]
[redacted] [redacted]
Subject: RE: Latest Fiesta Concerns

Unfortunately the vins here are the first 11 digits. We can't really use these to find a build date. Is there any way we could get the rest of the vins?

Do not go where the path may lead, go instead
where there is no path and leave a trail. -Ralph Waldo Emerson

Kosta Papanikolaou
Technical Specialist -Latching Body Hardware
Body Engineering
[redacted]

From: [redacted].F.)
Sent: Tuesday, September 02, 2014 7:02 AM
[redacted]
Subject: RE: Latest Fiesta Concerns

This file has the customer complaints received by NHTSA. These are what I discussed last week. Please contact me if you have any question.

Robert Girolamo
Automotive Safety Office
Fairlane Plaza South Suite 500
Phone: ([redacted]

From: [redacted]
Sent: Monday, September 01, 2014 10:25 PM
To: [redacted]
Subject: Latest Fiesta Concerns

[redacted]

Can you forward me the latest Fiesta door latch claims that were reviewed in the CCRG meeting?

Do not go where the path may lead, go instead where there is no path and leave a trail. - Ralph Waldo Emerson

Kosta Papanikolaou

Technical Specialist -Latching Body Hardware

Body Engineering

[redacted]

[redacted]

From: [redacted]
Sent: Thursday, May 16, 2013 10:39 AM
To: [redacted]
[redacted] [redacted]
Subject: RE: Meeting 11:00 AM Friday

Thanks[redacted], yes we understand that the objective is minimizing the exposure of suspect latches (vehicles).

At this point, after making a review of the DHL warehouse last week in Cuatitlan in search of the elusive 1,116 missing latches we really do not have many additional avenues to explore.

As we previously discussed we had our on-site representative at BAP and a 3rd party company inspecting latches line side for the suspect date period. This activity was put in place a couple of weeks before it was expected that the suspect latches would reach BAP.

Per the weekly rep reports, other than the 580 latches already reported as found, no additional suspect date code latches were discovered at line side or in the BAP inventory storage warehouse.

The only 'good' thing (good is probably the incorrect team) is that this condition 'heals' itself by just cycling of the catch. In two cases we have been able to turn the condition off with less than 100 cycles of the catch.

Regards,

[redacted]
Manager
Global Customer Quality
Keykert USA, Inc.
[redacted] Liberty Drive
[redacted]

[redacted].)" ---05/16/2013 09:40:15 AM---I am not aware of any other documents required. You understand what we're trying to do – get our ar

From: [redacted]
[redacted]
Date: 05/16/2013 09:40 AM
Subject: RE: Meeting 11:00 AM Friday

I am not aware of any other documents required. You understand what we're trying to do – get our arms around how many suspect parts may have found their way onto vehicles. So we need to locate as many of the suspect parts as possible.

Regards,

[redacted]
STA Supervisor - Body & Exterior Hardware
Ford Motor Company

([redacted]

[redacted]

"No shortcuts. No assumptions. No opinions. Data driven…"

From:[redacted]]
Sent: Thursday, May 16, 2013 8:17 AM
[redacted]
Subject: RE: Meeting 11:00 AM Friday

[redacted]
OK, the Kiekert team will participate in the 11:00 AM meeting tomorrow. I personally will have to call in from the road and therefore not be able to have any documents in front of me. However, our Mexico team will call in and also be supported by our US PD team (Hector Verde).

Is the anything, in addition to the documents that were already sent to you, that Kiekert will need to have prepared for this meeting?

We are in our last day of our TS Audit here at Wixom so I am in an out of my office and away from my PC but can monitor your response via the smart phone.

Thanks.

Regards,
[redacted]
Manager
Global Customer Quality
Keykert USA, Inc.
[redacted]

[redacted])" ---05/16/2013 07:35:49 AM---Please participate in the Friday meeting at 11 am. However, if Polman sent you an 8:30 am mtg for t

From: '[redacted]
Date: 05/16/2013 07:35 AM
Subject: RE: Meeting 11:00 AM Friday

Please participate in the Friday meeting at 11 am. However, if Polman sent you an 8:30 am mtg for today, that one is for Brose.

Regards,

[redacted]

[redacted] - Body & Exterior Hardware
Ford Motor Company

[redacted]

"No shortcuts. No assumptions. No opinions. Data driven…"

From: [redacted]
Sent: Wednesday, May 15, 2013 4:05 PM
To: [redacted]
Subject: Meeting 11:00 AM Friday

[redacted]
To confirm, Kiekert "does not" participate in Friday's (17-May) telecom at 11:00 AM?

Seems like I am getting confused a lot recently.

Regards,
[redacted]
Manager
Global Customer Quality
Keykert USA, Inc.
[redacted]

Headquarters: Kiekert AG, Hoeseler Platz 2, 42579 Heiligenhaus/Germany
T: +49-2056-15-0; www.kiekert.com
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Deutsche Bank AG, Wuppertal (BLZ 330 700 90) 484130001
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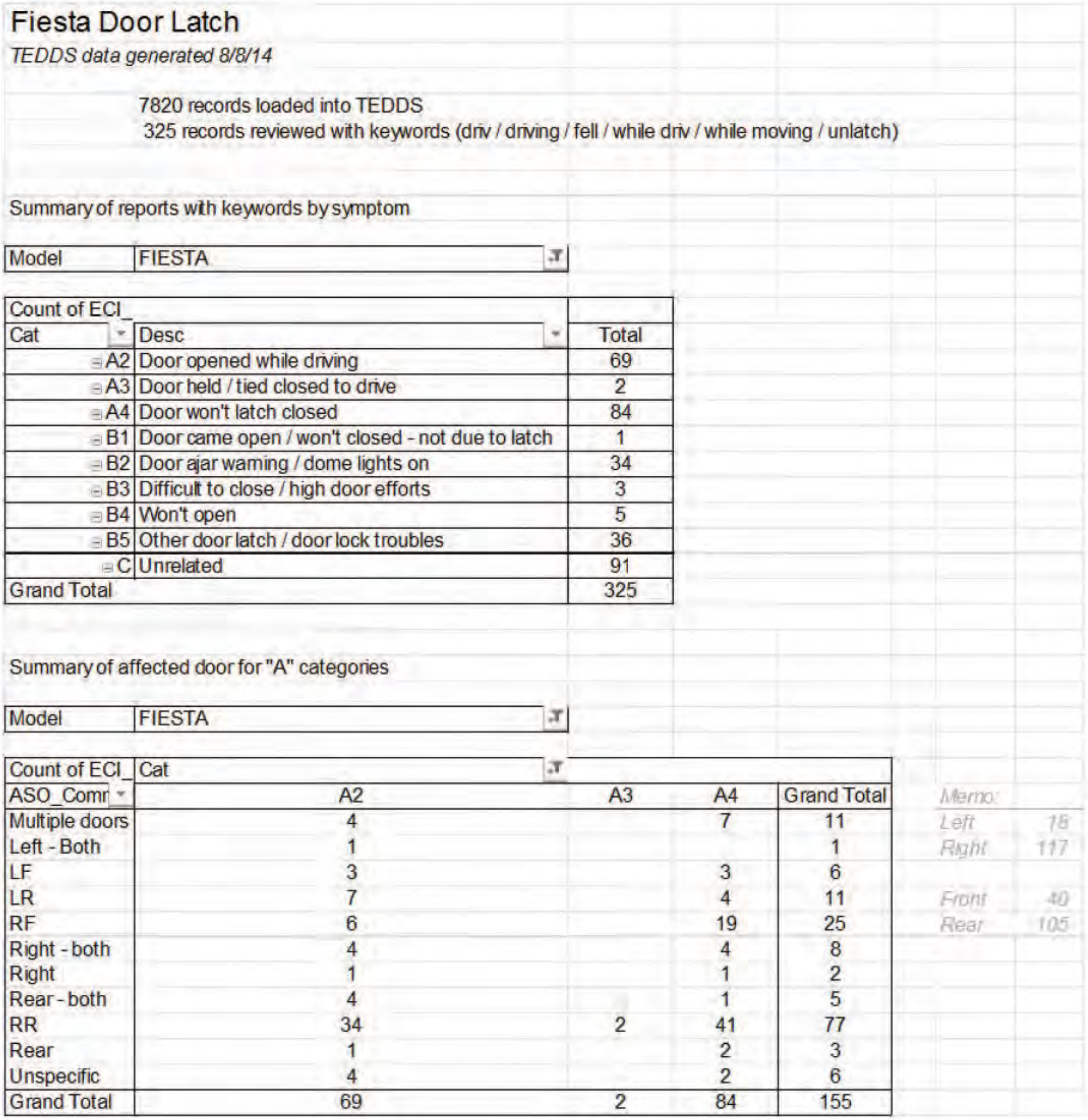
From: [redacted]
Sent: Tuesday, September 02, 2014 9:16 AM
To: [redacted])
Subject: RE: Need External Help

I've reviewed the records with keywords of interest and have summarized them:



Fiesta Door Latch

TEDDS data generated 8/8/14

7820 records loaded into TEDDS
325 records reviewed with keywords (driv / driving / fell / while driv / while moving / unlatch)

Summary of reports with keywords by symptom

Model	FIESTA

Count of ECI_		
Cat	Desc	Total
A2	Door opened while driving	69
A3	Door held / tied closed to drive	2
A4	Door won't latch closed	84
B1	Door came open / won't closed - not due to latch	1
B2	Door ajar warning / dome lights on	34
B3	Difficult to close / high door efforts	3
B4	Won't open	5
B5	Other door latch / door lock troubles	36
C	Unrelated	91
Grand Total		325

Summary of affected door for "A" categories

Model	FIESTA

Count of ECI_	Cat			
ASO_Comr	A2	A3	A4	Grand Total
Multiple doors	4		7	11
Left - Both	1			1
LF	3		3	6
LR	7		4	11
RF	6		19	25
Right - both	4		4	8
Right	1		1	2
Rear - both	4		1	5
RR	34	2	41	77
Rear	1		2	3
Unspecific	4		2	6
Grand Total	69	2	84	155

Memo:	
Left	*18*
Right	*117*
Front	*40*
Rear	*105*

Robert Girolamo
Automotive Safety Office
Fairlane Plaza South Suite 500
Phone: [redacted]m

From: Gurney, Chris (C.A.)
Sent: [redacted]
To: Tu[redacted]
C[redacted]
Subject: Need External Help

Mark, the ASO Internal Group is currently working on an issue with 2011-2014 Fiesta door latches. We need to look through 300-400 records that may allege doors opening while driving. Some of these records are FMC360 reports and are quite lengthy.

Bob is working on it, but we need help. If you could spare 1 person to help Bob go through these records over the next 2 working days, , we would very much appreciate it. The records are loaded into TEDDS, and Bob has created the labeling categories for the reviewer to use. The deadline for getting though these records is noon Wednesday, 9-3-14 (we will be reviewing the records at a 3:00 P.M. meeting that same day).

Thanks. Please see me or Bob if you have any questions.

Chris Gurney

From: [redacted])
Sent: Wednesday, September 10, 2014 5:56 PM
To: [redacted]
[redacted] [redacted]
Subject: RE: Next up list for B&E 6-Sigma projects

Okay Thanks.

I am working with Matt on the C1A latch

-----Original Message-----
From: [redacted]
Sent: Wednesday, September 10, 2014 05:50 PM Eastern Standard Time
To: [redacted]
[redacted]
Subject: RE: Next up list for B&E 6-Sigma projects

[redacted]

I don´t have a 6-sigma project with Kiekert (EBKTA)at this time but there is one where this supplier is involved which is being led by Matt Greenisen about Warranty- C1A Latch

[redacted]
[redacted] [redacted]
Sent: martes, 09 de septie[redacted]
[redacted] [redacted]
Subject: RE: Next up list for B&E 6-Sigma projects

Status?

From: [redacted]
Sent: Friday, September 05, 2014 7:06 AM
To:[redacted]
Subject: RE: Next up list for B&E 6-Sigma projects

I was not able to talk Gilbert yesterday, I was out of the office, but need to clarify it about Kikert since they produce Latches, no Locksets.

From: [redacted]
Sent: miércoles, 03 de septiembre de 2014 06:43 p.m.
To: [redacted])
Subject: RE: Next up list for B&E 6-Sigma projects

Brad,

Need to talk to Gilbert, you will get a response back tomorrow. Regards

---

From:[redacted]
Sent: miércoles, 03 de septiembre de 2014 08:01 a.m.
To: V[redacted].)
Subject: RE: Next up list for B&E 6-Sigma projects

[redacted],

If you are back in the office please let me know if the locksets from Kiekert are still an issue?

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

From: [redacted].)
Sent: Wednesday, August 20, 2014 11:27 AM
To: V[redacted].)
Subject: FW: Next up list for B&E 6-Sigma projects

Adrián,

I was looking for your reply to the email below and discovered it was not sent to you. My apologies, are the locksets from Kiekert still an issue?

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

From: [redacted]
Sent: Friday, July 25, 2014 2:42 PM
To:[redacted]
Subject: RE: Next up list for B&E 6-Sigma projects

[redacted]

Thank you for confirming that you are the STA for Kiekert (EBKTA). Below is the list of potential projects Gilbert submitted in February and confirmed this week. The other memo is a new approach for generating the list and was only sent to the supervisors and Jim Polman. It was not approved at this time (mid-year). It is likely I will use it to prioritize next year's projects. In the meantime let's collect the warranty data for "Locksets" produced at Kiekert (EBKTA). Please contact the supplier's warranty person and request the data. If you wish I am willing to contact the person directly or we can schedule a Web-Ex.

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

From: M[redacted])
Sent: Tuesday, July 22, 2014 3:40 PM
To: [redacted]
Subject: RE: Next up list for B&E 6-Sigma projects

Gilbert - Thank you. Below is my working list filtered. Did I enter the correct site codes and STAs?

Black Belt Engineer Supplier Site Code Commodity Site STA Site Manager Vehicle lines affected Initial DPMO Projected DPMO Improvement Starting R/1000 Starting CPU Starting TGW Starting CS Starting Scrap/ Rework Projected Improvement Issue Description
Bradley Mullen Saint Gobain México AM0XA Glass Hector Becerra Gilbert Gonzalez Multiple Windshield distortion
Bradley Mullen Trico T729F Wipers Hector Becerra Gilbert Gonzalez Wiper Noise
Bradley Mullen Kiekert EBKTA Latches Adrian Vazquez Gilbert Gonzalez Locksets

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company [redacted]

From: [redacted])
Sent: Tuesday, July 22, 2014 1:29 PM
To: [redacted])
Subject: RE: Next up list for B&E 6-Sigma projects

Confirmed

[redacted]
[redacted] [redacted]
Sent: martes, 22 de julio de 2014 12:15 p.m.
To: [redacted].)
Subject: Next up list for B&E 6-Sigma projects

Gilbert,

Please confirm the three issues you identified below are still potential projects. Upon confirmation I will request warranty data or from the supplier thru the Site STA.

Thank you -- Bradley Mullen | Site STA Engineer | Ford Motor Company | [redacted]

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