

**RQ04-011  
FORD  
APRIL 26, 2005  
REQUEST 8  
PART 3 OF 6  
BOOKS 29 OF 43**

29 x-ref. TO VOLUMES

RQ04-011 09986

## **TRW Seat Belt Buckle Recall - Process and Lessons Learned**

**September 25, 2001**

R004-011 09197

## **TRW Seat Belt Buckle Recall - Process and Lessons Learned**

**September 25, 2001**

8004-011 07003

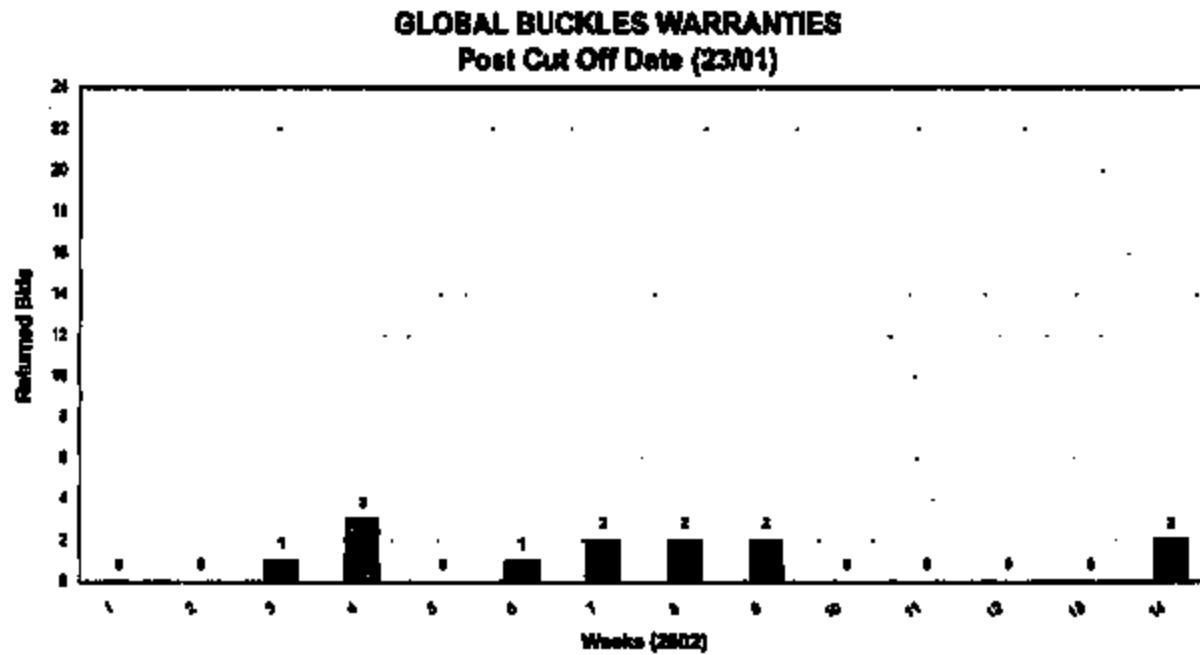
## 9-50 Hour Work Schedule Timeskeeping EXAMPLES

### Shift #3

<b>KOTU65</b> <b>REVIEW TIME RECORD</b> -- <b>DAY ENDING:</b> 03-15-02 07/03/01 09:24:07 >>>	<b>LOC:</b> 1234 <b>DEPT:</b> A5999 >>>
<b>EMPL-ID: 123 45 6789 NAME: C ANYNAME</b> R/ <b>S START QUIT ABSENT O/T SP</b> <b>D DAY H TIME TIME CD HRS MHS CD</b> <b>START</b> - 01 FR _____ R _____ 2 - 02 SA _____ _____ - - 03 SU _____ _____ -  - 04 MO 3 _____ _____ 1 - 05 TU 3 _____ _____ - - 06 WE 3 11:00 10:00 _____ 01.0 - 07 TH 3 _____ _____ - - 08 FR 3 _____ V 00.0 _____ -  - 09 SA _____ _____ - - 10 SU _____ _____ -	
<b>R/ S START QUIT ABSENT O/T SP</b> <b>D DAY H TIME TIME CD HRS MHS CD</b> - 11 MO 3 _____ _____ 2 - 12 TU 3 _____ _____ - - 13 WE 3 _____ _____ - - 14 TH 3 _____ T 09.0 _____ - - 15 FR _____ R _____ - <b>QUIT</b> _____	

- Friday, 3-01-02, is a continuation of the previous week's time statement and the special code is carried forward.
- Record the special code '1' on the Monday line of the first week of the two-week schedule.
- Record the special code '2' on the Monday line of the second week of the two-week schedule.
- Record a '#' in the absence code column on the day the 8 hours will be worked in the two-week schedule.
- If one Holiday occurs in the two-week schedule, the Holiday is the 8-hour day and the '#' is not required.
- Record an 'W' in the absence code column on the one scheduled day off in the two-week schedule.
- The start time, quit time, the shift code (if applicable), and any approved overtime hours must be recorded on the approved time statement to receive premium payment.
- Any absences (paid or unpaid) must be recorded with the appropriate absence codes and the number of hours taken, up to 9 hours may be recorded per day, up to 40 hours total in the two-week period.
- If the time off occurs on the 8-hour day, repeat the line, record the '#' on the first line and the absence code and hours on the second, repeated line.

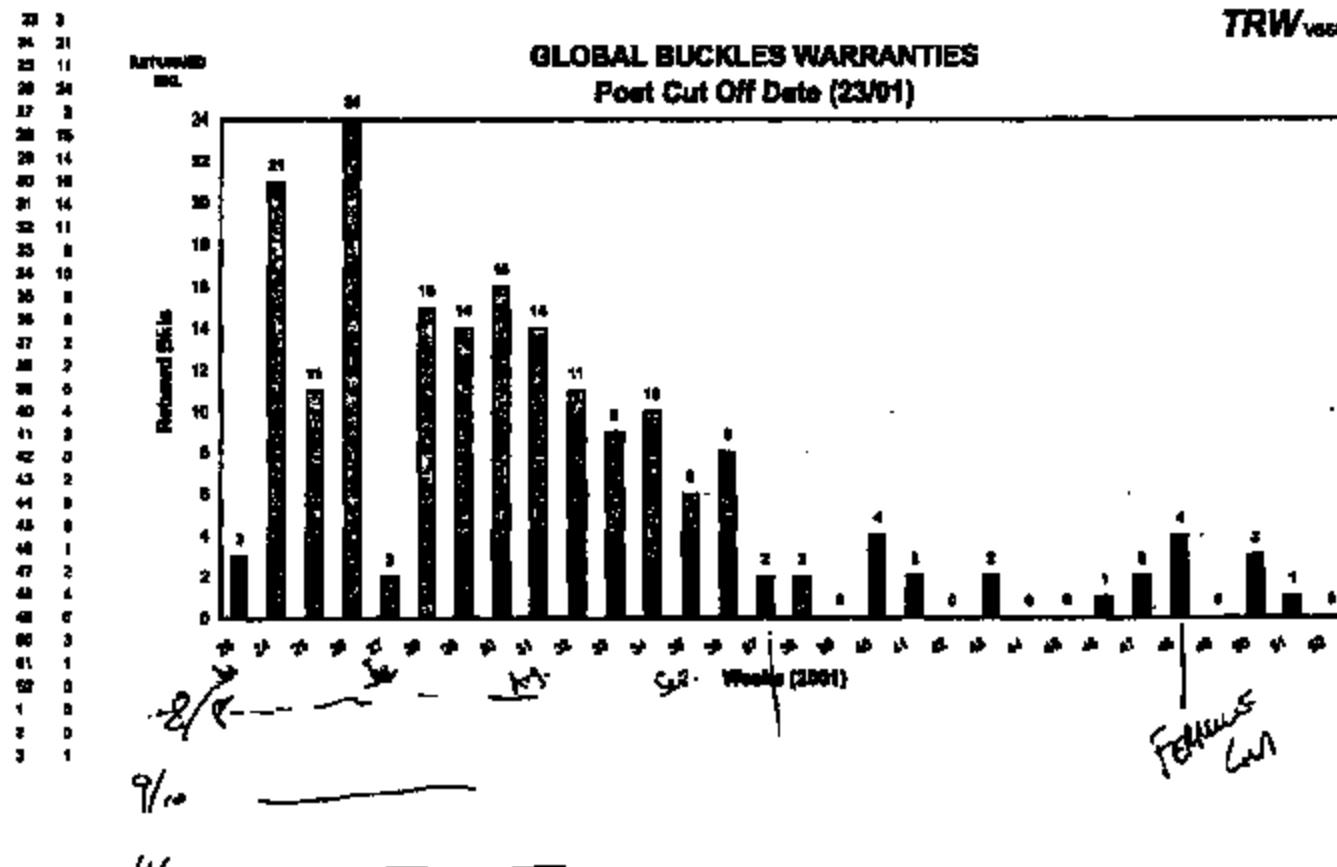
1 3  
2 1  
3 2  
4 2  
5 2  
6 0  
7 0  
8 0  
9 0  
10 0  
11 0  
12 0  
13 0  
14 2



RGM-011 10025

**TRW**

**GLOBAL BUCKLES WARRANTIES**  
Post Cut Off Date (23/01)



*ADD Revision Date*  
TRW SEAT BELT BUCKLE

### TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

Task	Owner	Owner Email	Description	Due Date	Comments
2. CR TRW Europe engineering, help US to review 5/7/01 Contact a French Engg Review.	Lorraine Murphy Charlie Stachow	LORRAINEMURPHY@TRW.COM CHARLIE_STACHOW@TRW.COM	Start for 6/12/01	6/12	TBD
4. Data Assessments - Verify effectiveness of corrective action for the 3 next months. Before/After data required. When will parts be completely acceptable?	John Clegg	JOHN.CLEGG@TRW.COM	-Need status of follow-up from engineering, no 5/22 -Charlie Kellie is substrate meeting with Murray, Lorraine, Julie, Pat McGovern and Bob EDR. Need to generate work plan. -Plan to start with HD data supplied, and see what's missing. -Will be tied to 6/3 and 6/12 -All changes in FAL	6/12	1/22/01 <i>will do by end of month</i>
5. TRW to conduct DVA of Buckle	Bob Fidling	BDFIDLING@TRW.COM	TRW to conduct DVA -Ed in contact John re 5/22 with data review date anticipated.	6/12	TBD
6. 3D Axon Layout of both Us and European Components	Lorraine Murphy TRW - TBB	LORRAINEMURPHY@TRW.COM	-Cross part and tool part lay-out required. -Plan to discuss details at meeting called by Charlie.	6/12	TBD
7. Follow-up of Quality Action Details	Marty Anderson Ed Lee	MARTY.ANDERSON@TRW.COM ED.LEE@TRW.COM	Need to ensure processes and controls are being followed and enforced is at TRW Raymes plant.	6/13	TBD
8. 140 paper	John Anderson	JWANDERSON@TRW.COM	Peer Review status 6/14/01.	6/21	On-Going
-Plastics	Bob Fidling	BDFIDLING@TRW.COM	Tech Review scheduled for 6/21.	6/21	On-Going
-Quality Data	Ron Anderson	RANDERSON@TRW.COM	Meeting required by early plant and by State or Region, in which plants were made. Also requested TGW data and NHTSA VOQ data. Waiting for responses by states, to determine date.	TBD	TBD
9. Buckle Inspection Procedure	Abe Philip Ed Schling	ABE.PHILIP@TRW.COM ED.SCHLING@TRW.COM	-New tool and procedure reviewed and sign-off on 5/21. -Key Life Tooling up and running. Report end 6/23.	6/21	TBD
10. Buckle Tool - Beta Test	Abe Philip Ed Schling	ABE.PHILIP@TRW.COM ED.SCHLING@TRW.COM	-TRW reviewed tool and gauge with Ford V.O. on 6/20. -Improved tool, with less false rejects, reported. -Need to determine effect of temperature on Beta test. -TRW tested 15 rejected buckles from car, at ambient temp of 136 degrees, and found the buckle performed correctly. Put some 15 in cold temp and will report out results on 6/23.	6/27	TBD
11. New Tools required for APG, MPPC, DPC, etc., for Pre-Production vehicles	Abe Philip Ed Schling	ABE.PHILIP@TRW.COM ED.SCHLING@TRW.COM	-Tools and procedures need to be shipped to APG, MPPC and DPC 1 week per site. -Janet Kotarski is contact at APG, X-20461. Edie Kuehne is contact at MPPC, 9-1-733-7241. -Need to determine procedure details, e.g. insert quickly and firmly, etc.	6/28	6/13
12. Other Vehicles Actions -Capture Pre-Production Parts and Units, e.g. crimp, durability	Bob Fidling	BDFIDLING@TRW.COM	-All assigned PVT Managers. -Need to determine procedure details, e.g. insert quickly and firmly, etc.	6/18	6/13
13. OEM Communication	Marty Anderson Ed Schling	MARTY.ANDERSON@TRW.COM ED.SCHLING@TRW.COM	-Will coordinate releases for all buckle affected. -Engage per engine information.	6/25	7/2

## TRW SEAT BELT BUCKLE

## TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

		NAME/EMAIL ADDRESS	DESCRIPTION OF WORK FOR THIS POSITION	STATUS	ESCALATION
11. Detailed Analysis of Parts Received from TRW Repair and Buck Supplies	Charles Miller Mike McCormick	CHARLES2000@AOL.COM MIKE.MCOWICAN@TRW.COM	Review parts for all CRPs, have been reviewed and approved. Mike McCormick to report next week. Other Parties offering help for coordination.	Chart completed on 9/14. Groups to summarize on 9/18	620 TBD
12. Review of parts received from TRW Repair and Buck Supplies	John Linn	JOHN.LINN@TRW.COM	Review parts for all CRPs, have been reviewed and approved.	Chart completed on 9/18	620 TBD
13. Review of parts received from TRW Repair and Buck Supplies	Charlie Shattock	CHARLES@TRW.COM	Review parts for all CRPs, have been reviewed and approved.	Chart completed on 9/18	620 TBD
14. Review of parts received from TRW Repair and Buck Supplies	Bill Palmer	BILL.PALMER@TRW.COM	Review parts for all CRPs, have been reviewed and approved.	Chart completed on 9/18	620 TBD
15. Get data from all vehicles inspected at JCI/CRP inspection to support 18 above	Bill Palmer	BILL.PALMER@TRW.COM	Good access to vehicles at JCI - Steve Perkins to investigate	Chart completed on 9/18	620 TBD
16. Obtain replacement parts for JD vehicles and evaluate them with respect to root cause.	Bill Palmer	BILL.PALMER@TRW.COM	Good access to vehicles at JCI - Steve Perkins to investigate	Chart completed on 9/18	620 TBD
17. Provide an equivalent parts line with all TRW analysis at the assembly plant to support the analysis items 18, 19, and 20 above.	Charlie Shattock	CHARLES@TRW.COM		Chart completed on 9/18	620 TBD
18. Compile gage related data to determine the accuracy of the gage and determine all studies.	Bill Schlegel	BILL.SCHLEGEL@TRW.COM	Report to include step ACR study, documentation of JD inspection, other plant data, and plant review P/TB data.	Chart completed on 9/18	620 TBD
19. Identification of Service Parts Required.	Norm Cover John Strode	NORM.COVER@TRW.COM JOHN.STRODE@TRW.COM 956-673-8113 X-3254			

Deb  
D'ANGELO

ADD:  
DMALECKI  
Paul Gor  
PGORSKI

ADD Revision Date

# TRW SEAT BELT BUCKLE

## TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

ASSIGNMENT	RESPONSIBLE	DESCRIPTION	STATUS	NEXT DUE DATE	
1. Can TRW Europe engineers help us to review Conduct a Risk Based Review.	Lorraine Marples Charlie Saffron	LAMAR@TRW.COM CHARLIE.SAFFRON@TRW.COM	European trip review complete. Results of trip report required.	6/25	TBD
2. Follow-up of Quality Actions Taken	Ed Peltier	ED.PELTIER@TRW.COM	None	6/25	TBD
3. Data Acquisition - Verify effectiveness of corrective actions for the 5 root causes. Define what data required. What will just be acceptably acceptable.	Chris Kallin	CKALINA@TRW.COM	-Chris Kallin to schedule meeting with Mary, Lorraine, Judie, Ann McGroarty and Bob Eke. Need to generate work plan. Will be start with 140 data supplied, and see what's missing. Will be tied to 40 and 60.	6/20	TBD
4. TRW to Conduct DVA of Buckle	Ed Peltier	ED.PELTIER@TRW.COM	TRW to conduct DVA.	TBD	TBD
5. 3D Part Layout of Buckle Unit and Etaplon Components	Lorraine Marples TRW - TBD	LAMAR@TRW.COM	3D part and tool part lay-out required	TBD	TBD
6. Follow-up of Quality Actions Taken	Mary Cooker Bill Lee	MARY.COOKER@TRW.COM BILLE.398-5393 BILLY.MCCONNELL@TRW.COM	Need to ensure processes and controls are being followed and adhered to at TRW Raybestos plant.	7/13	TBD
7. 140 Report	Julie Zyskowicz	JULIE.ZYSKOWICZ@TRW.COM	Reviewing first draft of 140 report. Will be updated after meeting with TRW and Etaplon.	6/25	TBD
8. Pressure Test	Bob Hilding	BILL.HILDEBRAND@TRW.COM BUILDING 323-2054	Tech Review scheduled for 6/21.	6/21	On-Going
9. Quality Data	David Schaefer John Ausdun	DSCHAEFER@TRW.COM JASCHAEFER@TRW.COM	Setting required by early placed and by date or Report, in which claims were made. Also compare TRW data and NHTSA VDOQ data. Waiting for validation by name, or normalize data.	TBD	TBD
10. Buckle Inspection Procedure	Abe Philip Ed Schlaipach Steve Perkins	ABE.PHILIP@TRW.COM ED.SCHLAIPACH@TRW.COM STEVE.PERKINS@TRW.COM	New tool and procedure reviewed and sign-off on 6/21. Stay Life Testing up and running. Report out 6/25.	6/21 6/23	TBD
11. Buckle Tool - Beta Test	Abe Philip Ed Schlaipach	ABE.PHILIP@TRW.COM ED.SCHLAIPACH@TRW.COM	TRW reviewed beta tool gauge with Ford VDO on 6/20. Improved tool, with less beta error, required. Need to determine no effect of temperature on beta errors.	6/21	TBD
12. New Tools Required for APO, MPG, DPO, etc. for Pre-Production vehicles.	Abe Philip Ed Schlaipach	ABE.PHILIP@TRW.COM ED.SCHLAIPACH@TRW.COM	Tools and procedures need to be shipped to APO, MPG and DPO 1 week per site. James Schaefer is contact at MPG, X-28641. Eric Kuskin is contact at APO, 6-1-753-7261. Need to know exact procedure details, e.g. insert quality and quantity, etc.	6/20	6/25
13. Other Vehicles Allowed <Captain Pre-Production Parts and Units, e.g. cost, durability	Bill Rogers	WEAKAM-394-3611	TRW solicited VDT Manager. Need to understand procedure details, e.g. insert quality and quantity, etc.	6/18	6/18
14. WERS Coordination	Silvia Andino John Sullivan	WANDINO@TRW.COM JSULLIVAN@TRW.COM DAVE.HENNESSEY@TRW.COM	-Will coordinate timeline to all buckles allowed. Engines per service identified. Concrete words for all CB's have been reviewed and approved. John Sullivan to report out next week. Mike Nelson offering help for coordination.	6/25	TBD
15. Pre-empted Analysis of Parts Returned from Ford Plants and	Geoffrey Richter	GRICHER@TRW.COM	Charts supplied on 5/18. Continue to summarize on 6/18.	6/25	TBD

**TRW SEAT BELT BUCKLE**

## **TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES**

SOM Subtask	Lead Manager	Lead Manager Email	Description	Due Date	Owner
17. STA (continued) TRW review	Bob Lee	BB.LEE@FHWA.GOV	Required as part of Pre-act Action Clearance procedure.	6/23	TBD
18. Complete statistics on Norfolk's wait on use of opposition regarding different license plates associated with weeks 10 through 16 can be supported	Charlie Bellino	CHB100@FHWA.GOV		6/27	
19. Get data from all vehicles registered at Jerome Daniels to support TRW above	Ed Pollock	ED.POLLOCK@FHWA.GOV	-need access to vehicles at J.D. Steve Parsons to an engineer	6/27	
20. Obtain replacement parts for JD vehicles and evaluate them with regard to root cause	Ed Pollock	ED.POLLOCK@FHWA.GOV	-need access to vehicles at J.D. Steve Parsons to an engineer	TBD	
21. Provide an updated time line with all TRW activities to the committee prior to support the study as from 18, 19, and 20 above	Charlie Bellino	CHB100@FHWA.GOV		TBD	
22. Complete gage reliability project to determine both the accuracy of the gages and downsample all studies	Ed Schlegel	ED.SCHLAPACK@FHWA.GOV	Report to include gage R&R study, documentation of FID inspection, point plan data, and most recent F150 data.	6/30	

TRW SEAT BELT BUCKLE

TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

Task Force	Lead Agency	Participating Agencies	Comments	Lead	TBD
1. Standardization	Buckle	BUICK	BUICK to report Phase A and C status	BUICK	TBD
2.					
3.					

**TRW SEAT BELT BUCKLE**  
**TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES**

ASSIGNMENTS	RESPONSIBLE	PRIORITIZED	STATUS	NEXT CRITERIA
2. Can TRW always be winning, help US to succeed? Conduct a Fresh Eye Review.	James Morgan Charlie Sartori	LMORRISON@TRW.COM CHARLIE.SARTORI@TRW.COM	Review trip review complete - status reported	6/20 TBD
3. Data Acquisition - Verify effectiveness of corrective actions for the first root cause. What other data required. When will parts be completely acceptable?	Craig Kellen	CKALIN@TRW.COM	Need Status of Before Action mitigation data, on 6/20. HAD - what's planned	6/20 TBD
4. TRW to Conduct DVA of Buckle	Ed Follett	ED.FOLLETT@TRW.COM	TRW to conduct DVA. Results to be reviewed in 1 week.	6/23 TBD
5. 3D Print Layout of Both Us and European Components	James Morgan TRW - TBD	LMORRISON@TRW.COM	Printed	TBD TBD
6. 140 Report	Jake Zychowicz	JZYCHOW@TRW.COM WILL.POWER@TRW.COM WILLDIMO@233-9264	Task Review scheduled for 6/21	6/18 Do-Going
- Financials	Bob Hilding			
- Quality Data	Dominic Skiles Bob Anderson	DSKILES@233-9252 BANDER@233-9236	Sorting required by each plant used by State or Region, in which countries were made. Also requested TGW data and NHTSA YOD data	6/20 TBD
7. Buckle Inspection Procedure	Alv Philip Ed Schlegel Steve Partch	APHILIP@TRW.COM ED.SCHLEGEL@TRW.COM	-Performed studies at NHTDC -Need to review guidelines for tool and procedures -Key Lab Testids required	6/23 TBD
8. New Tools required for APG, MPG, DPG etc. for Pre-Production vehicles.	Alv Philip Ed Schlegel	APHILIP@TRW.COM ED.SCHLEGEL@TRW.COM	-Tools and procedures need to be shipped to APG, MPG and DPG -Tool part# -James Schmidle is contact at MPG, X-28661 Eric Kuske is contact at APG, 9-1-733-7261.	6/20 6/23
9. OES Coordination	SOLARIS@TRW.COM SOLARIS@233-9264	MARTIND@233-9117 REUBEL@233-9180	-WES coordinate releases for all transfers affected -Need engineer from each OES to participate -Supervisors to identify which transfers	6/18 6/23
10. Follow-up of Quality Audits Team	Mary Vassos Bill Lee	MARYV@TRW.COM BILLE@TRW.COM	Need to ensure corrective and corrective are being followed and reflected in TRW Systems plan	6/15 TBD
11. Supplement Analysis of Parts Retained from First Plants and Sub Suppliers	Charles Kellen Jim McGowan	JIM.MCGOWAN@TRW.COM CKELLEN@233-9250	Change support for 1st Generation performance on 6/18	6/18 TBD
12. SVA to schedule TA/EE review	John L. Loh	JOHN.L.LOH@TRW.COM		
13. 1st Gen System Change	John L. Loh	JOHN.L.LOH@TRW.COM		

BUCKLE LATCH  
ASUE JN96

BLZ 18634

RC204-011-10321

## TRW SEAT BELT BUCKLE

### TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

ASSIGNMENT	RESPONSIBLE	DEADLINE	STATUS	NEXT DEADLINE
1. TRW Buckle Review - Initial, July 18 to review and conduct a French Review.	Lorraine Morphew Carrie Kallum	LANDOVER/7/18-7/19 CRAIG/7/18-7/19/2004@TRW.COM	Complete Tech Review complete. Status of study report required.	6/25 TBD
2. Data Acquisition - Verify effectiveness of executive criteria for the 3 root causes. Before After data required. These will parts be completely acceptable?	Craig Kallum	CRAIG/7/18-7/19	Need status of Buckle A/B review for data as of 6/20. -Carrie Kallum to schedule meeting with Murray, Lorraine, Paul, Jim McCawen and Bob Ellis. Need to generate work plan. -Plan to start with LOR data supplied, and see what's missing. -Will be final to 6/25 and #6.	6/20 TBD
3. TRW to Conduct DVA of Buckle	Ed Peltzer	EDP/7/18-7/19@TRW.COM	-TRW to conduct DVA. -Ed to submit table by 6/22 with data, review data anticipated.	TBD TBD
4. 3D Part Layout of Both US and European Components	Lorraine Morphew TRW - TAD	LANDOVER/7/18-7/19	-Check part and tool part lay-out required. -Plan to discuss design changes called by Carrie.	TBD TBD
5. Follow-up of Quality Action Taken	Mary Vosler Bill Lee	MARYV/7/18-7/19 BLL/7/18-7/19 JULIA/MORSE/7/18@TRW.COM	Need to review previous and current actions being followed and adhered to in TRW Raytheon plan.	7/15 TBD
6. 14D Paper	Salli Zydlowski	JZYDLOWSKI/7/18-7/19@TRW.COM	Tech Review scheduled for 6/21.	6/21 On-Going
Financials	Bob Halding	BHOLDING/7/18-7/19@TRW.COM	Tech Review scheduled for 6/21.	6/21 On-Going
Quality Data	Dorothy Stiles Eric Anderson	DSHEDD/7/18-7/19 EANDER/7/18-7/19	Sharing required by early plan and by State or Region, in which claims were made. Also required UOY data and NHTSA UOQ data. Waiting for validation by agency to summarize data.	TBD TBD
7. Buckle Inspection Procedure	Abe Philip Ed Schlegel Steve Pappas	APHILIP/7/18-7/19 EDSCHL/7/18-7/19@TRW.COM SPAPPAS/7/18-7/19	-New tool and procedure reviewed and sign-off on 6/21. -Key 1st fit meeting up and running. Report out 6/25.	6/21 6/25 TBD
8. Buckle Tool - Best Error	Abe Philip Ed Schlegel	APHILIP/7/18-7/19 EDSCHL/7/18-7/19@TRW.COM	-TRW reviewed tool and gauge with Ford V.O. on 6/20. -Improved tool, with less from error, required. -Need to characterize effect of improvements to Best error.	6/21 TBD
9. New Tools required for APG, MPG, DPG, inc., for Pre-production validation.	Abe Philip Ed Schlegel	APHILIP/7/18-7/19 EDSCHL/7/18-7/19@TRW.COM	-Tools and procedures need to be shipped to APG, MPG and DPG. 1 and per kit. -Janice Schmidt is contact at MPG, X-20461. Edie Kallum is contact at APG, P-1-753-7261. -Need to broadcast procedure details, e.g. Inspect quickly and often, etc.	6/20 6/25
10. Other Vehicles Affected Caprice Pre-Production Parts and 1500s, v.g. seats, durability	Bill Engen	WEAKAAS/7/18-7/19	-Bill contacted FVT Manager. -Need to broadcast procedure details, e.g. Inspect quickly and often, etc.	6/18 6/18
11. WERS Coordinates	Mike Andrus Bob Sullivan	MANDRUS/7/18-7/19 BSULLIVAN/7/18-7/19 DAVE.MURNESS@TRW.COM	-Will coordinate calendar for all vehicles affected. -Engines per update identified. -Carrie wants full CIR's, have been reviewed and approved. -Bob Sullivan to report out next week -Dave Murness offering help for transition time.	6/23 7/2
12. Statistical Analysis of Pure Returned Non-Ford Parts and	Carrie Kallum	CRICKEL/7/18-7/19	Carrie supplied on 6/18. Continue to summarize on 6/19.	6/25 TBD

ZBZ 18722

## TRW SEAT BELT BUCKLE

### TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

	Tom McDonald	TMCDONALD@AOL.COM		
1. Review failure mode 10 and determine if support is required for different failure modes associated with mode 10 except 14 can be postponed.	Bob Lee	BLee@TRW.COM	Review failure mode 10 and determine if support is required for different failure modes associated with mode 10 except 14 can be postponed.	ED
	Charlie Steffens	Charlie.steffens@trw.com		TBD
2. Get data from all vehicles represented at Technical Discrepancy to support 11 above	Ed Pelizzetti	Ed.pelizzetti@trw.com	Initial review of vehicles at JD. Steve Purdon to investigate	ED
3. Obtain replacement parts for JD vehicles and evaluate how much damage to total car.	Ed Pelizzetti	Ed.pelizzetti@trw.com	Initial review of vehicles at JD. Steve Purdon to investigate	TBD
4. Provide an updated time line with all TRW activities at the assembly plant to support the analysis from 10, 19, and 20 above.	Charlie Steffens	Charlie.steffens@trw.com		TBD
5. Compile gauge validation paper to demonstrate the accuracy of the gauge and document all testing.	Ed Schlegel	ED.SCHLEGEL@TRW.COM	Report on validate gauge Z.D.R. study, documentation of JD inspection, pilot plant data, and most recent F130 data.	E 29

BLUZ 18723

RQ04-011 10323

---

**From:** Morphew, Lorraine (L.M.)  
**Sent:** Wednesday, July 18, 2001 10:23 AM  
**To:** Zychowicz, Julie (J.A.)  
**Subject:** FW: Updated TRW Buckle - Task Force Matrix

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

**From:** Tuesday, July 03, 2001 12:50 PM  
**Sent:** Cowart, Greg (G.G.); Morphew, Lorraine (L.M.); Kalina, Curtis (C.D.); Lee, William (W.E.); 'dave.henneberry@trw.com'; 'bill.corcoran@trw.com'; 'ed.pelizzari@trw.com'; Vosler, Martin (M.C.); Egan, William (W.C.); Maxwell, Thomas (T.F.); Carver, Norman (N.B.); Sullivan, Rita (R.); Andrus, Michael (M.L.); Mitchell, Derrick (D.); Hilding, Robert (R.L.); Anderson, Rita (R.); Philip, Abraham (A.G.); Richel, Gordon (G.); Pervukoff, Paul (P.G.); Lands, Leonard (L.A.); Downs, Jim (J.C.); Brown, Jerry (J.R.); Sweeney, Stephanie (S.L.); Osborne, William (W.H.); Diengale, Deborah (D.A.); Malecki, David (D.B.); Gorski, Paul (P.E.)  
**Subject:** Updated TRW Buckle - Task Force Matrix

Bill - I haven't been involved in the meetings lately and will be on vacation the rest of the week. Here's the latest matrix per the limited info I have.

All - Please feel free to modify and send back to me to update and distribute.



buckletaskforce.xls  
or (70 KB)

## TRW SEAT BELT BUCKLE

### TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

ASSIGNMENTS	RESPONSIBLE PERSONNEL	PHONE NUMBER	STATUS	NEXT REVIEW	CLOSE DATE
1. Review current Buckle design and compare to European Buckle design. Identify differences.	Lorraine Morphew Charlie Shattoe	LMORPHEW/322-7616 CHARLIE.STEVEN@TRW.COM	Bureau Tech Review complete. Minutes of trip report to be reviewed at 7/26/01 with Charlie, Lorraine and TRW.	7/3	TBD
2. Update TRW Buckle Design. Create a new drawing.	Mike McElroy	MMCELROY/390-5130	Not yet started. To be completed by 6/20.	6/20	TBD
3. Update Buckle Drawing. Create a new drawing.	Mike McElroy	MMCELROY/390-5130	Not yet started. To be completed by 6/20.	6/20	TBD
4. Update Buckle Drawing. Create a new drawing.	Mike McElroy	MMCELROY/390-5130	Not yet started. To be completed by 6/20.	6/20	TBD
5. TRW to Conduct DVA of Buckle	Ed Pekar	EPKARZ@TRW.COM	-TRW to conduct DVA.	7/22	TBD
6. 3D Model Layout of Both US and European Components	Lorraine Morphew TRW - TBD	LMORPHEW/322-7616	-Good part and bad part lay-out required. -Plan to discuss details at meeting called by Cetus. -Plan to discuss with TRW at 7/6 meeting.	7/5	TBD
7. Follow-up of Quality Across Tasks	Marty Voskuil Bill Lee	MVOSKUIL/390-5141 BLLB/390-5393	Need to ensure processes and controls are being followed and adhered to at TRW Raytown plant.	7/15	TBD
8. Buckle Design Complete	Michael Frazee	MFRAZEE/390-5141	Not yet started. To be completed by 6/20.	6/20	TBD
9. 14D Paper -Financials -Quality Data	Bob Hilding Rita Anderton	BBHILDING@TRW.COM RITAANDERTON/323-9264	Next Tech Review - TRW FASB Review Scheduled for 7/24.  Next Tech Review - TRW.  Testing required by early plant and by State or Region, in which claims were made. Complete, with no temperature effects experienced. Also requested TRW data and NHTSA VOQ data. Supplied by Ford Quality.	6/20	On-Going Closed
10. Buckle Inspection Procedure	Abe Philip Ed Schlags Steve Parkin	APHILIP/324-1134 ED.SCHLAGS@TRW.COM SPARKIN/323-7610	-New tool and procedure reviewed and sign-off on 6/21 -Key Life Testing up and running. Report our 6/25 -Steve Parkin to contact OOC, on tool availability. -NEDD UPDATE	6/21 6/25	TBD
11. Buckle Tool - Beta Error	Abe Philip Ed Schlags	APHILIP/324-1134 ED.SCHLAGS@TRW.COM	-TRW review of tool and gauge with Ford V.O. on 6/20. -Improved tool, with less beta error, required. -Need to determine affect of temperature on Beta error. -TRW tested 15 injected buckles from sort, at ambient temp of 136 degrees, and found the buckles performed correctly. Put under 15 in cold temp and will report our results on 6/22. -NEDD UPDATE	6/27	TBD
12. New Tools required for APG, MPG, DPO, etc., for Pre-Production vehicles.	Abe Philip Ed Schlags	APHILIP/324-1134 ED.SCHLAGS@TRW.COM	-Tools and procedures need to be shipped to APG, MPG and DPO 1 tool per site. -James Schlags to contact us MPG, X-28661. Eric Kudla is contact at	6/20	6/25

Date Created: 6/12/01  
Date Revised: 12/10/04

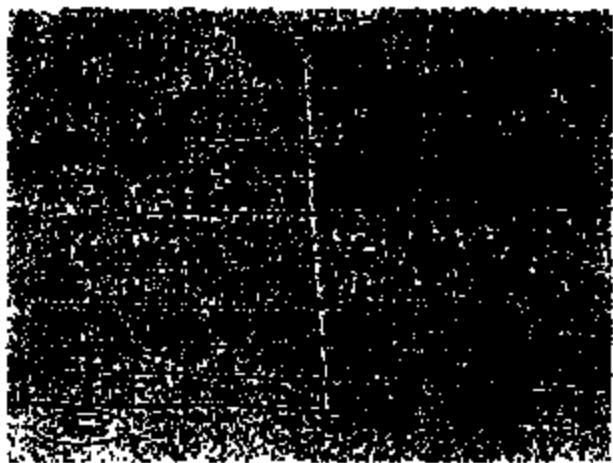
## TRW SEAT BELT BUCKLE

### TASK FORCE ASSIGNMENTS AND RESPONSIBILITIES

			APL 8-1-753-7161 -Need to broadcast procedure details, e.g. insert quickly and firmly, etc.		
13. Other Vehicles Affected: -Captain Pro-Production Plots and Units, e.g. crash, dimethyl	Bill Hayes	WEADAN/391-2618	-Bill contacted PVT Manager -Need to broadcast procedure details, e.g. insert quickly and firmly, etc.	6/18	6/18
14. WELS Coordination	Mike Andrus Rita Saldana	MANDRELL/323-1187 RSELLIV/323-1160 DAYE.HANNEN@PSTRW.COM	-Will coordinate releases for all buckles affected. -Engagers per codice identified -Current work for all CR's have been reviewed and approved. -Rita Saldana to report on next week -Don Nelson offering help for coordination <b>NEED UPDATE</b>	6/21	7/2
15. Sponsored Analysis of Parts Returned from Ford Plants and Supplier	Gordon Richter 1-800-222-4444	GRICHER/338-4006 JDM-HOOCH@PSTRW.COM	Charts supplied on 6/18. Gordon to summarize on 6/18.	6/25	TBD
16. Obtain replacement parts for ID vehicles and evaluate them with regard to error cause	Ed Pelear	ED.PELEAR@PSTRW.COM	<b>NEED UPDATE</b>	6/25	TBD
17. STA to schedule FASB review	Ed Pelear	ED.PELEAR@PSTRW.COM	-Requested as part of Prevent Action Closure procedure. -FASB Review Meeting Scheduled for 7/24.	6/25	TBD
18. Compile statistics on Norfolk test to see if suspension regarding different failure rates associated with models 10 through 16 can be supported.	Charlie Saffron	CHARLIE.SAFFRON@PSTRW.COM	<b>NEED UPDATE</b>	6/29	
19. Get data from all vehicles inspected at Jönköping Division to support 18 above	Ed Pelear	ED.PELEAR@PSTRW.COM	<b>NEED UPDATE</b>	6/29	
20. Obtain replacement parts for JD vehicles and evaluate them with regard to error cause	Ed Pelear	ED.PELEAR@PSTRW.COM	<b>NEED UPDATE</b>	6/29	
21. Provide an updated time line with all TRW activities or due date assembly plant to support the analysis from 18, 19, and 20 above	Charlie Saffron	CHARLIE.SAFFRON@PSTRW.COM	<b>NEED UPDATE</b>	6/29	
22. Compile gauge reliability paper to demonstrate the accuracy of the gauge and document JD practices	Ed Schlego	ED.SCHLEG@PSTRW.COM	Report to include gauge R&R study, documentation of JD inspection, gauge plant data, and most recent FLSO data	6/29	
23. Completion of Service Pack Request	Norm Carver John Barker	NCARVER/244-5916 JMB-BLUE@PSTRW.COM 936-672-6113 X-4254			

RCM-011 10308

Julie Zychowicz/jzychowi  
Buckletaskforce1.word



**B02 18863**

**RQ04-011 10444**

B									
A									
C									
D									
E									
F									
G									
H									
I									
J									
K									
L									
M									
N									
O									
P									
Q									
R									
S									
T									
U									
V									
W									
X									
Y									
Z									

BLZ 1500

RCM4-011 08858

**SEAT BELT BUCKLE INSPECTION AND/OR REPLACEMENT PROCEDURE****AFFECTED VEHICLES:**

CERTAIN 2001 MODEL YEAR CROWN VICTORIA,  
EXCURSION, EXPEDITION, F-150, F-SUPER DUTY,  
GRAND MARQUIS, NAVIGATOR, RANGER, TOWN CAR  
AND WINDSTAR

**OVERVIEW**

Less than 2% of the affected vehicles are expected to need seat belt buckle replacement. This document contains the necessary information for inspecting and, if necessary, replacing the driver and/or passenger seat belt buckle assembly(s) on the affected vehicles. Center seat belt buckles are not affected. A special tool has been developed to identify faulty buckles and make sure the inspection of the buckle mechanism is consistent each time it is performed. Although the special tool has been developed to identify 100% of the potentially faulty buckles, it can identify good buckles as faulty. This is an acceptable issue. If the tool identifies any buckle as faulty, it must be replaced. This document also contains amendments to the Workshop Manual sections relating to buckle replacement. Be sure to read this document before attempting to replace the seat belt buckles.

**INSPECTION**

**⚠ WARNING: FAILURE TO USE THE SPECIAL TOOL AS INSTRUCTED IN THIS INSPECTION CAN ALLOW A FAULTY BUCKLE TO PASS THE INSPECTION. MAKE SURE TO USE THE TOOL EXACTLY AS INSTRUCTED IN THE INSPECTION PROCEDURE.**

1. NOTE: Make sure that the knob on the special tool is fully extended (unscrewed) before installing it on the buckle.

**⚠** Press and release the red seat belt release button located on the driver side seat belt buckle. Then, install the special tool onto the driver side seat belt buckle and hold it in place. See Figure 1.

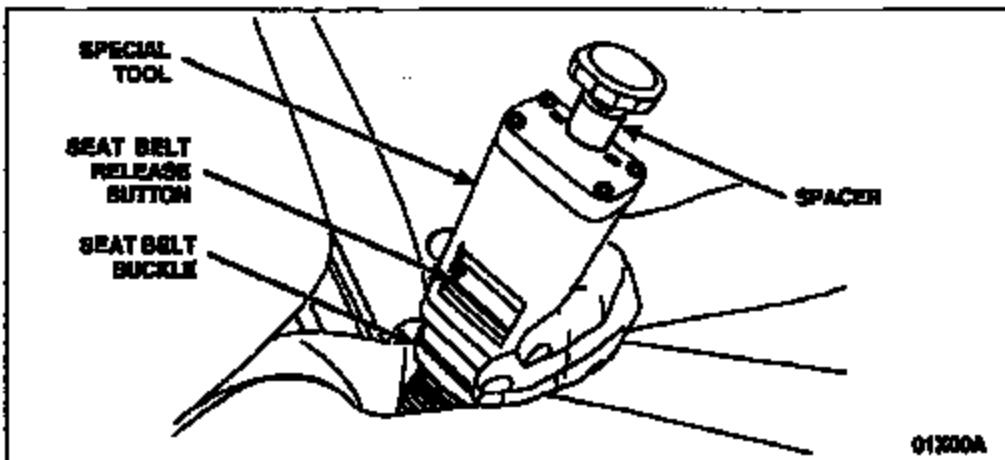


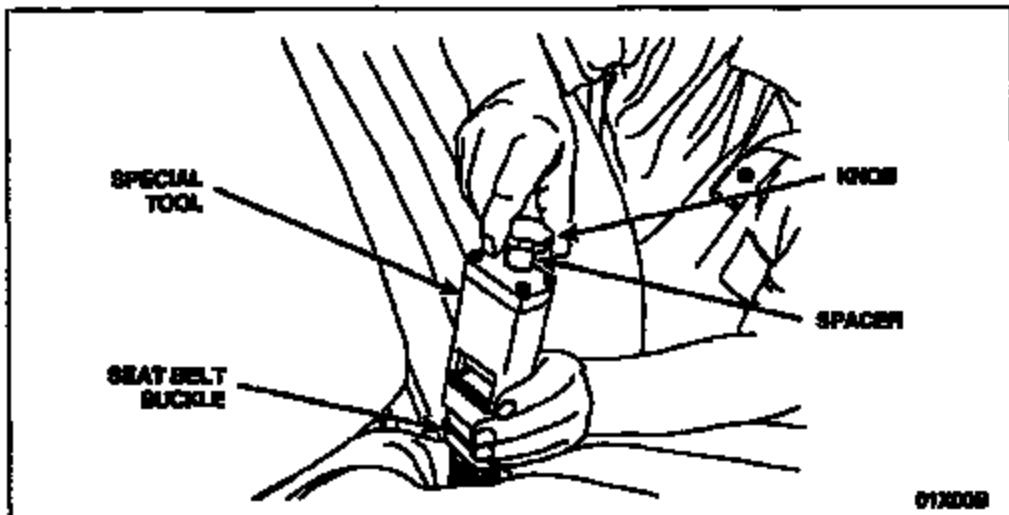
FIGURE 1

Ford Motor Company,  
© 2001 FORD MOTOR COMPANY  
DETROIT, MICHIGAN 48231  
04H

**2. WARNING: MAKE SURE YOU TURN THE KNOB ON THE SPECIAL TOOL SLOWLY IN THIS STEP. FAILURE TO DO SO MAY RESULT IN A FAULTY BUCKLE PASSING INSPECTION.**

NOTE: When the gauge tongue is near the end of its travel, the buckle is likely to make a "click" sound. Do not stop turning the knob at this point. Disregard the click and continue to turn the knob until it bottoms out.

-  While holding the special tool in place, turn the knob on the special tool until it bottoms out. If resistance is felt while turning the knob on the special tool, it may require lubrication. Lubricate the threads on the knob shaft with Lubri-Plate® (130-AA) white grease or similar white lithium grease. See Figure 2.



**FIGURE 2**

3. Pull on the body of the special tool in an attempt to remove it from the belt buckle. Do this without pressing the red seat belt release button.
  - If the special tool does not lock into place in the belt buckle, but instead disengages from the belt buckle, the belt buckle must be replaced. Refer to the Service Procedure section of this document for instruction.
  - If the special tool does lock into place in the belt buckle, the belt buckle does not need to be replaced.
4. Remove the special tool from the seat belt buckle and unscrew the knob completely. If the special tool is retained by the buckle, press the seat belt release button to release it. Repeat Steps 1-3 on the passenger side seat belt buckle.

*Ford Motor Company*  
©P/N 9231 FORD MOTOR COMPANY  
DEPARTMENT MICHIGAN 07/01  
0001

**SERVICE PROCEDURE**

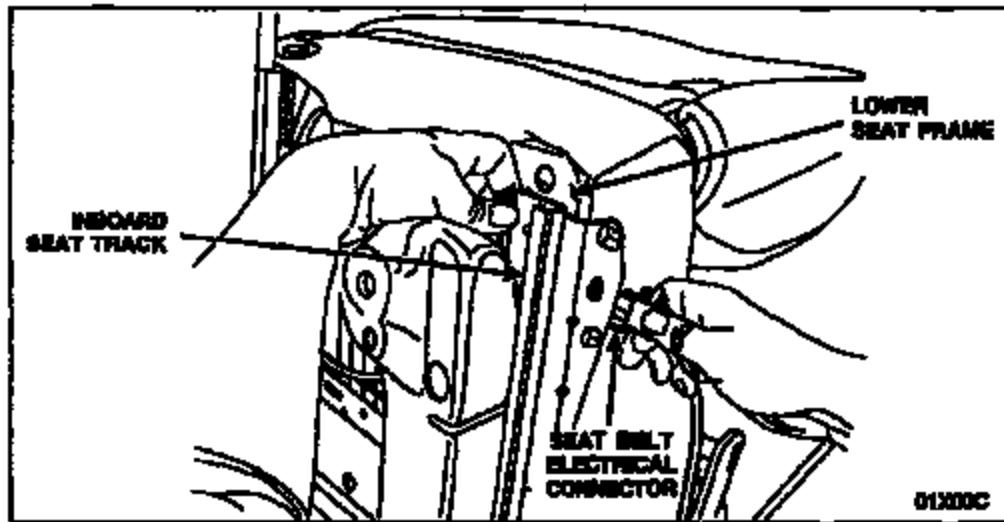
**NOTE:** All Workshop Manual references in this document are to the June 2001 CD version.

**CROWN VICTORIA, GRAND MARQUIS AND TOWN CAR**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 601-20A of the Crown Victoria, Grand Marquis and Town Car Workshop Manual.

**EXCURSION AND F-SUPER DUTY (250, 350, 450 AND 550)**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 601-20A of the Workshop Manual, with the following exceptions for manual 60/40 split bench and manual captain's chair:
  - A. On vehicles equipped with captain's chairs, the driver seat must be removed from the vehicle. Refer to the service procedures in Section 601-19 of the Excursion and F-Series Super Duty Workshop Manual.
  - B. The following steps must be performed to remove the driver seat belt buckle from the seat on captain's chairs and 40 percent seats of the 60/40 split bench seats.
    - Remove the rear mounting bolt from the inboard seat track.
    - Remove the buckle retaining nut.
    - Position the rear of the inboard seat track away from the seat frame for clearance to remove the electrical connector. See Figure 3.

**FIGURE 3**

- Remove the buckle and route the electrical connector through the side of the lower seat frame.
- For installation, reverse the steps above. Tighten the seat track bolt to 23 Nm (19 lb-ft) and the belt buckle nut to 40 Nm (30 lb-ft).

*Original Equipment*  
GM FORD MOTOR COMPANY  
DEARBORN, MICHIGAN 48121  
08/01

**EXPLORER AND NAVIGATOR**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Expedition and Navigator Workshop Manual.

**F-150**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the F-150 Workshop Manual, with the following exceptions:
  - For vehicles with 80/40 split bench seats equipped with Seat Integrated Restraint (SIR) System: during seat belt buckle removal, the 60 percent seat cushion does not have to be removed to access the seat belt buckle bolt.
  - For vehicles equipped with BIF: during seat removal, position the seat forward to access the fifth foot trim cover fastener.

**RANGER**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Ranger Workshop Manual, with the following exceptions:
  - Remove both center seat belt bolts and leave the belts attached to the seat during removal.
  - During seat installation, it is not necessary to route the center seat belts through the loosing strap since they are still attached to the seat. Tighten both bolts to 40 Nm (30 lb-ft).

**WINDSTAR**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Windstar Workshop Manual.

*Ford Motor Company*  
©FBI 2001 FORD MOTOR COMPANY  
DEARBORN, MICHIGAN 48121  
2001

**SEAT BELT BUCKLE INSPECTION AND/OR REPLACEMENT PROCEDURE**

**AFFECTED VEHICLES:** CERTAIN 2001 MODEL YEAR CROWN VICTORIA, EXCURSION, EXPEDITION, F-150, F-SUPER DUTY, GRAND MARQUIS, NAVIGATOR, RANGER, TOWN CAR, AND WINDSTAR

**OVERVIEW**

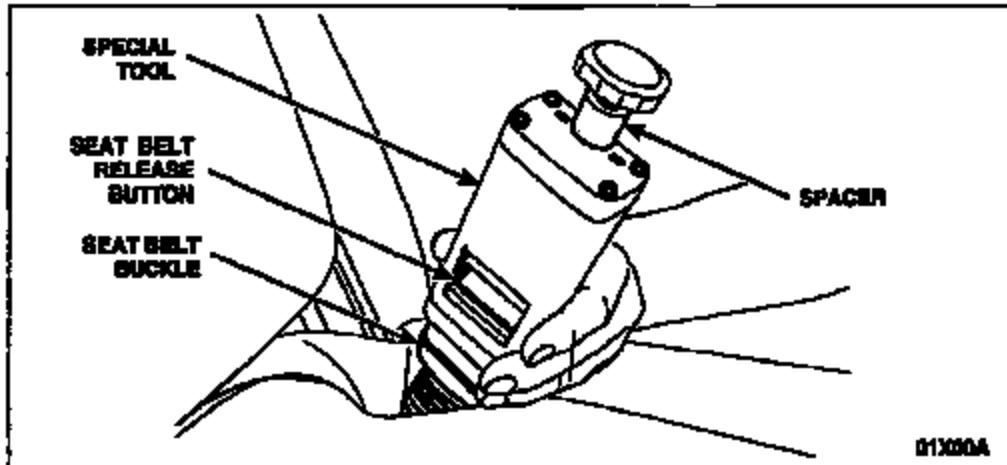
Less than 2% of the affected vehicles are expected to need seat belt buckle replacement. This document contains the necessary information for inspecting and, if necessary, replacing the driver and/or passenger seat belt buckle assembly(s) on the affected vehicles. Center seat belt buckles are not affected. A special tool has been developed to identify faulty buckles and make sure the inspection of the buckle mechanism is consistent each time it is performed. Although the special tool has been developed to identify 100% of the potentially faulty buckles, it can identify good buckles as faulty. This is an acceptable issue. If the tool identifies any buckle as faulty, it must be replaced. This document also contains amendments to the Workshop Manual sections relating to buckle replacement. Be sure to read this document before attempting to replace the seat belt buckles.

**INSPECTION**

**WARNING:** FAILURE TO USE THE SPECIAL TOOL AS INSTRUCTED IN THIS INSPECTION CAN ALLOW A FAULTY BUCKLE TO PASS THE INSPECTION. MAKE SURE TO USE THE TOOL EXACTLY AS INSTRUCTED IN THE INSPECTION PROCEDURE.

1. **NOTE:** Make sure that the knob on the special tool is fully extended (unscrewed) before installing it on the buckle.

**FIGURE 1** Press and release the red seat belt release button located on the driver side seat belt buckle. Then, install the special tool onto the driver side seat belt buckle and hold it in place. See Figure 1.

**FIGURE 1**

*Ford Motor Company,*  
© 2001 FORD MOTOR COMPANY  
DEARBORN, MICHIGAN 48121  
DRAFT

**2. WARNING: MAKE SURE YOU TURN THE KNOB ON THE SPECIAL TOOL SLOWLY IN THIS STEP. FAILURE TO DO SO MAY RESULT IN A FAULTY BUCKLE PASSING INSPECTION.**

**NOTE:** When the gauge tongue is near the end of its travel, the buckle is likely to make a "click" sound. Do not stop turning the knob at this point. Disregard the click and continue to turn the knob until it bottoms out.

- A** While holding the special tool in place, turn the knob on the special tool until it bottoms out. If resistance is felt while turning the knob on the special tool, it may require lubrication. Lubricate the threads on the knob shaft with Lubri-Plate® (130-AA) white grease or similar white lithium grease. See Figure 2.

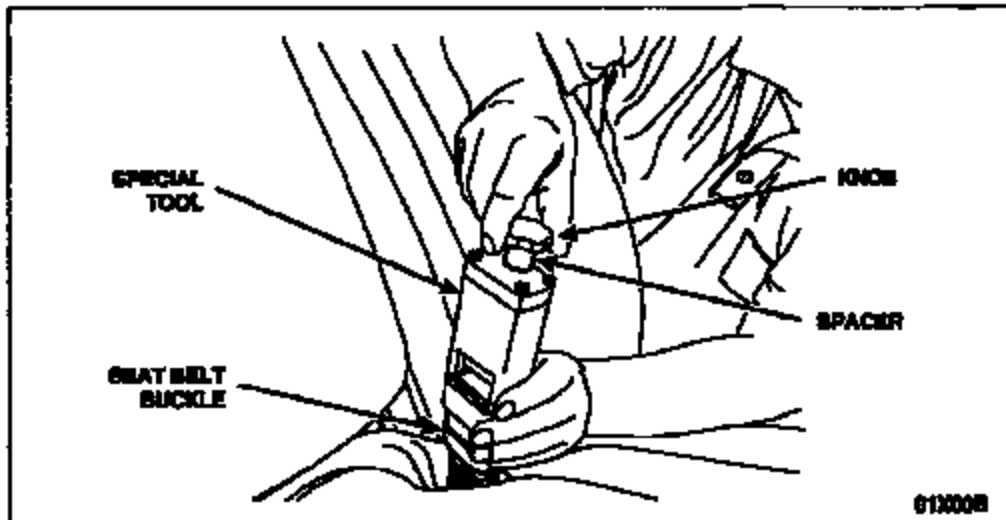


FIGURE 2

3. Pull on the body of the special tool in an attempt to remove it from the belt buckle. Do this without pressing the red seat belt release button.
  - If the special tool does not lock into place in the belt buckle, but instead disengages from the belt buckle, the belt buckle must be replaced. Refer to the Service Procedure section of this document for instruction.
  - If the special tool does lock into place in the belt buckle, the belt buckle does not need to be replaced.
4. Remove the special tool from the seat belt buckle and unscrew the knob completely. If the special tool is retained by the buckle, press the seat belt release button to release it. Repeat Steps 1-3 on the passenger side seat belt buckle.

Ford Motor Company,  
CPA © 2001 FORD MOTOR COMPANY  
DEARBORN, MICHIGAN 48121  
DMT

**SERVICE PROCEDURE**

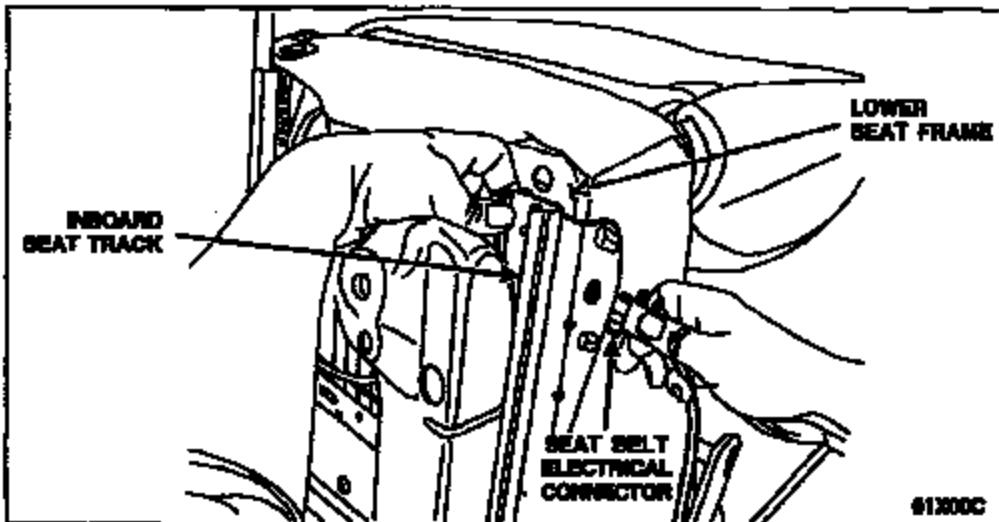
**NOTE:** All Workshop Manual references in this document are to the June 2001 CD version.

**CROWN VICTORIA, GRAND MARQUIS AND TOWN CAR**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Crown Victoria, Grand Marquis and Town Car Workshop Manual.

**EXCURSION AND F-SUPER DUTY (250, 350, 450 AND 550)**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Workshop Manual, with the following exceptions for manual 60/40 split bench and manual captain's chair:
  - A. On vehicles equipped with captain's chairs, the driver seat must be removed from the vehicle. Refer to the service procedures in Section 501-10 of the Excursion and F-Series Super Duty Workshop Manual.
  - B. The following steps must be performed to remove the driver seat belt buckle from the seat on captain's chairs and 40 percent seats of the 60/40 split bench seats.
    - Remove the rear mounting bolt from the inboard seat track.
    - Remove the buckle retaining nut.
    - Position the rear of the inboard seat track away from the seat frame for clearance to remove the electrical connector. See Figure 3.

**FIGURE 3**

- Remove the buckle and route the electrical connector through the side of the lower seat frame.
- For installation, reverse the steps above. Tighten the seat track bolt to 26 Nm (19 lb-ft) and the belt buckle nut to 40 Nm (30 lb-ft).

*Ford Motor Company*  
©FPI ©2001 FORD MOTOR COMPANY  
DEARBORN, MICHIGAN 48121  
www.ford.com

**EXPEDITION AND NAVIGATOR**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Expedition and Navigator Workshop Manual.

**F-150**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the F-150 Workshop Manual, with the following exceptions:
  - For vehicles with 60/40 split bench seats equipped with Seat Integrated Restraint (SIR) systems; during seat belt buckle removal, the 60 percent seat cushion does not have to be removed to access the seat belt buckle bolt.
  - For vehicles equipped with SIR; during seat removal, position the seat forward to access the fifth foot trim cover fastener.

**RANGER**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Ranger Workshop Manual, with the following exceptions:
  - Remove both center seat belt bolts and leave the belts attached to the seat during removal.
  - During seat installation, it is not necessary to route the center seat belts through the locating strap since they are still attached to the seat. Tighten both bolts to 40 Nm (30 lb-ft).

**WINDSTAR**

1. Replace the affected front row seat belt buckle(s). Refer to the service procedures in Section 501-20A of the Windstar Workshop Manual.

*Ford Motor Company,*  
©F 0 2001 FORD MOTOR COMPANY  
DEA/PW01LW00048121  
06/01

JUN 05 2001 12:43 PM MTON

268 3445374 TO 53243

P.01/02

To  
Savip Patel

From

Carl Rutkowske  
Wilson Army. IQ  
45369

BLZ 16879

RQ04-011 10460

## **TWY SEAT BELT TRAINING MATRIX FOR DEFECTIVE BUCKLE ISSUE**

The operators, above, have been fully certified in the T-38C aircraft flying operation.

TMW Paperworks G.Davis,  
Wilson L.C. and T.Burke

卷之三

## ~~CONFIDENTIAL~~

# SEATBELT TEST PROCEDURE FOR L/H AND R/H FRONT SEATS

- 1.) Obtain a certified TRW min/max tongue gage.
- 2.) Note the red button on the buckle, it should be sitting slightly above the black housing.
- 3.) SLOWLY insert the tongue into the buckle and try to seat it all the way.
- 4.) If the red button does not spring back to its original position, the tongue may be removed by wiggling the tongue back and forth (side to side) while trying to back the tongue out. If the tongue DOES back out, OR if the red button does not return to the original position, It is a DEFECTIVE buckle assembly.
- 5.) If the Red button does return to the original position, the tongue SHOULD NOT be able to back out using the above procedure.
- 6.) Repeat the test five times on each front seat seatbelt buckle.

**NOTE:** The certified gage must be inserted SLOWLY, it is possible to "trick" the buckle and ship a potentially defective seatbelt if the tongue is inserted too quickly.

RUZ 18779

RQ64-011 10385

**From:** Zychowicz, Julie (J.A.)  
**Sent:** Monday, June 24, 2002 12:30 PM  
**To:** Clement, Charles (C.A.); [robertellis@trw.com](mailto:robertellis@trw.com); [bill.forbes@trw.com](mailto:bill.forbes@trw.com)  
**Cc:** 'Jack Phillion'; Jim McGowan; Jose Dorado; Robert Ellis  
**Subject:** RE: Action Items on Buckle

Rob or Bill,

Can you tell me what the CFk data is on the ferrule staking vs spin riveting, for all lines shown. Line 345 seems to have a large amount of variance, compared to the other lines, for spin riveting. Don't see how this data shows any improvement from staking to spin riveting.

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

**From:** Clement, Charles (C.A.)  
**Sent:** Friday, June 21, 2002 4:19 PM  
**To:** 'Robert EllisBill Forbes'  
**Cc:** Jack Phillion; Jim McGowan; Jose Dorado; Robert Ellis; Zychowicz, Julie (J.A.)  
**Subject:** FW: Action Items on Buckle

Bill, in review of the data provided I would like TRW to tear down all the No problem found. Can't Duplicate, retractors as a part of this exploratory investigation. Since specifically the assessment of the noted conditions has yet to be determined. The exploratory investigation should not exclude the 41 or so NPF and CD's. Please advise....

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

**From:** Bill Forbes (<mailto:Bill.Forbes@trw.com>)  
**Sent:** Friday, June 21, 2002 3:09 PM  
**To:** [clement@ford.com](mailto:clement@ford.com); [jzychow@ford.com](mailto:jzychow@ford.com)  
**Cc:** Jack Phillion; Jim McGowan; Jose Dorado; Robert Ellis  
**Subject:** Action Items on Buckle

Julie and Charles,  
Attached are:

1. Reynosa warranty analysis report for Q2 YTD
2. Action Plan
3. Retention data for spin rivet vs. old axial rivet

We will update status on all actions on Monday's 3pm meeting. If acceptable, we would like to conference in. Let me know if you feel representation at Dearborn is needed. Also let me know if we have missed any actions.

Of the three additional buckles returned today, one was part of the first four reviewed with Julie and Jim Downs yesterday. One was built in week 2 of '01 and fails the gauge (Rob will do an analysis on this one). The other was similar to the first four and was built in week 33.

Bill Forbes  
TRW OSS Product Assurance Manager  
(586) 781-8085 Phone  
(586) 781-8010 Fax

RQ04-011 10594

From: Lovelace, Maria (M.E.)  
Sent: Thursday, September 19, 2002 10:48 AM  
To: Zychowicz, Julie (J.A.)  
Cee, Gennell, Greg (G.G.)  
Subject: RE: VEHICLES

Julie,

this is the balance of the Ford Motor owned vehicles on the list. I have one seat belt buckle coming back and that is for SUE85734. That unit is going to be crushed next week and we have an order in to remove the buckle before that happens.

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

From: Blum, Sherry (S.L.)  
Sent: Thursday, September 19, 2002 10:39 AM  
To: Lovelace, Maria (M.E.)  
Subject: RE: VEHICLES

4816 total theft - unrecovered  
2982 total theft - unrecovered  
4140 sold @ auction 1996  
2529 flood - donate 1996 (this vehicle to school and tech shop and is not to be driven)  
0931 total theft - unrecovered  
6959 sold @ auction 1995  
8119 sold @ auction 2001  
6702 flood - donate 1995 (this vehicle to school or tech shop and is not to be driven)

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

From: Lovelace, Maria (M.E.)  
Sent: Thursday, September 19, 2002 10:01 AM  
To: Blum, Sherry (S.L.)  
Subject: VEHICLES

Sherry,

below are the vehicles that I am trying to track. Thank you for your time and help.

1FMCLU222CXE1	AMERICAN ROAD INS	4 PARKLANE BLVD
1FMDU540X860	AMERICAN ROAD INS	4 PARKLANE BLVD
1FMDU540X864	AMERICAN ROAD INS CO	4 PARKLANE BLVD STE 480
1FMDU540X864	AMERICAN ROAD INS CO	4 PARKLANE BLVD STE 480
1FMDU540X480	AMERICAN ROAD INS CO	4 PARKLANE BLVD STE 480
1FMDU340X732	AMERICAN ROAD INS CO	4 PARKLANE BLVD STE 480
1FMDU340X181	AMERICAN ROAD INS CO	4 PARKLANE BLVD
1FMDU340X862	AMERICAN ROAD SER	4 PARKLANE BLVD

## Maria E. Lovelace - FQE Liaison

Enhanced Concern Identification - FCSD  
600 Town Center, Suite 300 Cube 25  
500 Town Center Drive  
Dearborn, Michigan 48126  
313-323-6561/800-521-4450

---

From: Robert Ellis [Robert.Ellis@trw.com]  
Sent: Monday, July 29, 2002 8:31 AM  
To: jzychow@ford.com  
Subject: Updated Warranty Analysis.



ANALYSIS  
WARRANTY AS OF 12/31/01

Here it is

R. Ellis  
Product Performance Manager  
ph: (586) 784-7604  
fax: (586) 781-7279  
robert.ellis@trw.com

## ANALYSIS SUMMARY AS OF 18.JL02

### TOTAL RETURNS THRU WARRANTY / FORD

1185 - Pre Wk 23 = 928

- Post Wk 23 = 240

N.T.F. = 157\*  
Contamination = 45  
Damaged = 26  
Reproduce w/bias = 12\*

Total returns correlating to verbatim won't latch, unlatches/takes, won't stay latched and unlatches while driving.

74 - Pre Wk 23 = 35

- Post Wk 23 = 38

N.T.F. = 18\*  
Contamination = 18  
Reproduce w/bias = 3\*

Only 12 of 240 can be made to reproduce condition by bleeding\*\* tongue into pushbutton and inserting slowly.

\*All samples pass dial caliper gage.

\*\*Bleeding = Intentionally applying constant outward force to tongue, during entire insertion distance, causing severe interference and dragging between tongue and pushbutton. Bleeding in this manner is not indicative of vehicle operator action.

## **RECOMMENDATION**

**Based on analysis data suggesting a minimal number of warranty samples exhibiting condition when checked with extreme mental biasing of tongue, it is recommended that this concern be closed from Ford CCRQ with the following on-going actions:**

- 1. Continue to closely monitor in-coming warranty samples to ensure existing trend continues. Review data with Ford weekly.**
- 2. Perform deep-dive evaluation of vehicle geometry to better understand variation in warranty between various vehicle lines and trim packages.**

---

**From:** Robert Ellis [Robert.Ellis@trw.com]  
**Sent:** Thursday, October 10, 2002 1:40 PM  
**To:** jzychow@ford.com; wilkins@ford.com  
**Subject:** Fwd: Ford Type 1 Buckle - Life Cycles



Ford Type 1 Buckle  
- Life Cyc...  
Hi Julie

Please find attached the specifics of sample #5 and photos. The coins are added to give some perspective as to the gap between the cover and the pushbutton. I have not been able to find the status of the hardness test yet, but I will forward you an E-mail as soon as I have details.

Regards

R.Ellis  
Product Performance Manager  
ph: (586) 786-7604  
fax: (586) 781-7279  
robert.ellis@trw.com



RQ04-011 10223



RQ04-011 10224



RQ04-011 10225



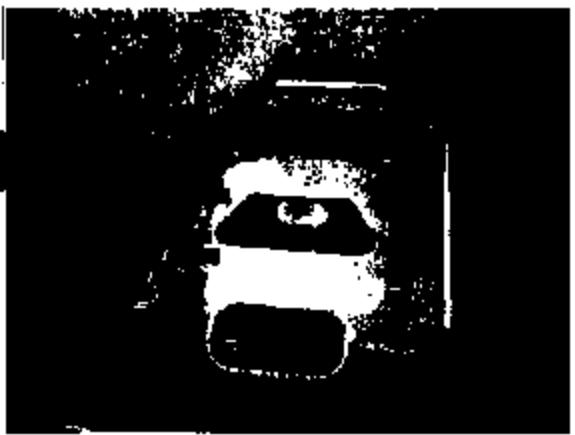
RQ04-011 10226



RQ04-011 10227



RQ04-011 10228



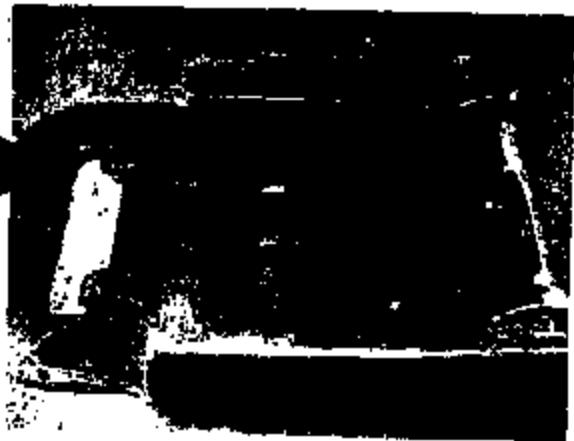
RQ04-011 10229



RQ04-011 10230



RQ04-011 10231



RQ04-011 10232



RQ04-011 10233



RQ04-011 10234



RQ04-011 10235

**RQ04-011 10236**

From: Clement, Charles (C.A.)  
Sent: Thursday, October 10, 2002 2:33 PM  
To: Wilkins, Linda (L.A.); Zychowicz, Julie (J.A.)  
Subject: FW: Ford Type 1 Buckle - Life Cycles

MVC-0011.JPG (73 MVC-0021.JPG (81 MVC-0031.JPG (92 MVC-0041.JPG (135 MVC-0051.JPG (114 MVC-0061.JPG (121 MVC-0071.JPG (121 KB) KB) KB) KB) KB) KB) KB) KB)

MVC-0081.JPG (127 MVC-0091.JPG (93 MVC-0101.JPG (155 MVC-0111.JPG (120 MVC-0121.JPG (126 MVC-1535.JPG (38 MVC-1545.JPG (39 KB) KB) KB) KB) KB) KB) KB) KB)

Linda

, do we still want to meet Monday to discuss, with TRW. Please advise....

Charles A. Clement  
Safety - Seats and Restraints  
Campaign Prevent Specialist - Occupant Movement  
Tough Truck  
Phone: 313-390-5150  
Pager: 313-851-0674 (Please do not use)

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

From: Robert Ellis [mailto:Robert.Ellis@trw.com]  
Sent: Thursday, October 10, 2002 1:40 PM  
To: clement@FORD.COM; jzychowicz@FORD.COM; lwilkins@FORD.COM  
Subject: FW: Ford Type 1 Buckle - Life Cycles

Hi Julie

Please find attached the specifics of sample #5 and photos. The coins are added to give some perspective as to the gap between the cover and the pushbutton. I have not been able to find the status of the harness test yet, but I will forward you an E-mail as soon as I have details.

Regards

R. Ellis  
Product Performance Manager  
ph: (586) 786-7604  
fax: (586) 781-7279  
robert.ellis@trw.com

Date: Wed, 09 Oct 2002 16:42:09 -0400  
From: "Angelberto Vela" <Angelberto.Vela@trw.com>  
To: "Brian Tally" <Brian.Tally@trw.com>,  
"Jose Sanchez" <Jose.Sanchez@trw.com>,  
"Robert Ellis" <Robert.Ellis@trw.com>  
Subject: Ford Type 1 Buckle - Life Cycles

Attachments are some photos of sample # 5 of Ford Type 1 Buckle that had broken Latch Spring at 17,437 cycles.  
The Latch Spring Lot on this buckle is K060.



RQ04-011 10208



RQ04-011 10209



RQ04-011 10210

**Monogram Test Report**  
01-0000, 01-0000

DATE / TIME  
TIME/TEMP.  
LOCATION:

Thu May 26 05 11:12  
01 AVIATOR  
FRONT HEAD IMPACT

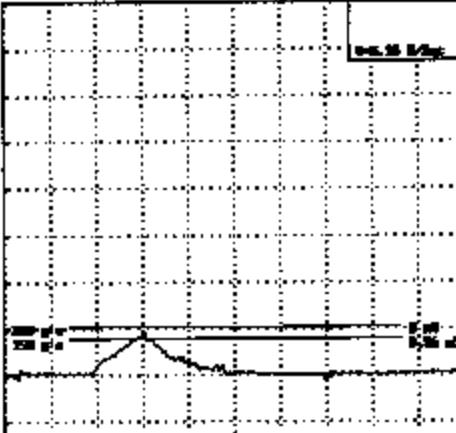
CLIENT:  
REPORT NO.

DOT/NTSA  
204000-009  
BELL SPRINT 52:5

Remarks:  
Ch. 1: 1200.00 G's./sec.  
Filter:  
Ch. 1: 2000 Hz

Trig. Ch. : 1  
Polarity : Positive  
Level : -45.00 G's.  
Mode : ~~Normal~~  
Signal Threshold : 10  
Pulse Count : 13  
Pulse Upper : 200 u

00	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
-1	10.00 ms	100.00 G's.	200.00 G's.	300.00 G's.	400.00 G's.	500.00 G's.	600.00 G's.	700.00 G's.	800.00 G's.	900.00 G's.



DATE / TIME  
TIME/TEMP.  
LOCATION:

Thu May 26 05 11:19  
02 AVIATOR  
FRONT HEAD IMPACT

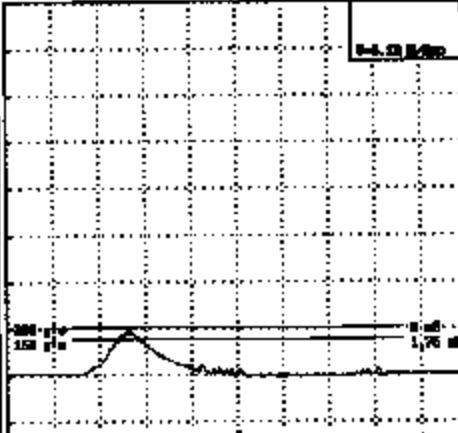
CLIENT:  
REPORT NO.

DOT/NTSA  
204000-009  
BELL SPRINT 52:5

Remarks:  
Ch. 1: 1200.00 G's./sec.  
Filter:  
Ch. 1: 2000 Hz

Trig. Ch. : 1  
Polarity : Positive  
Level : -45.00 G's.  
Mode : ~~Normal~~  
Signal Threshold : 10  
Pulse Count : 13  
Pulse Upper : 200 u

00	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
-1	10.00 ms	100.00 G's.	200.00 G's.	300.00 G's.	400.00 G's.	500.00 G's.	600.00 G's.	700.00 G's.	800.00 G's.	900.00 G's.



Remarks:

**Monogram Test Report**  
01-0000, 01-0000

DATE / TIME  
TIME/TEMP.  
LOCATION:

Thu May 26 05 11:21  
03 LOW TEMP  
FRONT HEAD IMPACT

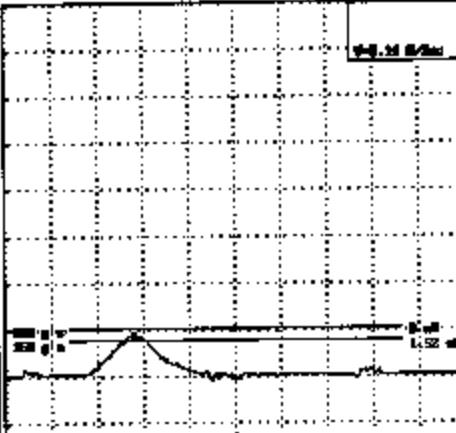
CLIENT:  
REPORT NO.

DOT/NTSA  
204000-009  
BELL SPRINT 52:5

Remarks:  
Ch. 1: 1200.00 G's./sec.  
Filter:  
Ch. 1: 2000 Hz

Trig. Ch. : 1  
Polarity : Positive  
Level : -45.00 G's.  
Mode : ~~Normal~~  
Signal Threshold : 10  
Pulse Count : 13  
Pulse Upper : 200 u

00	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
-1	10.00 ms	100.00 G's.	200.00 G's.	300.00 G's.	400.00 G's.	500.00 G's.	600.00 G's.	700.00 G's.	800.00 G's.	900.00 G's.



DATE / TIME  
TIME/TEMP.  
LOCATION:

Thu May 26 05 11:22  
04 LOW TEMP  
FRONT HEAD IMPACT

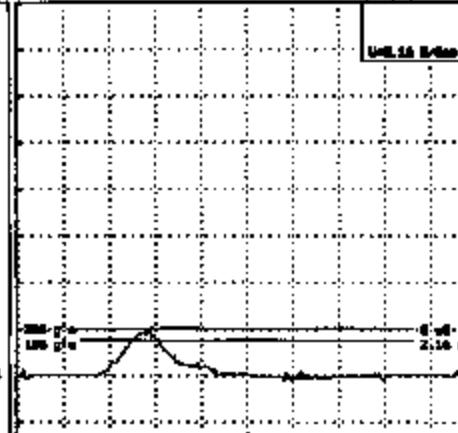
CLIENT:  
REPORT NO.

DOT/NTSA  
204000-009  
BELL SPRINT 52:5

Remarks:  
Ch. 1: 1200.00 G's./sec.  
Filter:  
Ch. 1: 2000 Hz

Trig. Ch. : 1  
Polarity : Positive  
Level : -45.00 G's.  
Mode : ~~Normal~~  
Signal Threshold : 10  
Pulse Count : 13  
Pulse Upper : 200 u

00	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000
-1	10.00 ms	100.00 G's.	200.00 G's.	300.00 G's.	400.00 G's.	500.00 G's.	600.00 G's.	700.00 G's.	800.00 G's.	900.00 G's.



Remarks:

100%  
100%

100%  
100%

100%  
100%

RQ04-011 10212



RQ04-011 10213



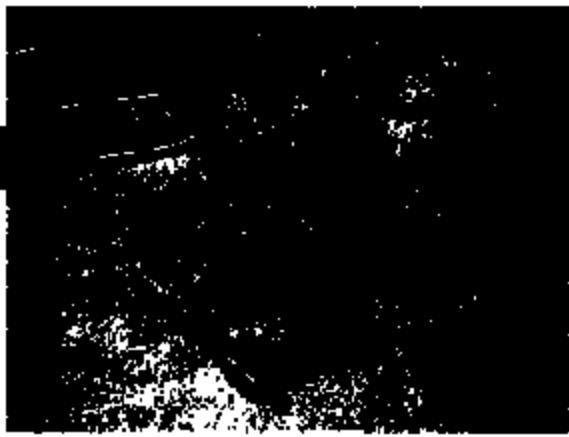
RQ04-011 10214



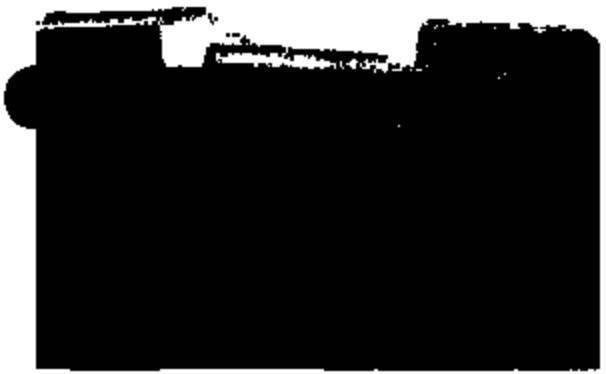
RQ04-011 10215



RQ04-011 10217



RQ04-011 10215



RQ04-011 10219



RQ04-011 10216



RQ04-011 10220

RQ04-011 10221

*2D-76*

*INSPECTION TIME*

Crown Victoria/Grand Marquis

Bucket Seats (with or without power seats)	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.7
Inspect and Replace Two (2) Seat Belt Buckle	1.1
6040 Split Bench Seat (with or without power seats)	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.6
Inspect and Replace Two (2) Seat Belt Buckle	1.0
Inspect and Replace Three (3) Seat Belt Buckle	1.0

Town Car

40/20/40 Split Bench Seat With Side Airbags

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	1.8
Inspect and Replace Two (2) Seat Belt Buckle	2.1
Inspect and Replace Three (3) Seat Belt Buckle	2.1
40/20/40 Split Bench Seat Without Side Airbags	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.6
Inspect and Replace Two (2) Seat Belt Buckle	1.0
Inspect and Replace Three (3) Seat Belt Buckle	1.0

Ranger

With Pre-Tensioners

REGULAR CAB/SUPER CAB

6040 Split Bench Seat

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	1.2
Inspect and Replace Two (2) Seat Belt Buckle	1.6
Inspect and Replace Three (3) Seat Belt Buckle	1.6

Without Pre-Tensioners

6040 Split Bench Seat

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.7
Inspect and Replace Two (2) Seat Belt Buckle	1.0
Inspect and Replace Three (3) Seat Belt Buckle	1.1

Expedition

Bucket Seats, With or Without Side Air Bags

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.8
Inspect and Replace Two (2) Seat Belt Buckle	0.8

6048 Split Bench Seat (with or without power seats)

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.4
Inspect and Replace Two (2) Seat Belt Buckle	0.5
Inspect and Replace Three (3) Seat Belt Buckle	0.5

Navigator

Bucket Seats, With or Without Side Air Bags

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.8
Inspect and Replace Two (2) Seat Belt Buckle	0.9

**F-150, Without SB**

**Rag Cab**

**Bucket Seats (with or without power seats)**

<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.6
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.7
<b>60/40 Split Bench Seat (with or without power seats)</b>	
<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.7
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.9
<u>Inspect and Replace Three (3) Seat Belt Buckle</u>	0.9
<b>Full Bench Seat (with or without power seats)</b>	
<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.5
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.6
<u>Inspect and Replace Three (3) Seat Belt Buckle</u>	0.6

**Super Cab**

**Bucket Seats (with or without power seats)**

<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.6
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.7
<b>60/40 Split Bench Seat (with or without power seats)</b>	
<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.7
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.9
<u>Inspect and Replace Three (3) Seat Belt Buckle</u>	0.9
<b>Full Bench Seat (with or without power seats)</b>	
<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.5
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.5
<u>Inspect and Replace Three (3) Seat Belt Buckle</u>	0.6

**Super Crew**

**Bucket Seats (with or without power seats)**

<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.6
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.7
<b>60/40 Split Bench Seat (with or without power seats)</b>	
<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.7
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.9
<u>Inspect and Replace Three (3) Seat Belt Buckle</u>	0.9
<b>Full Bench Seat (with or without power seats)</b>	
<u>Inspect</u>	0.1
<u>Inspect and Replace One (1) Seat Belt Buckle</u>	0.5
<u>Inspect and Replace Two (2) Seat Belt Buckle</u>	0.5
<u>Inspect and Replace Three (3) Seat Belt Buckle</u>	0.6

**F-150 With SIR and Per-Tensioners**

**Super Cab**

**Bucket Seats (with or without power seats)**

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	1.0
Inspect and Replace Two (2) Seat Belt Buckle	1.4
<b>50/40 Split Bench Seat (with or without power seats)</b>	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	1.1
Inspect and Replace Two (2) Seat Belt Buckle	1.4
Inspect and Replace Three (3) Seat Belt Buckle	1.4

**Excursion**

**Bucket Seats (with or without power seats)**

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.6
Inspect and Replace Two (2) Seat Belt Buckle	0.7
<b>40/20/40 Split Bench Seat</b>	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.6
Inspect and Replace Two (2) Seat Belt Buckle	0.9
Inspect and Replace Three (3) Seat Belt Buckle	1.0

**Super Duty With SIR**

**Super Cab**

**Bucket Seats (with or without power seats)**

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.9
Inspect and Replace Two (2) Seat Belt Buckle	1.0
<b>40/20/40 Split Bench Seat (with or without power seats)</b>	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	1.0
Inspect and Replace Two (2) Seat Belt Buckle	1.4
Inspect and Replace Three (3) Seat Belt Buckle	1.4

**Super Duty With Curi SIR**

**Reg Cab**

**Bucket Seats (with or without power seats)**

Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.6
Inspect and Replace Two (2) Seat Belt Buckle	0.7
<b>50/40 Split Bench Seat (with or without power seats)</b>	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.6
Inspect and Replace Two (2) Seat Belt Buckle	0.9
Inspect and Replace Three (3) Seat Belt Buckle	1.0
<b>Full Bench Seat</b>	
Inspect	0.1
Inspect and Replace One (1) Seat Belt Buckle	0.5
Inspect and Replace Two (2) Seat Belt Buckle	0.5
Inspect and Replace Three (3) Seat Belt Buckle	0.6