

EA02-025

FORD 10/27/03

APPENDIX N

BOOK 21 OF 61

PART 4 OF 4

Ansari, Fareen (F.)

From: Ray Nevi [rnevi@gw.ford.com]
Sent: Friday, May 14, 1999 1:34 PM
To: fensari1@mail.ford.com
Cc: logel@mail.ford.com; wbohen@gw.ford.com; mevi@gw.ford.com; jnama@gw.ford.com
Subject: Town Car

Fareen -

I recieved a call from the NHTSA today with a reported fire. Please arrange for inspection.

1992 Town Car - VIN: 1LNLM82W0N [REDACTED]
DOL: 6/10/99
Contact: John Rauter, Fire Investigator
Phone: (727) 848-3923

Regards,
R. A. Nevi PROFS ID: RNEVI Phone: 69-47588 FAX: 69-42268
Car Safety Investigations Manager, Automotive Safety Office
Suite 500, Fairlane Plaza South

Ansari, Fareen (F.)

From: Joseph Neme [jneme@gw.ford.com]
Sent: Monday, May 17, 1999 3:34 PM
To: farsari1@mail.ford.com
Subject: should we inspect?

If it fits, go ahead and schedule it... thanks

Joseph S. Neme
LVC - Safety/Recall
Phone: 38-08133, Fax: 82-18147, E-Mail: jneme@ford.com
Location: MD1255/Cuba 2M37, Building #2, Telex: 313-795-7003
*** Forwarding note from FANSARI1-FORDNA1 05/17/99 15:20 ***
To: JNEME -FORDMAIL Neme, Joseph (J.S.)

From: Ansari, Fareen (F.)
Subject: should we inspect?

Hi again Joe...
I got a call from a Fire investigator that I had contacted for another NHTSA - referred unit that is currently set up for inspection. I haven't called him back yet, so I don't have any details, but he mentioned another vehicle in his phone message.

should I set that up for inspection if it fits the criteria? or not?

thanks...

...We do not stop laughing when we grow old, we grow old when we stop laughing...
...peace, Farsen

FCSD- Consumer Affairs
Litigation Prevention Small Claims Analyst
3NE-8341 Regent Court Building (RGB)
Phone: (313)64-55525
Fax: (313)64-55569
E-Mail: farsari1@ford.com

Ansari, Farsen (F.)

From: Ansari, Farsen (F.)
Sent: Wednesday, May 18, 1999 10:37 AM
To: 'Eassec@soi.com'
Cc: Ansari, Farsen (F.)
Subject: For Alan Hass/ Inspection Reports

Alan,
Could you please have the case numbers written on the inspection reports as well as the invoice. I have asked for this because it is much smoother and consistent. Please confirm receipt of this note. I just received more reports () and the case numbers are not on them. thank you, again.

..We do not stop laughing when we grow old, we grow old when we stop laughing..
...peace, *Farsen*

PCSD- Consumer Affairs
Litigation Prevention Small Claims Analyst
SNE-BB41 Regent Court Building (RCB)
Phone: (513)84-55625
Fax: (513)84-55669
E-Mail: farsen1@ford.com

Ansar, Farsen (F.)

From: Kraft, Linda (L.E.)
Sent: Wednesday, May 19, 1999 4:18 PM
To: Aloia Harris; Alma Taylor; Andrew Chebot; Bill Billups; Carrington Johnson; Cindy Cowell; Delfina Martinez; Dionne Garrison; Farsen Ansari; Julie Bawol; Kathy Kocakes; Ken Arnold; Landra' Eagleston; Leah Gale; Linda Kraft; Lourdes Neron Fonseca; Luvenia Smith; Lynn Black; Maureen Pawelek; Maureen Roeger; Michele Henderson; Michelle Hull; Randy McClure; Stephanie Woolan; Tracey Woods; Vince Kirksey
Subject: FW: ANNOUNCING SAFETY RECALL 99S15 ON THE WEB

Linda E. Kraft
Linda E. Kraft
FCSD - Consumer Affairs
Litigation Prevention Team Leader
3NE-B351 Regent Court Building (RCB)
Phone: (313) 84-55678
Fax: (313) 84-55669
Email: lkraft@ford.com

-----Original Message-----
From: R. Cidept [mailto:rcidept@ow.ford.com]
Sent: Tuesday, May 18, 1999 5:10 PM
Cc: rcidept@ow.ford.com
Subject: ANNOUNCING SAFETY RECALL 99S15 ON THE WEB

To: TO RECALL/ONP RECIPIENTS

Subject: Safety Recall 99S15 - Speed Control Deactivation Switch --
Certain 1992-1993 Crown Victoria, Grand Marquis, and Lincoln
Town Cars

The Dealer Bulletin for the subject campaign has been posted to the Ford
Intranet at the following URL address:

http://www.mso.ford.com/fcsd/vsp/recall/rci_notice
Regards,
R Cidept

Ansari, Farsen (F.)

From: Eessoc@aol.com
Sent: Friday, May 21, 1999 2:12 PM
To: jhorne@gw.ford.com; wabramcz@gw.ford.com; mevic@gw.ford.com; tporter@gw.ford.com;
mesters@gw.ford.com; farsan1@mail.ford.com; WhiteWalu@aol.com;
info@eessociates.com
Subject: Daily update 5/20/99



PO8800-1.XLS

Attached is the status of Ford Underhood Investigations by EAA as of 5/19/99 at 4:30 p.m. Please direct any questions or changes to the program to me either by return E Mail or by phone at (248) 642-3232.

Alan Haas
EAA

Draft

Dear Customer:

This letter is in follow up to our phone conversation of date. Thank you for cooperating with our investigation into your report and taking the time to answer some questions for us. It will assist our efforts to understand your incident. We also would like to thank you for allowing Ford to inspect your vehicle and remove parts that may be relevant to our investigation. You will receive a list of any components that are removed as part of the inspection process. Again, your cooperation is greatly appreciated.

rev 2.0 — 3/19/92: Vehicle/Customer Information/Accident Info

Model Year: **Make:** **VIN#:** **Mileage (at inspection):**

Inspection Date/Location: **Vehicle Owner:**

Incident date: **Approximate mileage at incident:**

Inspector Name:

Requested Info

Area of fire origination (engine compartment quadrant, component, etc)

Identify if any underhood relays show evidence of internal overheating

Identify if any fuses or fuse links were blown or show evidence of other damage

Determine if the correct fuse for the stop lamp switch in the fuse box

Identify if there was any damage to wiring in the area where the fire was started (ie chafing, missing insulation)

Assess whether the air suspension pump shows evidence of internal overheating

Identify if there were any aftermarket modifications to the vehicle? (specifically car alarm, trailer tow, or remote start)

If possible, identify if the vehicle was involved in a natural disaster/accident that required significant vehicle clean up? If so where was cleanup performed?

If possible, identify vehicle repair history

Any other info that may be pertinent to the incident...

Parts that we would like from vehicle if possible to acquire

Brake pressure switch (preferably with wire pigtail/connector attached and still attached to prop valve)

Sample of brake fluid at prop valve (in sealed glass container)

Relay pack located on LH fender apron (with as much wiring as possible)

EDIS 8 module located on LH fender

Speed control module located on LH fender

Air suspension compressor located under air filter

Air suspension relay

Photograph of door jam VIN sticker

Other suspect parts

Consumer Affairs
16800 Executive Plaza Drive
Mail Drop #3 NE-B, Suite 331
Dearborn, MI 48126-4207



To: Alan Haas

From: Ms. Fareen Ansari

Fax: 248-642-4558

Pages: 2 (including cover page)

Phone: 248-642-3232

Date: May 28, 1999

Re: survey for case 59

Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• **Comments:** If you did not receive all pages, please call me at 313/845-5525

Have a great day!

FAREEN

Questions to ask:

1. Was the fire underhood?
2. Was anyone injured in the fire?
3. Has the vehicle already been repaired since the fire?
4. Is your insurance company handling this incident? (agency name and agent phone #)
5. Is the vehicle available for Ford inspection?
6. What is the exact date of the fire?
7. Was a fire report done?
8. Where is the vehicle now?
9. What is the name of the Ford dealer involved, or the nearest dealer?
10. What is the VIN number, the make, model and year of the vehicle?
11. Customer's name, address and phone number?

~~We never~~
Sent me
this one.

1991

3713 4194

[illegible]

[illegible]

unable to find
any further info
about 63, 64, 67,
123 or 126

1992-1995 TOWN CAR ELECTRICAL INSPECTIONS

Foloco-1

CASE No	LOCATION	VIN	EAA &A	EAA NOTIFIED	OWNER	ADDRESS	TELEPHONE	CONTACT AND VEHICLE LOCATION	TELEPHONE	SCHEDULED DATE
N/A	Memphis TN	1LNLM81W0N1	Walters	3-11-98 Abramozik		Memphis		Memphis TN		3/18/98
1	Naples FL	1LNLM81W0N1	Burnett	3-12-98 PM		Naples, FL		owner		3/23/98
2	Aspen IL	1LNLM82W0P1	Walters	3-11-98 3:55PM		Aspen IL		Aspen IL		3/17/98
3N	Tyler TX	1LNLM81W0N1	Albritton	3-11-98 3:16PM				Glen Bolton		3/22/98
15N	Houston TX	1LNLM82W0N1	Albritton	3-12-98 4:46PM				Houston TX		4/1/98
16N	Davenport FL	1LNLM81W0N1	Burnett	3-12-98 2:10PM		Davenport FL		Sami		3/18/98
17N	FL Myers FL	1LNLM82W0N1	Burnett	3-12-98 4:10PM		Don Stewart Ins Adj.		FL Myers FL		3/31/98
31	Orlando, FL	2MECM75N1N	Burnett	4/10/1998 2:55PM				Alan Conger State Farm Insurance Vehicle located at Marshall Auto Auction		4/18/98
36N	Gibsonia, FL	2MECM74N1N	Burnett	3/31/98		Bill Buckley SEA, Inc. Tampa, FL		Opert Salvage Route 41 Gibsonia, FL		4/5/98
43N	Longview, TX	1LNLM81W0N1	Albritton	4/14/98				Glen Bolton Fire Cause Investigation Opert Salvage Co		4/14/98
44N	Palmetto, FL	1LNLM81W0P1	Burnett	4/10/1998 3:55PM				Alan Conger State Farm Insurance		4/30/98
48N	Macon, GA	1LNLM81W0N1	Albritton	4/10/1998 3:55PM				Alan Conger State Farm Insurance	(877) 464-6555	N/A

3713 4202

1992-1995 TOWN CAR ELECTRICAL INSPECTIONS

F05ecb-1

CASE No	DATE COMPLETED	REPORT REV #	COMMENTS
NA Almarack	3/16/00	1.0	Completed
1	3/23/00	2.0	Demetrius(?) Lino-More repaired car. Car is spotless per Barnett and the owner is willing to sell it to Ford.
2	3/17/00	1.0	John Kessler present at inspection. Gave me heat sealed aluminum horn. Could remove only cruise brake switch.
3N	3/22/00	2.0	NHTBA not present at inspection. Glen Bellon, All State Int. rep, would not permit any parts to be removed or brake fluid samples to be taken. Made blown fuse service history that is included in the report.
15N	4/1/00	2.0	Difficulty was experienced in contacting the case representative, Michelle Torres, at USAA to schedule an inspection. I called Michelle on Monday, 3/28. Jeff Houtman (866) 882-4766 from Elton Eng. will represent USAA. All scheduling is done by him.
16N	3/17/00	1.0	Very cooperative owner.
17N	3/31/00	2.0	Alice Bardenhe, (727) 712-8877 or pager (888) 980-3011, is the Nationwide Insurance investigator handling the inspection. I called Alice March 29. The inspection delay was due to an unrelated mobile home fire / homicide prioritized by Mike & the Fire Ma
31	4/20/00	2.0	Alice Bismack, Technical Transport (Independent fire investigation co. for State Farm) & Alan Conger arrived at inspection before scheduled time and had removed a section of wiringconnector and the cruise brake switch. Parts may be available later.
30N	4/5/00	2.0	I called Bill Buckley April 1, 8:00 AM. He was not available until April 12. Following our discussion, Bill agreed to meet Dave Bennett to inspect the car at 8:00 AM Monday, April 3 before his flight to Houston.
43N	N/A	N/A	Cancel inspection per voice mail from Farrow on 4/14/00 at 12:10. There is no significant additional property damage other than to vehicle.
44N	4/20/00	2.0	5br additional "shrink wrapped" Town Cars with similar conditions noted by Alan Conger in same salvage yard during inspection. Conger took VPRs in database if they were State Farm claims, also.
45N	N/A	N/A	Inspection cancelled 4/23/00 per Farrow's call. Per Jessie Hollingsworth, Ford OGC a Ford employee arranged for Robert Drew from Howell Investigation Services to complete this inspection.

3713 4203

1992-1995 TOWN CAR ELECTRICAL INSPECTIONS

Fo9ccc-1

46N	Jacksonville, FL	1LNLM81W4N1000000	Burnett	4/19/98 3:00PM			Alan Conger State Farm Insurance	(770) 480-4923 Pager (877) 494-0365	5/11/98
47	Orlando, FL	2MECM78W4ND000000	Burnett	4/19/98			Alan Conger State Farm Insurance Mushkin Auto Auction	(770) 480-4923 Pager (877) 494-0365	4/22/98
48	FL Lauderdale, Florida	2FALP71M0R0000000	Sackal	4/23/98 12:00PM		Sherriff's Dept Bob Savage John Disk	FL Lauderdale Lino-Mess George Taylor, Tech	(954) 770-2000	4/25/98 9:30AM
53N	Ridgeland, MS	1LNLM81W4N1000000	Mullins	5-5-98 9:12 AM		State Farm Ins Tiffany Temple (801) 855-3383	Mid South Salvage Row B James Vickers	(801) 855-8016	5/12/98
54N	Venice, FL	2FALP74W0P0000000	Burnett	5-6-98 9:12 AM	Do not contact owner directly	(941) 482-3591	CNA Insurance Allen Hachaba (800) 895-8227 X3412 Bill Buckley SSA Inc (813) 891-1448	(813) 891-1448	5/13/98
55N	FL Myers, FL	1LNLM81W4N1000000	Burnett	5-6-98 9:35 AM		(941) 378-8510 X300	Contact Owner Greg MacKoske FL Myers Fire Marshall	(941) 433-0990	5/12/98
56N	Columbus, OH	1LNLM81W4N1000000	Mullins	5/13/98 4:30PM		Hamilton Mutual Ins Jim Holman (740) 248-4890	Ford Maxon SSA Inc Car located at Columbus Salvage Yard	(614) 823-4160	TBD
57N	Augusta, GA	1LNLM81W4N1000000	Mullins	5/14/98 4:00PM			Alan Conger State Farm Insurance	(770) 480-4923 Pager (877) 494-0365	TBD
58N	Greenville, FL	1LNLM81W4N1000000	Mullins	5/14/98 4:00PM	Greenville, FL	(362) 848-3823	John Redler Fire Investigator Move car ASAP	(727) 848-3823	5/24/98
59	Near Port Folchie, FL	1LNLM81W4N1000000	Mullins	5/17/98 4:00PM	Near Port Folchie, FL		All State Ins. Jim Redler John Redler, Investigator	(888) 805-7070 X225 (727) 848-3823	5/24/98

Notes:

N suffix in a case number indicates that the case was supplied to Ford by NHTSA.

All reports are double copied and photos are triple copied and sent as follows:

1 copy of report and photos to Fawcett

1 copy of report and 2 copies of photos to Joe Morris

Sent by fastest means possible (overnight strongly desired)

All parts to be carefully packaged & sent to Ford Control Testing Lab, Department T116 with the following:

Sheet with VIN, date inspected, name, phone & fax of EAA SA who inspected the vehicle

3713 4204

1992-1995 TOWN CAR ELECTRICAL INSPECTIONS

Fo5acc-1

46N	MM 5/1/99	NA	5/5 date rescheduled to 5/11. Car not in BELISCO yard. Conger had no info. Photos taken of two others, 93 T/C 828843, Mary Jackson & 95 C/V 182514, St. Louis Sheriff's Dept.
47	4/29/99	2.0	Mike Blawock, Technical Transport (Independent fire investigation co. retained by State Farm) & Alan Conger were both present at the inspection with EAA.
48	4/29/99	2.0	Car was at Dealership until Monday, April 26. This was an excellent opportunity to remove parts from a non fire vehicle that displays significant field leakage at the cruise brake switch.
53N	5/17/99 1:00PM	2.0	Dr. Mullins, EAA, talked with Tiffany Temple, State Farm, in order to schedule the inspection with James Vickers. Vickers available approximately mid week, 12 May.
54N	5/13/99 9:00AM	2.0	Brake switch returned
55N	5/13/99 1:00PM	2.0	Owner asked for call from Ford. I called. Wanted buy back before any parts removed. Owner OK at inspection. No comments regarding crash site. 4th report sent to OGC.
56N		2.0	Pick Morris has been contacted twice by Dr. Mullins and Pick is currently attempting to fit this inspection into his schedule.
57N		2.0	Alan Conger has been contacted. No inspection date set as of 5/19/99.
58N		2.0	I called Rauter 5/17/99 4:40PM. Inspection scheduled with Rauter by Mullins for 5/24/99 as noted.
59		2.0	I called Rauter 5/17/99 4:40PM. Inspection scheduled with Rauter by Mullins for 5/24/99 as noted.

8713 4205

1992-1995 TOWN CAR ELECTRICAL INSPECTIONS

Fo5acc-1

and "If any questions, please contact Joe Neme at (313) 380-8133". If you are having difficulty contacting the EAA Inspector immediately contact Alan Hens at EAA, phone (248) 642-3232 X146, fax (248) 642-4555. Send via fastest means available (overnight strongly preferred).

To be addressed to "Department Y116 - EAA Project # F002A"

When requested, EAA will provide additional copies of reports and/or photos. Contact Alan Hens at the numbers listed above. EAA will schedule inspections and notify any Ford representatives who has asked to attend.

Notification will be completed within one hour after establishing the inspection date and time.

If an insurance company or others assigned by them is delaying the inspection of an NHTSA case, EAA (Alan Hens) will immediately contact Ray Neri to help resolve the issue. Similar delays with non-NHTSA assigned cases will be immediately directed to Joe Martin for assistance in resolving delay issues.

Falcon Amend will call Alan Hens regarding each case and will also send the questionnaire (with her comments added) to the assigned EAA Inspector's fax and also send a copy to Alan Hens by fax. Alan Hens will provide the name of the EAA Inspector who has been assigned to each case.

Priority of cases is as follows: (1) NHTSA, (2) other most recent, (3) other older cases.

Daily status report to be sent by Alan Hens by e-mail to Joe Neme, Bill Abramson, Ray Neri, jporter@ford.com, trawler@ford.com, and fwertl@ford.com. The attached EXCEL file will be formatted at an EXCEL level which will enable all addressees

Questionnaire "rev" level to be added to each case. As questionnaire revisions are made this will aid in understanding which questions were asked in any given case. Alan Hens is maintain an electronic file of these "rev" levels.

Reports and photo negatives are to be maintained by EAA Inspectors until such time as Ford requests these materials to be sent to Ford. EAA will retain no copies of these materials after that point in time.

3713 4208

Item	QTY	UNIT	DESCRIPTION	PRICE	TOTAL	REMARKS
1. Labor	1	HR	1.000000	1.00	1.00	1.000000
2. Material	1	EA	2.000000	2.00	2.00	2.000000
3. Subcontract	1	EA	3.000000	3.00	3.00	3.000000
4. Equipment	1	EA	4.000000	4.00	4.00	4.000000
5. Fuel	1	EA	5.000000	5.00	5.00	5.000000
6. Transport	1	EA	6.000000	6.00	6.00	6.000000
7. Insurance	1	EA	7.000000	7.00	7.00	7.000000
8. Maintenance	1	EA	8.000000	8.00	8.00	8.000000
9. Supplies	1	EA	9.000000	9.00	9.00	9.000000
10. Other	1	EA	10.000000	10.00	10.00	10.000000
11. Total	11			55.00	55.00	

[illegible]

TABLE 1

3713 4210

3713 4211

3713 4212

3713 4213

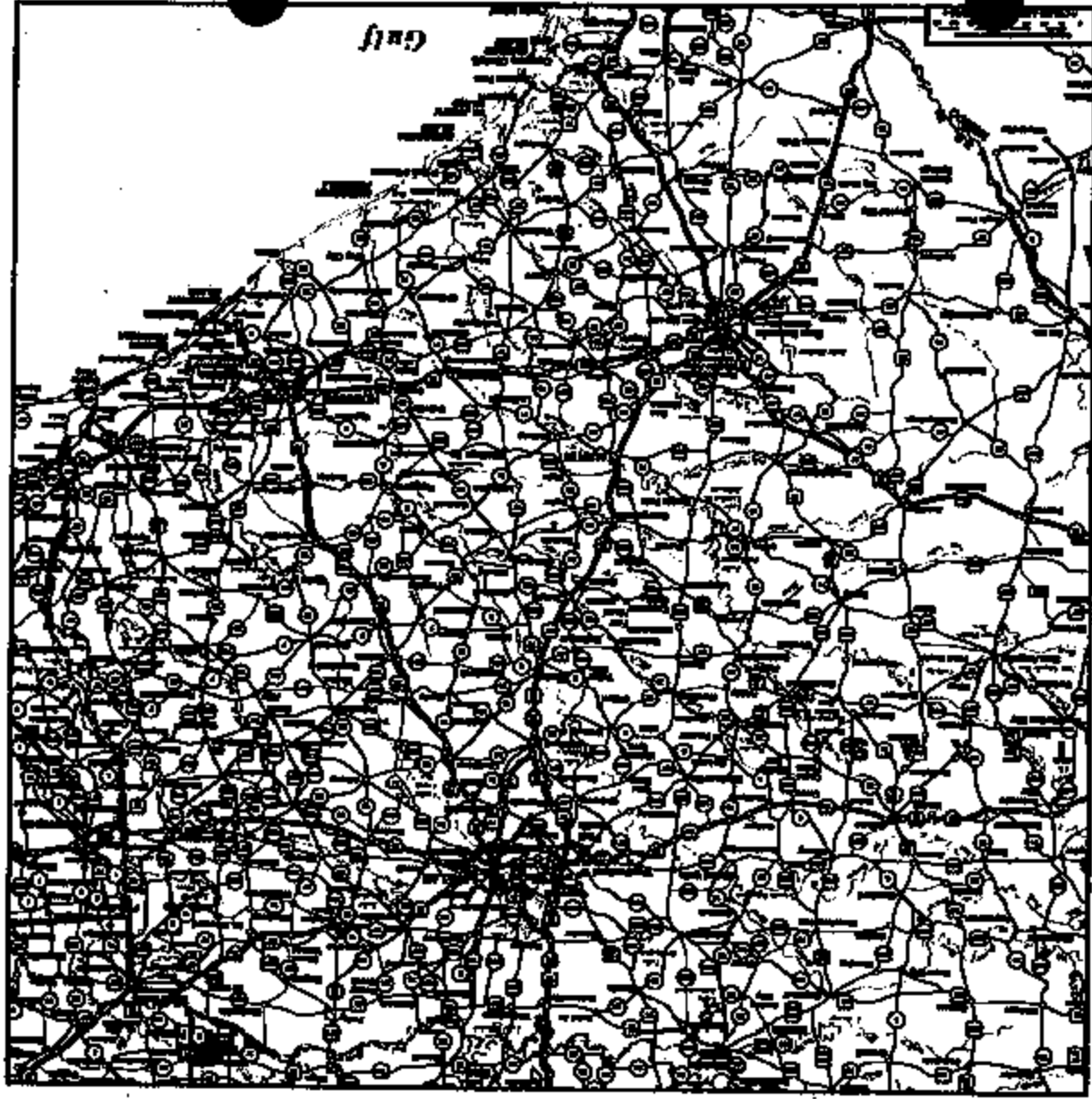
3713 4214

3713 4215

PE98-055
1992 and 1993
Lincoln Town Car
All underhood fires...



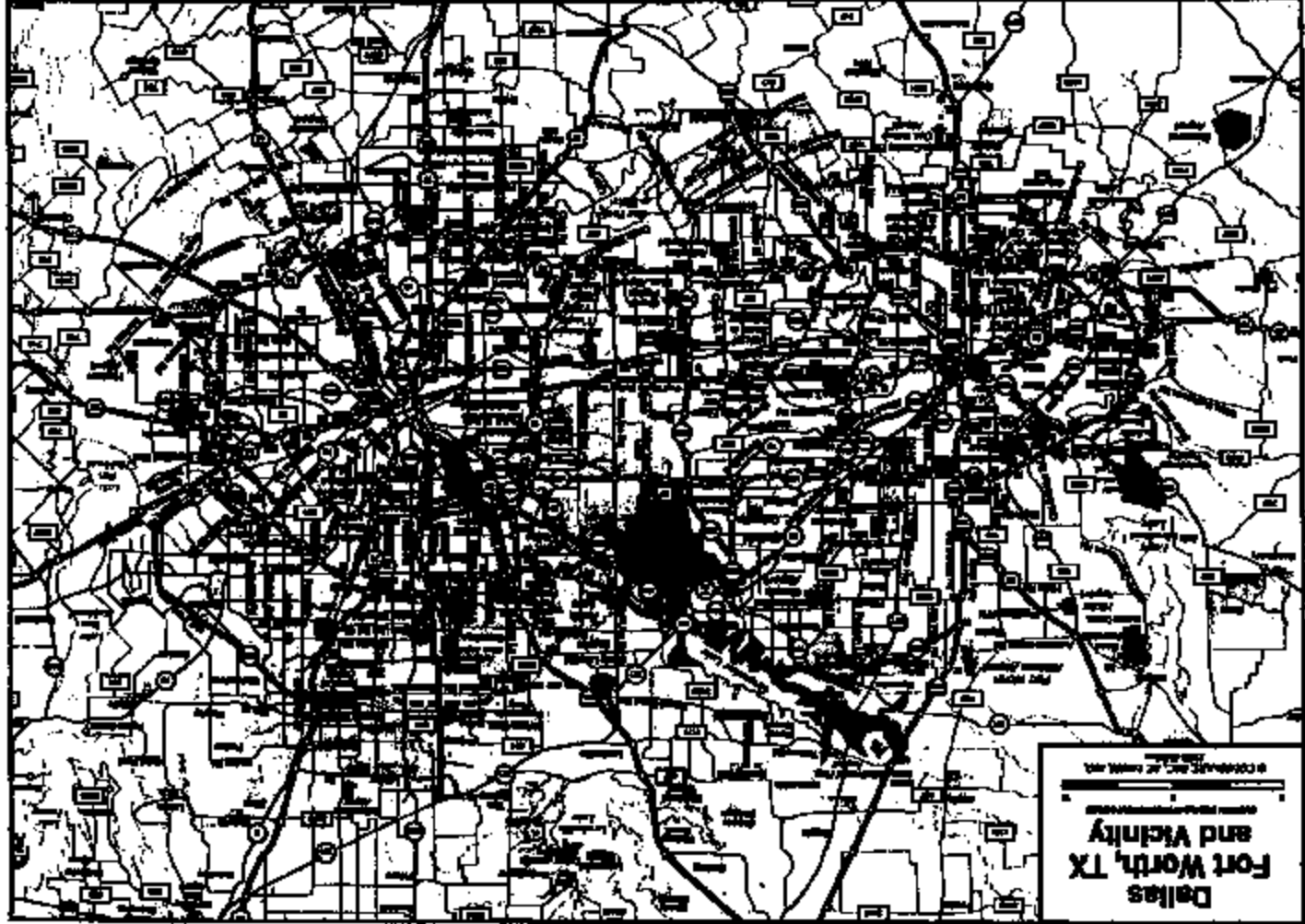
Due to NHTSA 99-Jan-22
ASO contact: William Abramcyk
313-322-3284



3713 4217

CAR RENTAL LOCATIONS:
(Numbers correspond to locations on map)

- Love Field Airport
- DFW Airport North
- DFW Airport South
- Aubrey Lane at Mockingbird
- Valley View Mall at LBJ
- Richardson-Central at Spring Valley
- Vann Ridge Mall
- Ft. Worth-1001 Henderson
- Arlington-3212 E. Alamo
- Budget Worldwide Reservations & Customer Service Center



TRUCK RENTAL LOCATIONS:

- Richardson-Central at Spring Valley
- Ft. Worth-1001 Henderson
- Arlington-3212 E. Alamo
- Budget Worldwide Reservations & Customer Service Center

FOR LOCAL RESERVATIONS AND INFORMATION CALL:

CAR: 817-329-CARS

TRUCKS: 817-329-TRIC

CUSTOMER SERVICE: 800-621-2944

FOR WEEKEND RESERVATIONS CALL (800) 627-6786

For Emergency Road Service call (800) 627-6786

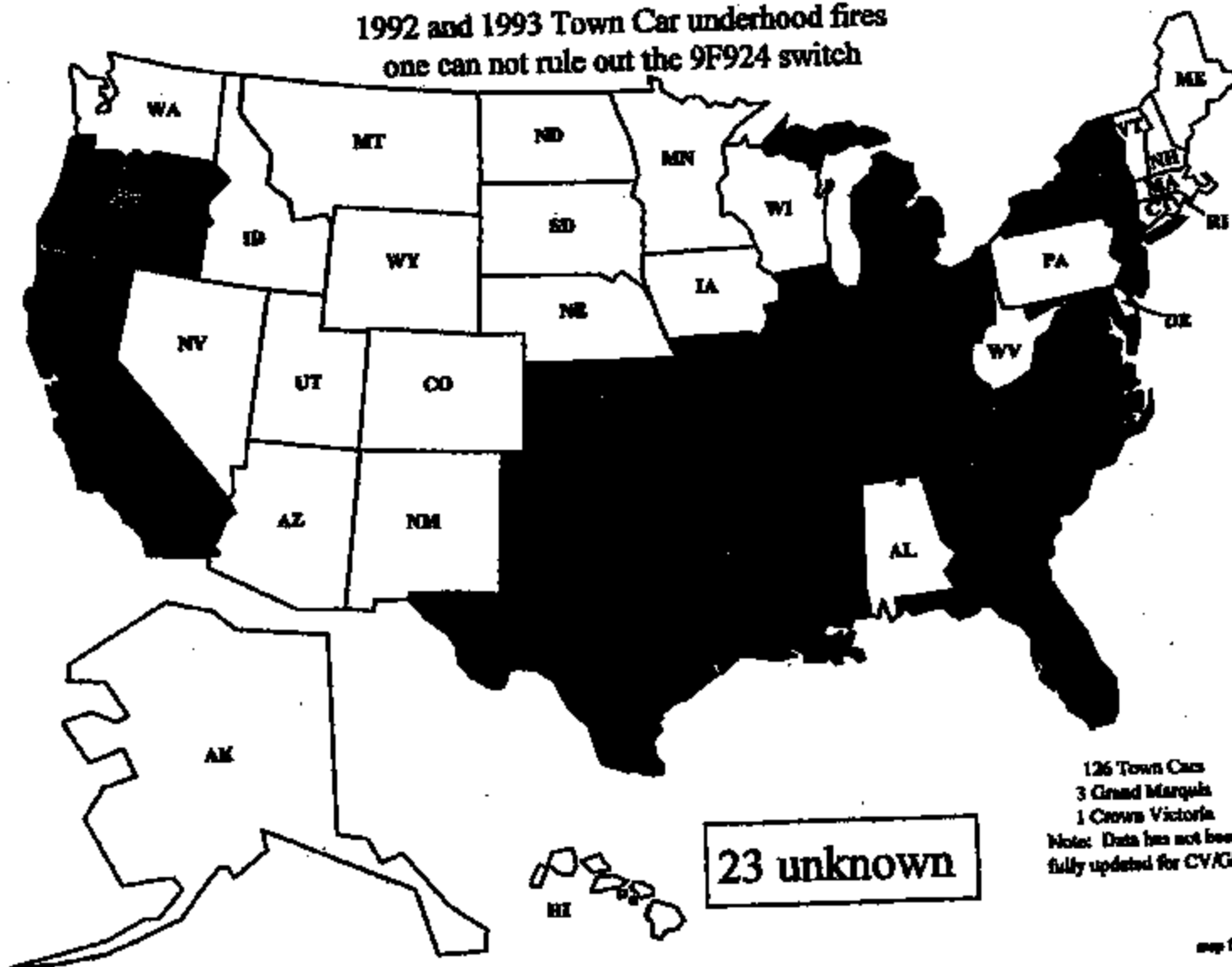
DALLAS LOVE FIELD

DALLAS-FORT WORTH INTERNATIONAL AIRPORT

Budget

DALLAS and Vicinity

1992 and 1993 Town Car underhood fires
one can not rule out the 9F924 switch



H

1982-1993 CROWN VICTORIA/GRAND MARQUIS AND
1982, 1984, 1986 LINCOLN TOWN CAR
UNDERHOOD FILES

OWNER						VEHICLE					REPORT			
No.	Name	Address	City	State	ZIP	Telephone Number	Year	Model	Model Year	Make Date	Sale Date	Mileage	Date	Type
			Laurelton	LA			2FA0PT0000	1982	C-Vic	06/15/82	06/15/82	130,000	06/05/82	MORE
			FL				2FA0PT0000	1982	C-Vic	03/17/82	04/17/82	66,210	07/07/82	MORE
			Palm Bay	FL			2FA0PT0000	1982	C-Vic	04/05/81	06/05/81	70,000	07/10/82	MORE
			Fortis	FL			Unknown	1982	C-Vic	Unknown	Unknown	30,000	10/05/82	MORE
			San Antonio	TX			2MEC0T0000	1982	C-Vic	03/14/82	07/17/82	52,000	06/15/82	MORE
			Corpus	TX			Unknown	1982	C-Vic	Unknown	Unknown	65,000	10/15/82	MORE
			Minnehaha Falls	OR			2FALPT0000	1982	C-Vic	06/14/82	06/14/82	2,212	06/20/82	MORE
			Northbrook	KY			2FACPT0000	1982	C-Vic	02/17/82	04/20/82	47,320	06/25/82	MORE
			Summerside	CA			2FACPT0000	1982	C-Vic	06/20/82	06/23/82	30,000	11/05/82	MORE
			Franklin	IL			2FACPT0000	1982	C-Vic	06/05/81	01/04/82	60,000	06/24/82	MORE
			Allen	SO			2FACPT0000	1982	C-Vic	06/15/82	07/22/82	10,307	11/05/82	MORE
			Proctor	MA			2FACPT0000	1982	C-Vic	03/05/82	04/12/82	42,421	07/20/82	MORE
			Oakland Creek	FL			2MEC0T0000	1982	C-Vic	03/24/82	04/20/82	62,000	12/10/82	MORE
			Yoplen	SO			2MEC0T0000	1982	C-Vic	04/10/81	06/05/81	32,000	06/07/82	MORE
			Adrian	TX			2FACPT0000	1982	C-Vic	03/27/81	04/22/81	20,000	04/05/82	MORE
			Bladen	TX			2FACPT0000	1982	C-Vic	06/05/81	06/15/81	Unknown	10/25/82	MORE
			Isis	MO			2FACPT0000	1982	C-Vic	03/02/82	03/15/82	94,300	06/05/82	MORE
			Farwest Hills	NY			2FALPT0000	1982	C-Vic	06/15/82	06/15/82	80,000	10/15/82	MORE
			Forest	CA			2MEC0T0000	1982	C-Vic	07/22/81	06/05/81	40,000	03/27/82	MORE
			Detroit	MI			2MEC0T0000	1982	C-Vic	04/12/81	04/20/81	41,000	07/10/82	MORE
			Rockville	MD			2FALPT0000	1982	C-Vic	03/15/82	07/15/82	42,000	06/05/82	MORE
			Greenwood	OK			Unknown	1982	C-Vic	Unknown	Unknown	130,000	06/24/82	MORE
			Adrian	GA			2FACPT0000	1982	C-Vic	06/23/82	07/14/82	35,000	10/04/82	MORE
			Adrian	MI			2MEC0T0000	1982	C-Vic	06/20/82	06/14/82	40,000	06/20/82	MORE
			Scottsdale	AZ			2FALPT0000	1982	C-Vic	06/20/82	06/14/82	25,000	10/10/82	MORE
			Jefferson City	TX			2FALPT0000	1982	C-Vic	06/23/82	10/23/82	3,400	10/21/82	MORE
			Grayville	IN			2FALPT0000	1982	C-Vic	10/20/82	06/05/82	10,000	06/22/82	MORE
			Bedford	MD			2LAC0T0000	1982	Town Car	10/22/82	06/20/81	72,000	06/15/82	MORE
			Detroit	MI			2LAC0T0000	1982	Town Car	06/20/82	10/14/82	40,000	07/20/82	MORE
			Minnehaha Falls	OR			2LAC0T0000	1982	Town Car	07/11/82	07/20/82	40,101	07/21/82	MORE
			Edinburgh	AL			2LAC0T0000	1982	Town Car	06/21/81	06/17/81	60,317	10/10/82	MORE
			Brooklyn	NY			2LAC0T0000	1982	Town Car	06/15/82	06/02/82	30,000	06/23/82	MORE
			Adrian	MI			Unknown	1982	Town Car	Unknown	Unknown	100,000	06/25/82	MORE
			Southboro	AL			2LAC0T0000	1982	Town Car	06/15/82	06/20/82	63,000	07/12/82	MORE
			Adrian	GA			2LAC0T0000	1982	Town Car	06/23/82	07/20/82	34,320	01/21/82	MORE
			Verona	TX			2LAC0T0000	1982	Town Car	06/20/82	06/10/82	37,000	11/12/82	MORE
			Palm Coast	FL			2LAC0T0000	1982	Town Car	11/02/82	11/24/82	54,000	11/15/82	MORE
			Washington	NC			2LAC0T0000	1982	Town Car	10/11/82	10/10/82	32,000	07/20/82	MORE
			Flint	MI			Unknown	1982	Town Car	Unknown	Unknown	40,000	07/20/82	MORE
			Lithia	GA			2LAC0T0000	1982	Town Car	06/05/81	04/20/81	30,211	06/17/82	MORE
			Glennville	AZ			2LAC0T0000	1982	Town Car	06/15/82	10/21/82	6,000	12/01/82	MORE
			Pompano Beach	FL			2LAC0T0000	1982	Town Car	06/15/82	10/11/82	Unknown	06/12/82	MORE

1982-1983 GREEN VICTORIA GRAND MARQUEE AND
1982, 1984, 1986 LINCOLN TOWN CAR
UNSUBSTANTIATED

ORDER						VEHICLE						REPORT		
No.	Name	Address	City	State	ZIP	Telephone Number	Year	Model	Make Date	Sale Date	Mileage	Date	Type	
43			St. Louis	MO			Unknown	1981	Town Car	Unknown	Unknown	85,000	10/13/85	MORS
44			Lebanon	CA			UNKNOWN	1981	Town Car	64/1281	88/0281	38,000	8/14/85	MORS
45			Meriden	CT			UNKNOWN	1986	Town Car	64/1686	88/0186	38,000	8/14/85	MORS
46			Upper Marlboro	MD			UNKNOWN	1986	Town Car	128/086	128/086	18,000	8/14/85	MORS
47			Los Angeles	CA			UNKNOWN	1981	Town Car	63/1581	88/0281	43,000	8/14/85	MORS
48			Utica	NY			UNKNOWN	1984	Town Car	64/2284	88/0184	14,000	8/14/85	MORS
49			Rockford	IL			Unknown	1981	Town Car	Unknown	Unknown	148,000	8/14/85	MORS
50			St. Cloud	MS			UNKNOWN	1984	Town Car	63/2184	88/0684	Unknown	8/14/85	MORS
51			Tucson	AZ			UNKNOWN	1986	Town Car	63/1486	87/0186	63,000	8/14/85	MORS
52			Houston	TX			UNKNOWN	1981	Town Car	12/2880	12/3180	88,000	8/14/85	MORS
53			Marion	FL			UNKNOWN	1982	Other	83/1182	88/0282	21,000	8/14/85	COB
54			St. Louis	MO			UNKNOWN	1982	Other	84/0182	84/0382	18,000	8/14/85	COB
55			Marion	FL			UNKNOWN	1983	Other	84/1483	88/0283	2,000	8/14/85	COB
56			Jacksonville	FL			UNKNOWN	1982	Other	88/0882	87/1482	23,001	11/02/83	COB
57			Arlington	VA			UNKNOWN	1982	Other	83/1281	10/0281	88	8/14/85	COB
58			Des Moines	IA			UNKNOWN	1982	Other	88/0282	88/0882	24,000	11/08/84	COB
59			San Jose	CA			UNKNOWN	1982	Other	88/0182	87/0882	45,000	8/14/85	COB
60			Staten Island	NY			UNKNOWN	1982	Other	88/0282	87/1182	7,700	8/14/85	COB
61			Providence	RI			UNKNOWN	1982	Other	88/1181	87/1081	48,000	8/14/85	COB
62			Lebanon	CA			UNKNOWN	1986	Town Car	63/1186	84/1686	84,000	8/14/85	COB
63			High Point	NC			UNKNOWN	1981	Town Car	128/081	128/1781	78,000	8/14/85	COB
64			Stacy Hill	NC			UNKNOWN	1984	Town Car	83/0884	83/1184	42,432	8/14/85	COB
65			London Hill	MD			UNKNOWN	1986	Town Car	82/0786	83/0286	47,780	8/14/85	COB

Court of record	Year		Month		Day		Hour		Minute		Second		Tenth		Hundredth		Thousandth		Total	
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Total	1	1	2	1	3	1	1	1	1	2	1	1	1	2	1	4	1	4	20	47

3719 4229

Inquiry PE98-055



U.S. Department
of Transportation
National Highway
Traffic Safety
Administration

F. J. BORAS

NOV 24 1998

30 NOV 98 3:10

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

L.W. Camp, Director
Automotive Safety and Engineering Standards Office
Ford Motor Company
330 Town Center Drive
Dearborn, MI 48126

400 Seventh Street, S.W.
Washington, D.C. 20590

DISPOSE of Copies (Black Stamped) by:	
RETAIN Record Copy (Red Stamped) thru:	2018
Schedule Number:	27.03

NSA-12jfb
PE98-055

Dear Mr. Camp:

This letter is to advise you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) is conducting a Preliminary Evaluation concerning engine compartment fires in certain Lincoln Town Car vehicles manufactured by the Ford Motor Company.

This office has received 21 reports of engine compartment fires in 1992 and 1993 Lincoln Town Cars. The fires in these vehicles are reported to have started while the vehicles were parked and the engines not running. Ten of the reports indicate a fire at the left front fender wheel well area (see photograph, page 6), two indicate a fire at the master cylinder, which is adjacent to the left front fender wheel well area, and the remaining nine reports indicate a fire in the engine compartment. Additionally, five of the reports indicate the vehicle owner's carport, garage, or home, was also damaged as a result of the fire.

A copy of each of the reports is enclosed for your information.

Unless otherwise stated in the text, the following definitions apply to this information request:

- **Subject vehicles:** all 1992 and 1993 Lincoln Town Car vehicles.
- **Ford:** Ford Motor Company, all of its past and present officers, employees, whether assigned to its principal offices or to any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged by or under the control of Ford Motor Company (including all business units and persons previously referred to) who are or were involved in any way with (a) design, analysis, modification or production; (b) testing, assessment or evaluation; or (c) record-keeping, claims, or lawsuits relating to the alleged defect in the subject vehicles.



AUTO SAFETY HOTLINE
(800) 424-9333
Wash. D.C. Area (202) 366-0123

3713 4230

- **Alleged defect:** all under hood fires, or other thermal anomalies, from any source or origin, of any description, level, degree, or magnitude, occurring in the left, or drivers side, of the engine compartment. This would include fires in the area of the left front wheel, or left front fender.
- **Documents:** In the broadest sense of the word, shall mean all written, printed, typed, recorded or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, including but not limited to, papers, records, letters, correspondence, memoranda, communications, electronic mail messages (existing in hard copy and/or in electronic storage), faxes, notes, annotations, working papers, drafts, minutes, records, resolutions, books, pleadings, response to discovery, administrative and judicial filings, all transcripts and other recordings of any kind, affidavits, materials and things produced in discovery, statements, summaries, interviews, opinions, reports, newspaper articles, studies, analysis, evaluations, interpretations, applications, agreements, jottings, agendas, bulletins, notices, announcements, instructions, designs, specifications, blueprints, as-builts, manuals, brochures, publications, schedules, journals, statistical data, lists, tabulations, computer printouts, data processing input, data in storage, and data output, microfilm, microfiche, data from optical scanning or recording, photographs, tangible things, and all records kept by electronic, photographic, or mechanical means, any drafts or revisions pertaining to any of the foregoing, and all other things similar to any of the foregoing however denominated and any other data compilations from which information can be obtained, translated if necessary, into reasonably usable form and any other documents.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following questions. Please repeat each question verbatim before the response. If you have previously furnished ODI with information that is responsive to any item(s) in this request, you need not resubmit that information, but your response must cross-reference (by date of response and question number) the earlier submission. If Ford cannot answer any specific question, please state the reason why it is unable to do so. If you claim that any information or material responsive to the following items need not be divulged to the NHTSA because it is privileged, or the work product of an attorney, state the nature of that information or material and identify any document in which it is found by, date, subject or title, name and position of person from and person to whom it was sent, and name and position of any other recipient. You must also describe any privilege that you claim, and explain why you believe it applies.

- A32
1. State the total number of subject vehicles sold in the United States by model year.
 2. State the number incidents, known to Ford, in which the alleged defect has been reported to have occurred in the subject vehicles. Furnish copies of all documents, from any and all sources, including documents which may not originally have been submitted to Ford, which

DISCOVERED
FORD
C-3-5

8.26
5.25 21
→ 5/A

3.25 C-1012

ALL THESE USE WORK
65

are in Ford's possession or control, or of which it is otherwise aware, that pertain, in any way, to any of these incidents. This should include, but is not limited to, all documents possessed by Ford, or of which it is otherwise aware, pertaining to the reports included with this letter. Furnish all documents whether or not Ford has verified the validity of each document. For each incident in this response please provide the vehicle owner's name, address, and telephone number; and identify all vehicles by vehicle identification number, model year, date of manufacture, date of retail sale, date of incident, mileage at the time of the incident, and problem description. For all incidents involving lawsuits please identify the caption, court, docket number, and filing date of each lawsuit and a copy of the complaint document initiating the lawsuit. Sort all incidents by cause and area or component of origin.

State the total number vehicles sold in the United States by model name and model year that have engine-compartment configurations (i.e., components and component location, wiring harnesses and harness location) the same as the subject vehicles. Provide a response to question number two for all vehicles identified in your answer to this question.

4. State the number of all warranty claims, including extended warranty claims, and "goodwill," field or zone adjustments received by Ford that relate to the alleged defect in the subject vehicles by calendar year, calendar month, and problem identification. Identify all owners by name, address, and telephone number, and all vehicles by vehicle identification number, model name, model year, date of manufacture, date of retail sale, date of incident, mileage at the time of the incident, and problem description.

5. Identify all electrical circuits by name, number, and wire color, located in the left side of the engine compartment that are, or remain, energized by the battery when the ignition key is in the off position. For all circuits identified, provide a schematic drawing which identifies the harness(es) in which they reside, the harness location(s), and the components to which power is supplied.

6. Identify and describe all inspections, tests or other analyses conducted by Ford, its contractors, suppliers, or by any other entities, regarding the inspection of any subject vehicles that relate to the alleged defect, to date. Identify, by name and address, the entity that conducted each such test or analysis. Furnish copies of all reports, surveys, notes, tables, graphs or other documents that pertain to each such test or analysis. State when each test or analysis was initiated and concluded, or whether it is still in progress. Include in your response a description of a worst case scenario.

7. If Ford has issued any bulletins, advisories, or other communications to distributors, retailers, consumers, or any other entity pertaining to the alleged defect in the subject vehicles, provide a copy of each such document. If no such documents have been issued, so state.

DISCLOSED

NOTICE

CALL THE TWO
MAY BE BANNED

GETTING

WILLING POWER?

OPD QUICK TESTS
NOT ENOUGH

12-91
ATO

AVF
NOT ENOUGH

OGC
LAWSUITS + CLAIMS

OPD

OGC

CALL
MTC W/OPD
TESTS
E.A. THAMES UP

CALL MTC
SUBJECT
VEHICLE?

8. Identify and describe all significant modifications or changes made by or on behalf of Ford in the manufacture, design, or material composition of all components in the subject vehicles that may relate to the alleged defect. The following information must be included for each such modification or change:

So Read

- a. the approximate date on which the modification or change was incorporated into production;
b. a description of the modification or change;
c. the reason for the modification or change; and
d. whether the modified or changed components can be interchanged with earlier production components.

9. Provide Ford's assessment of the alleged defect in the subject vehicles, including:

- a. all causal or contributory factors;
b. the failure mode;
c. the risk to occupant safety it poses; and
d. whether there are any circumstances that would provide the vehicle owner or others with warning of its existence.

Your response to this letter, in duplicate, must be submitted to this office by January 6, 1999. Please include in your response the identification codes referenced on page 1 of this letter. If you find that you are unable to provide all of the information requested within the time allotted, you must request an extension from Mr. Thomas Z. Cooper not later than five days from the due date. If you are unable to provide all of the information requested by the original deadline, you must submit a partial response by that date with whatever information you have available, even if you have received an extension.

This letter is being sent to your company pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49, U.S. Code. Your failure to respond promptly and fully to this letter could subject Ford to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163.

If you consider any portion of your response to be confidential information, include that material in a separate enclosure marked "CONFIDENTIAL." In addition, you must submit a copy of all such material to the Office of Chief Counsel (NCC-30), National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590, and comply with all other requirements for the submission of confidential business information stated in 49 CFR Part 512.

If you have any technical questions concerning this matter, please contact Mr. John Abbott of my staff at (202) 366-5221.

Sincerely,


Thomas Z. Cooper, Chief
Vehicle Integrity Division
Office of Defects Investigation

Enclosures: 12 VOQ's: 813241, 824016, 808265, 821667, 979634, 521137, 804418, 541041
820316, 536206, 819621, 823462; 5 fire department reports; 2 internet reports; and
2 fire investigator reports

NHTSA:NSA:ODI
NSA-12:JABBOTT:dnd:6-5221:11/17/98
cc:
NSA-01
NSA-12/Subj/Chron/
Document: L/ABBOTT/Towncar.IR

DUE Dec. 13, 1998

1992 Lincoln Town Car (1LNLM81W2N7 [REDACTED])



11/24/98

PE Opening Reports (PE98-055)
1992 Lincoln Town Car Engine Fires

NO.	Source	ST	VIN	M/Y
1	813241	FL	1LNLM82W5NY	92
2	824018	TX	1LNLM81W2NY	92
3	808265	FL	1LNLM82W7NY	92
4	821667	LA	1LNLM81W9NY	92
5	979834	TX	1LNLM82W5NY	92
6	521137	OK	1LNLM81W2NY	92
7	F.D.R.	GA	1LNLM82W3NY	92
8	804418	OH	1LNLM81W8NY	92
9	541041	FL	1LNLM81W3NY	92
10	F.D.R.	FL	1LNLM81W2NY	92
11	F.D.R.	FL	1LNLM82W7NY	92
12	A805280	FL	1LNLM81W0NY	92
13	820316	FL	1LNLM81W3NY	92
14	I/Net	FL	1LNLM81W8NY	92
15	538208	MS	1LNLM83W9NY	92
16	819821	LA	1LNLM82W5NY	92
17	I/Net	FL	1LNLM82W4NY	92
18	F.D.R.	GA	1LNLM82W1NY	92
19	A804221	FL	1LNLM81WP2Y	93
20	823462	MS	1LNLM81W5PY	93
21	F.D.R.	FL	1LNLM81WXPY	93

3713 4236

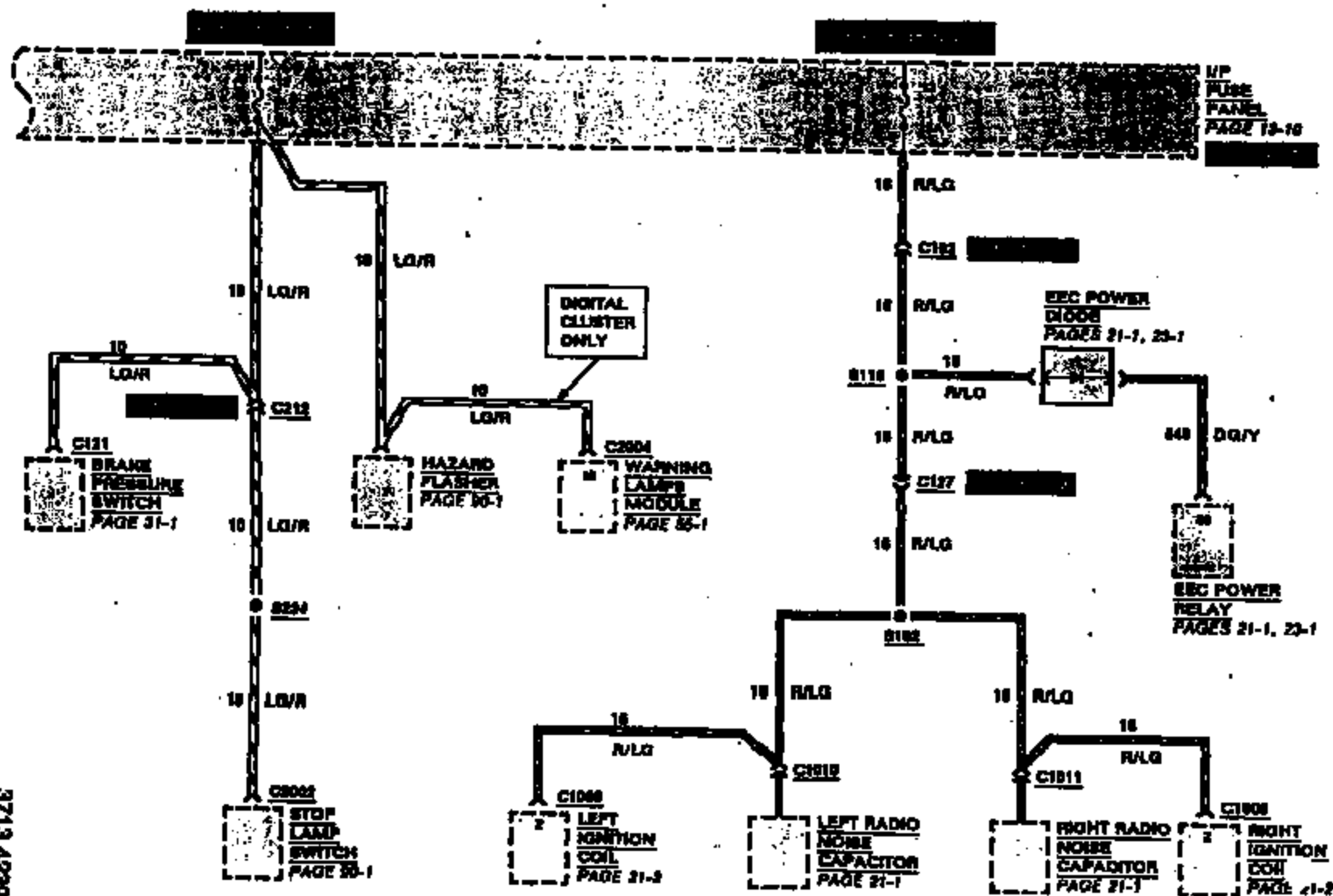
Circuits

3713 4237

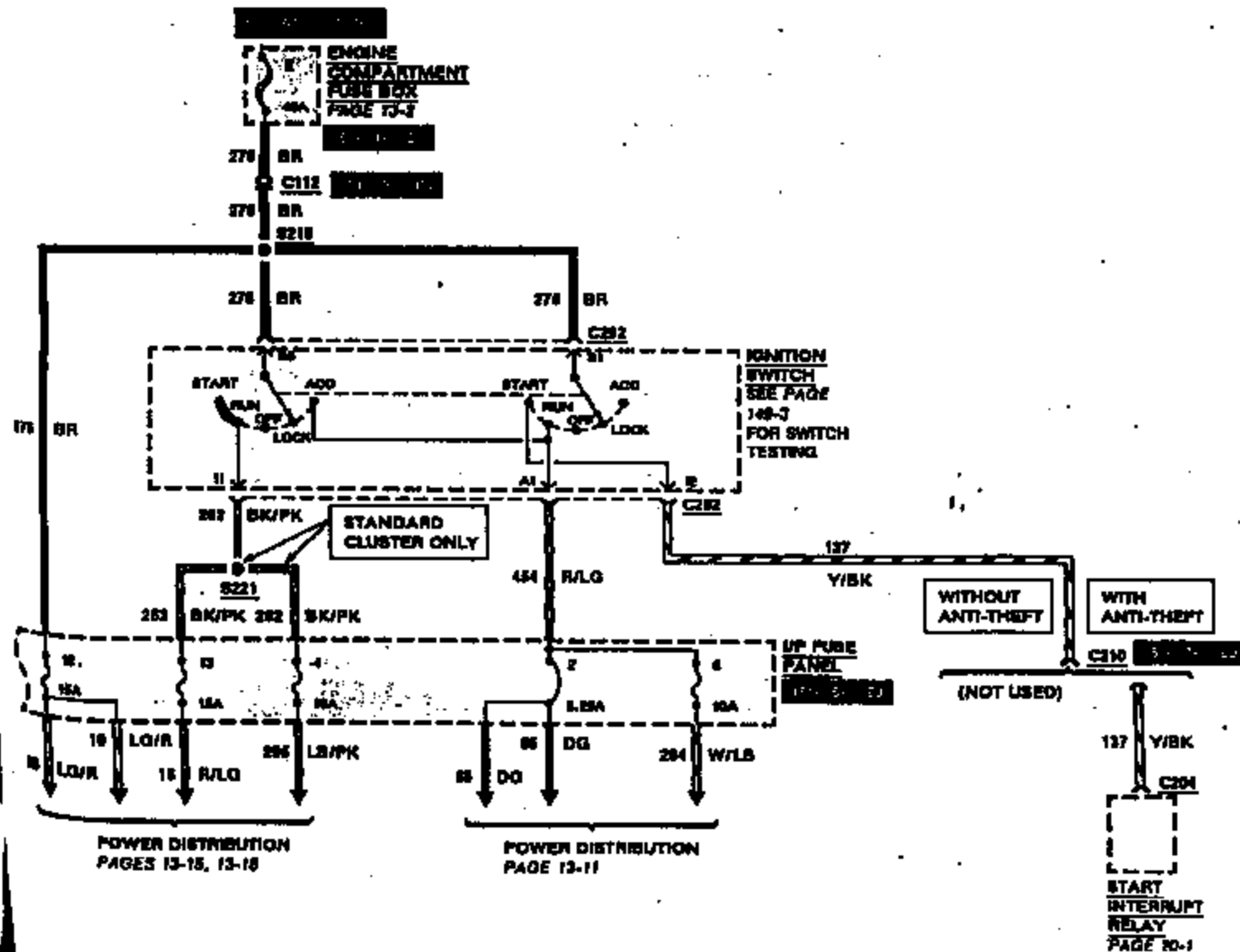
**CIRCUITS THAT REMAIN ENERGIZED AT ALL TIMES - 1982-83 LINCOLN TOWN CAR
ON THE LEFT HAND SIDE OF THE ENGINE COMPARTMENT**

CKT #	CIRCUIT NAME / DESCRIPTION	CKT COLOR	WIRE HARNESS
10	MP FUSE PANEL TO BRAKE PRESSURE SWITCH	LGR	14401
278	PDB TO IGNITION SW	BR	14401 / 14290
414	AIR SUSPENSION COMPRESSOR MOTOR & VENT	Q/R	14290
537	PDB TO ANTI-LOCK BRAKE MOTOR RELAY	T/Y	14290
554	PDB TO EEC PWR RELAY / ECC MODULE	Y/BK	14290 / 12A581
787	PDB TO FUEL PUMP RELAY	PK/BK	14290 / 12A581

POWER DISTRIBUTION 13-16

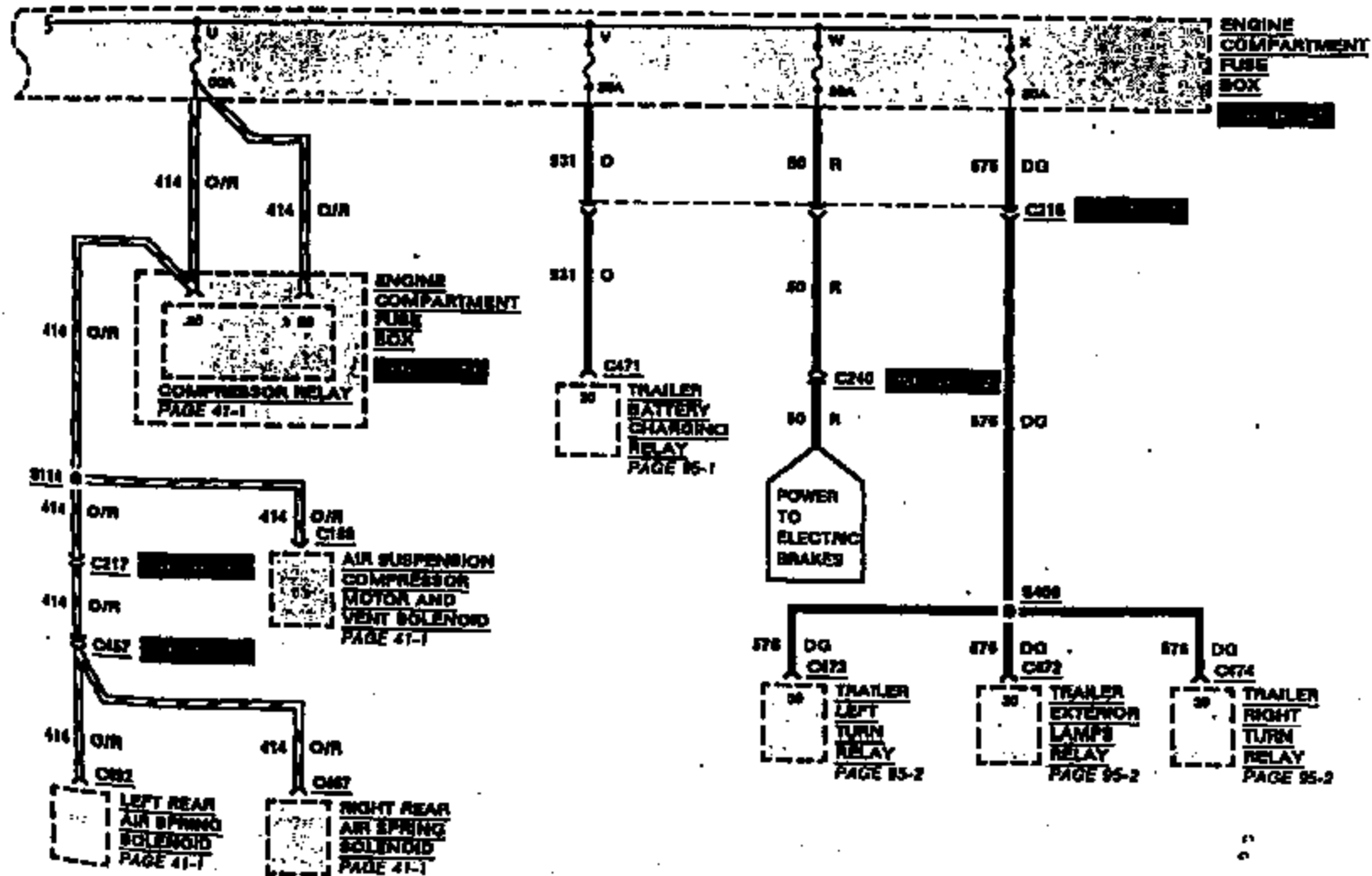


POWER DISTRIBUTION 13-10



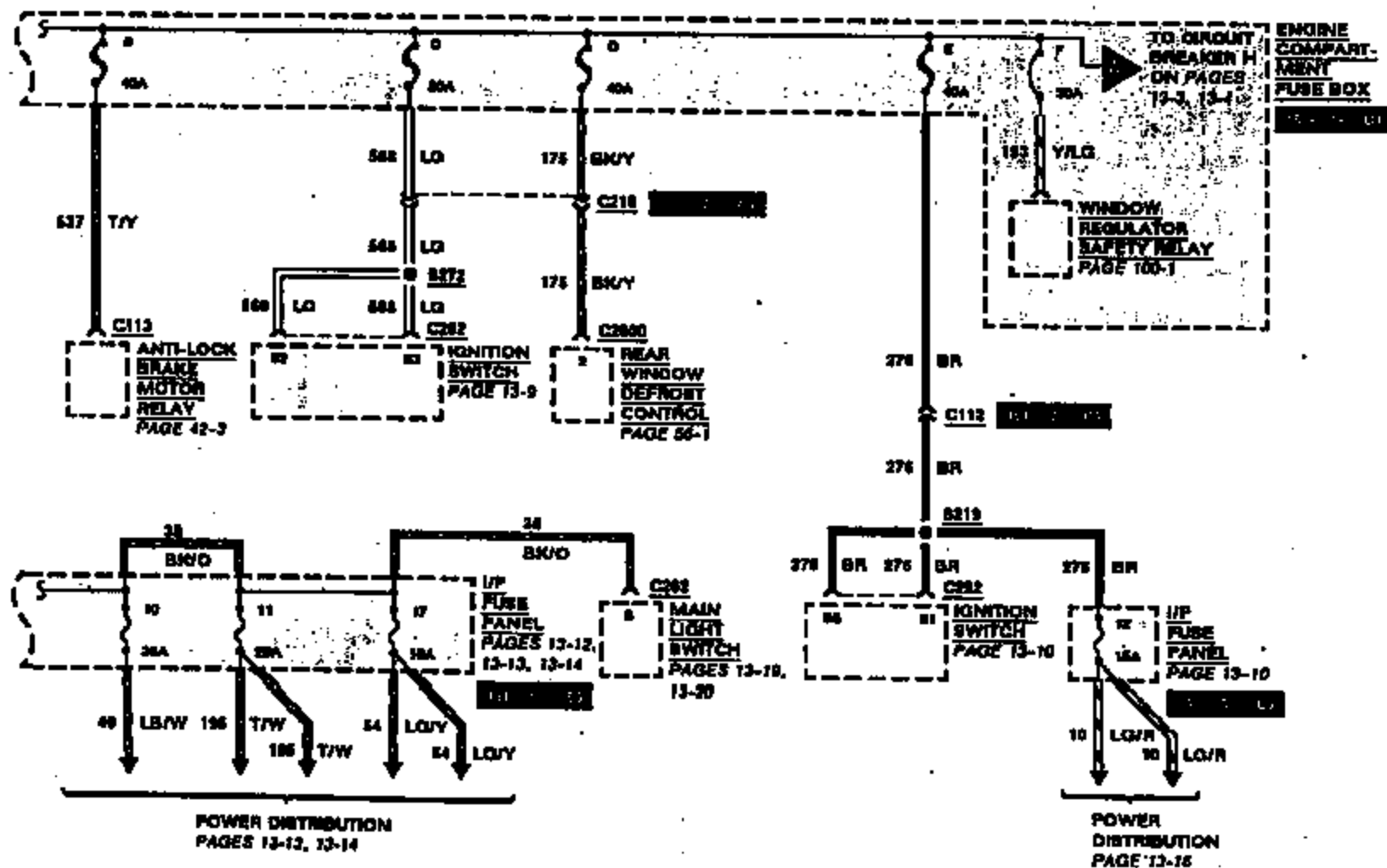
3719 4240

POWER DISTRIBUTION 13-8



3713 4241

POWER DISTRIBUTION 13-2

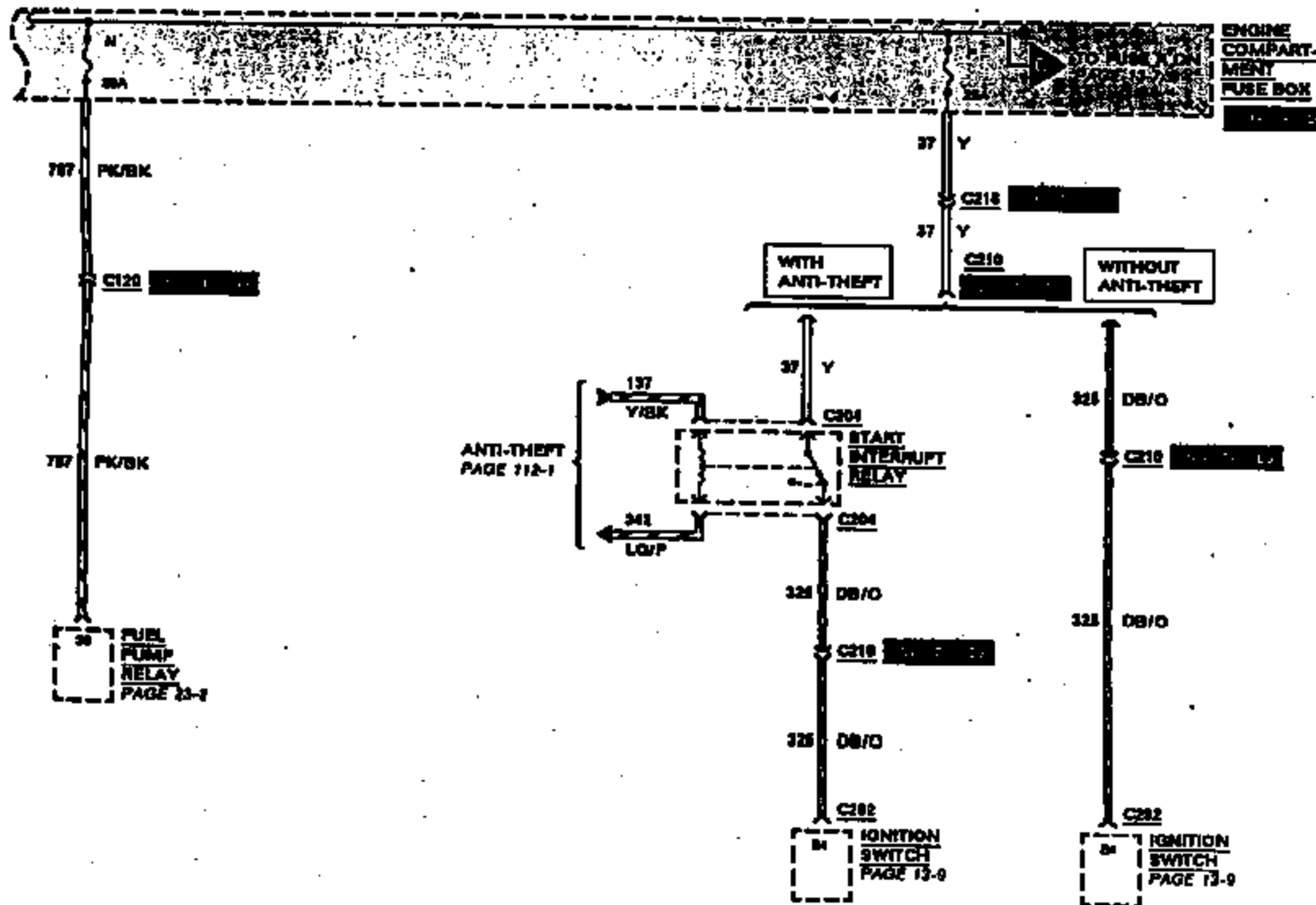


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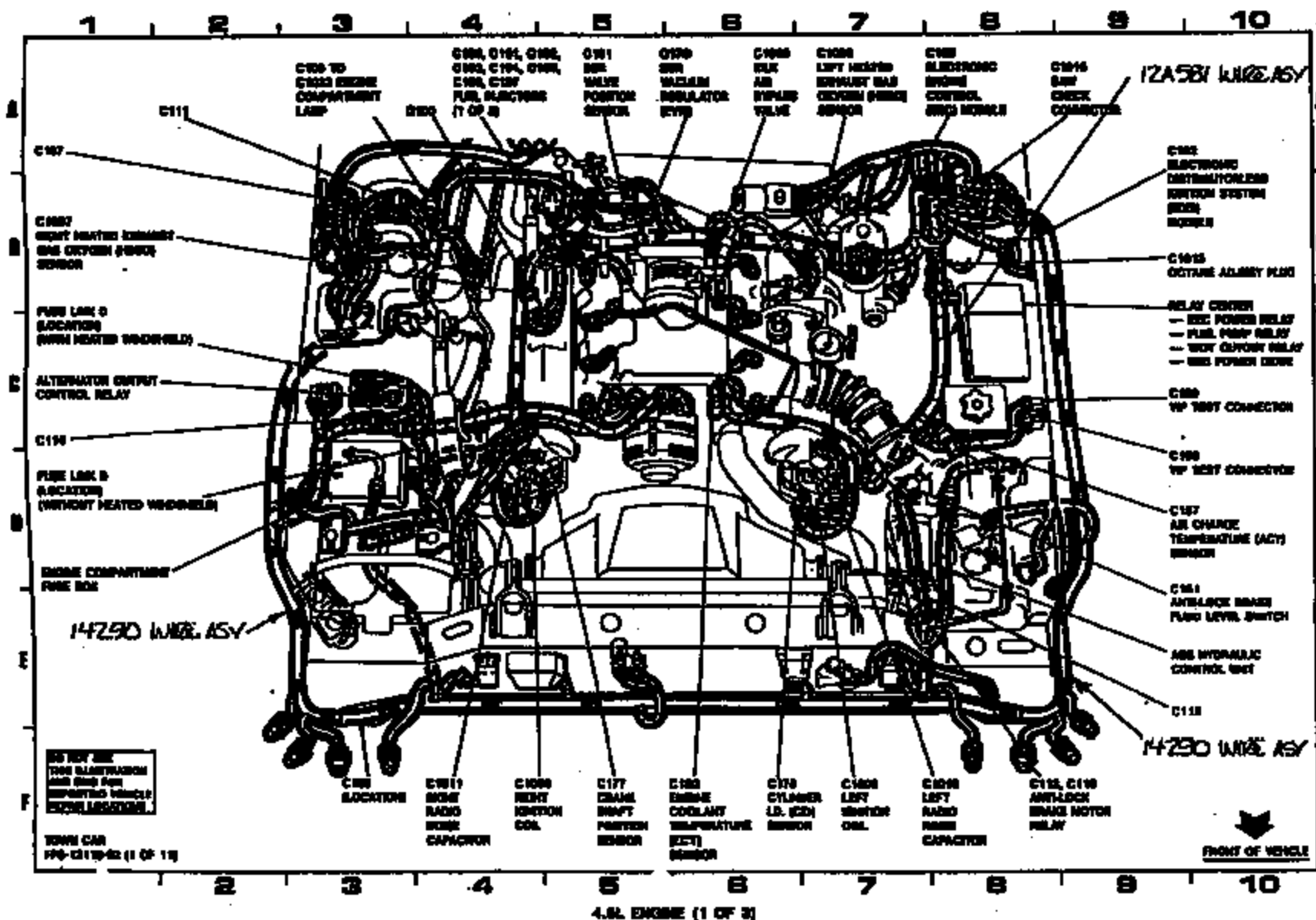
Wiring diagram for the 1994 Ford Taurus, showing the power distribution from the battery to various components. The diagram includes a main power line with fuses (F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16, F17, F18, F19, F20, F21, F22, F23, F24, F25, F26, F27, F28, F29, F30, F31, F32, F33, F34, F35, F36, F37, F38, F39, F40, F41, F42, F43, F44, F45, F46, F47, F48, F49, F50, F51, F52, F53, F54, F55, F56, F57, F58, F59, F60, F61, F62, F63, F64, F65, F66, F67, F68, F69, F70, F71, F72, F73, F74, F75, F76, F77, F78, F79, F80, F81, F82, F83, F84, F85, F86, F87, F88, F89, F90, F91, F92, F93, F94, F95, F96, F97, F98, F99, F100) and branches leading to components like the Premium Sound Radio, JBL Radio, Anti-Lock Brake Relay, Engine Compartment Fuse Box, IEC Power Relay, and Electronic Engine Control (EEC) Module. The diagram also shows the location of the battery and the main power line.

3713 4243

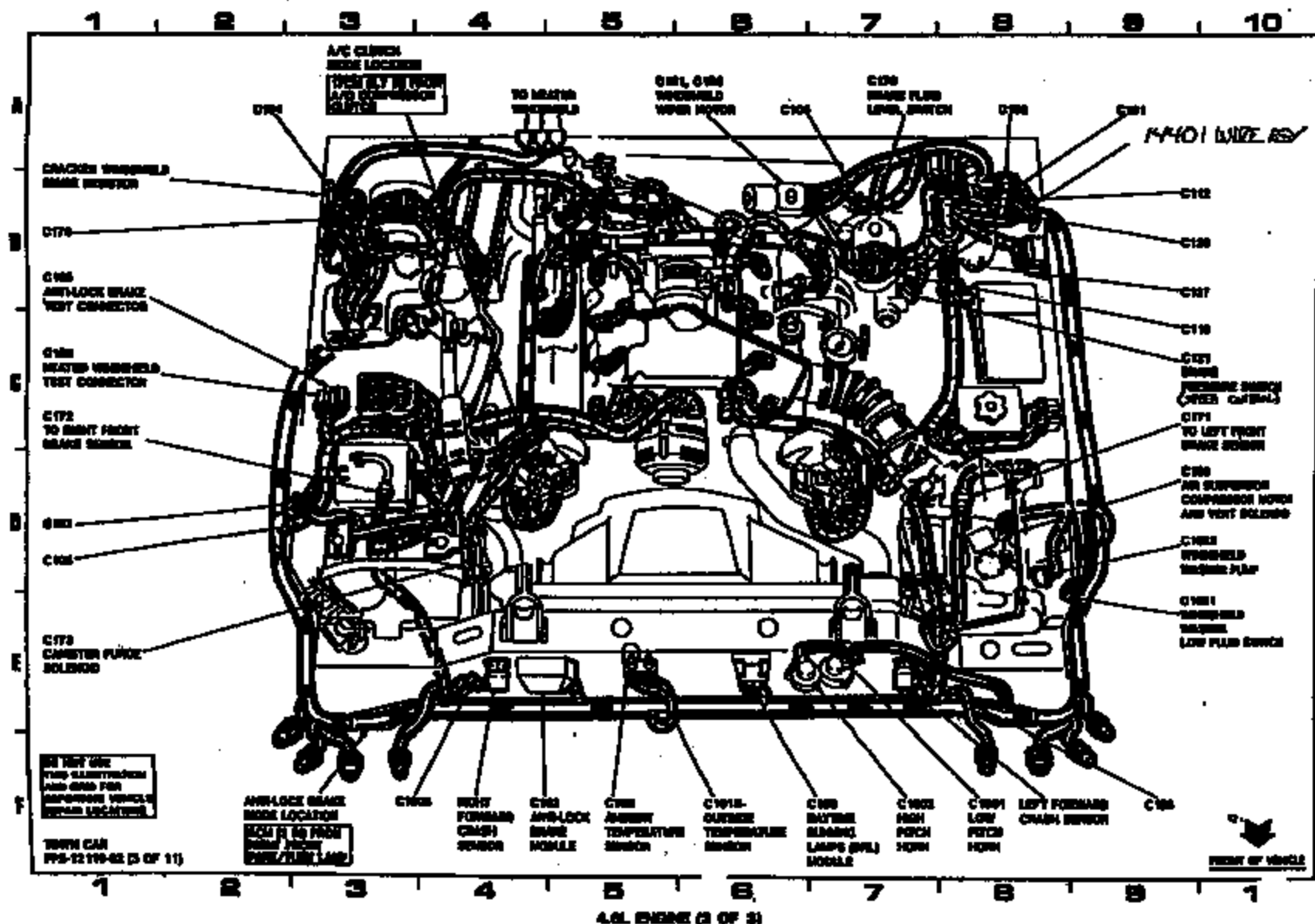
POWER DISTRIBUTION 13-6



15.1 COMPONENT LOCATION VIEWS

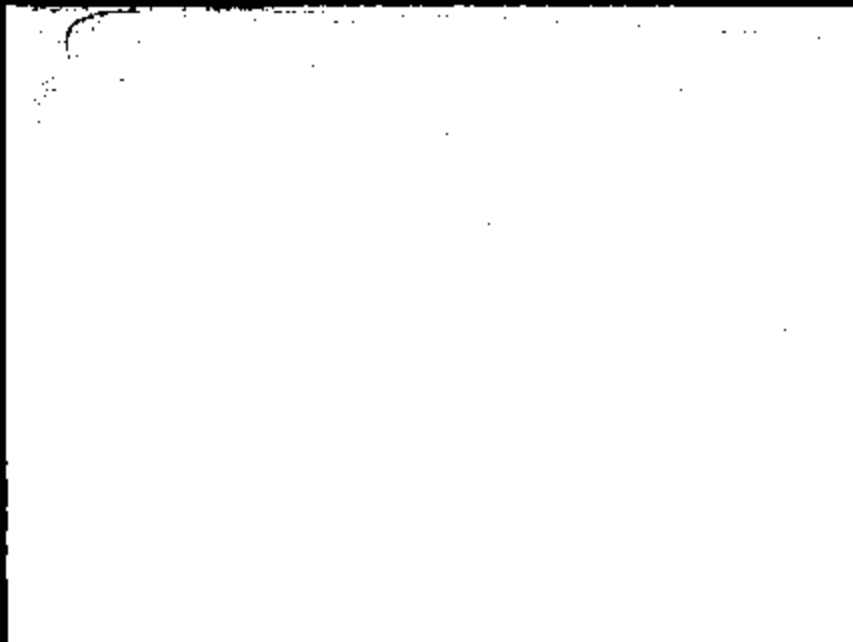
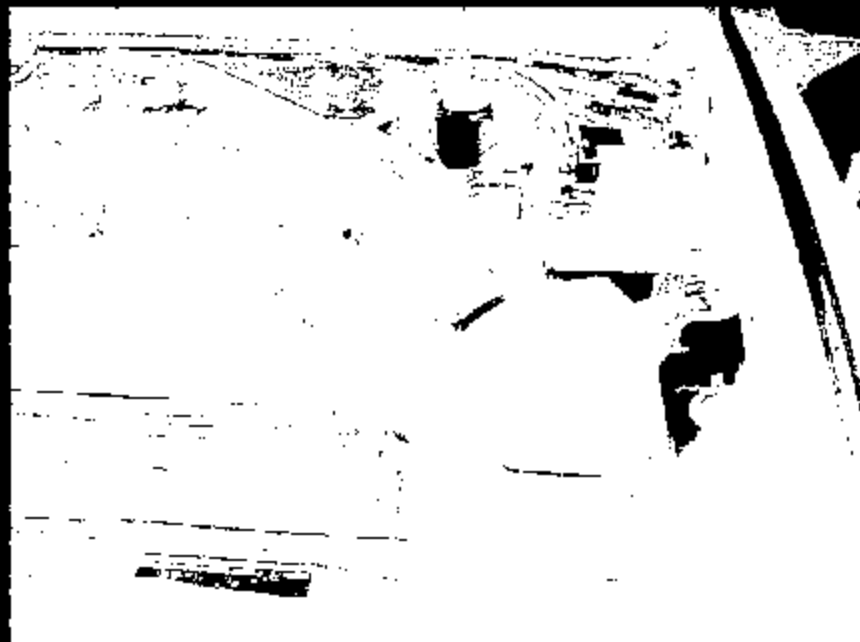


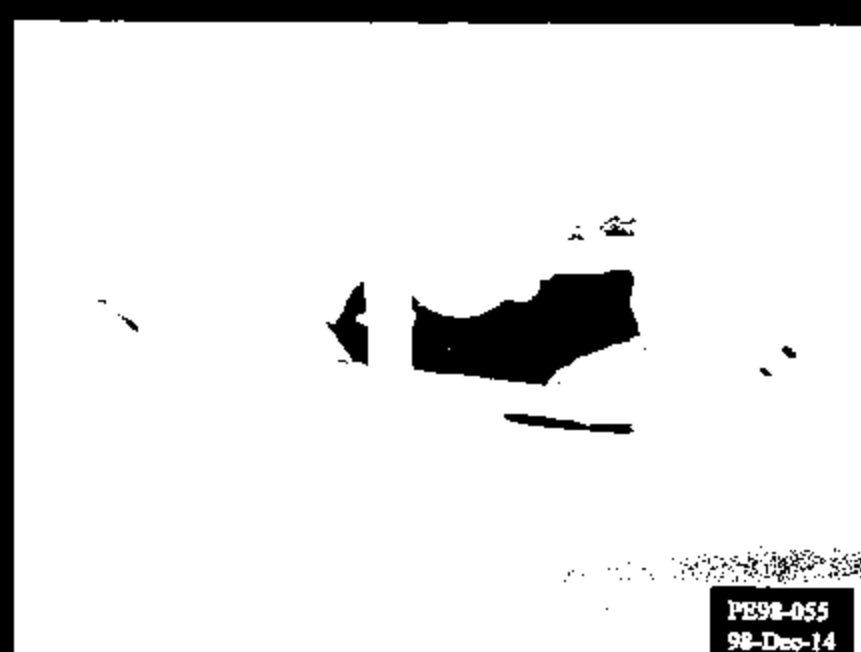
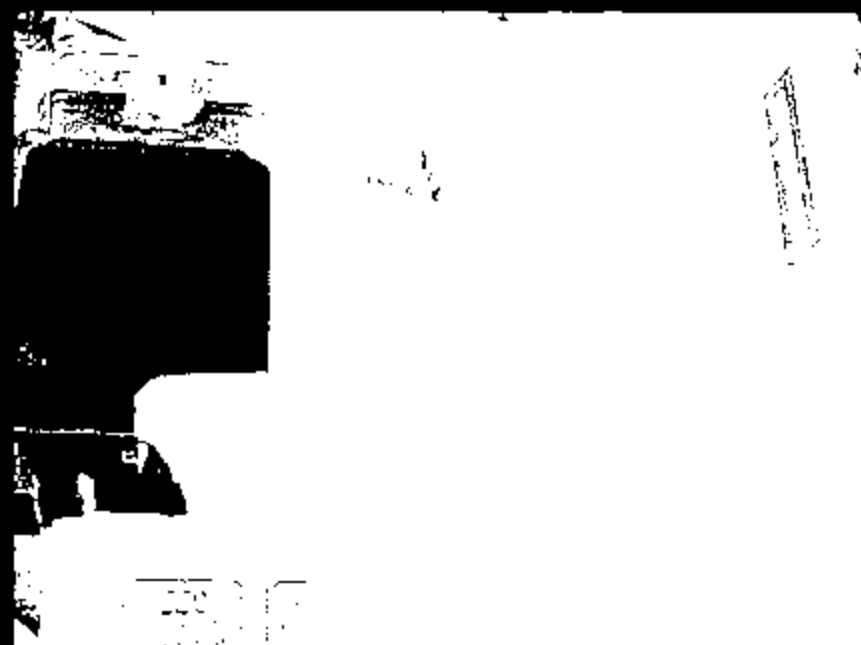
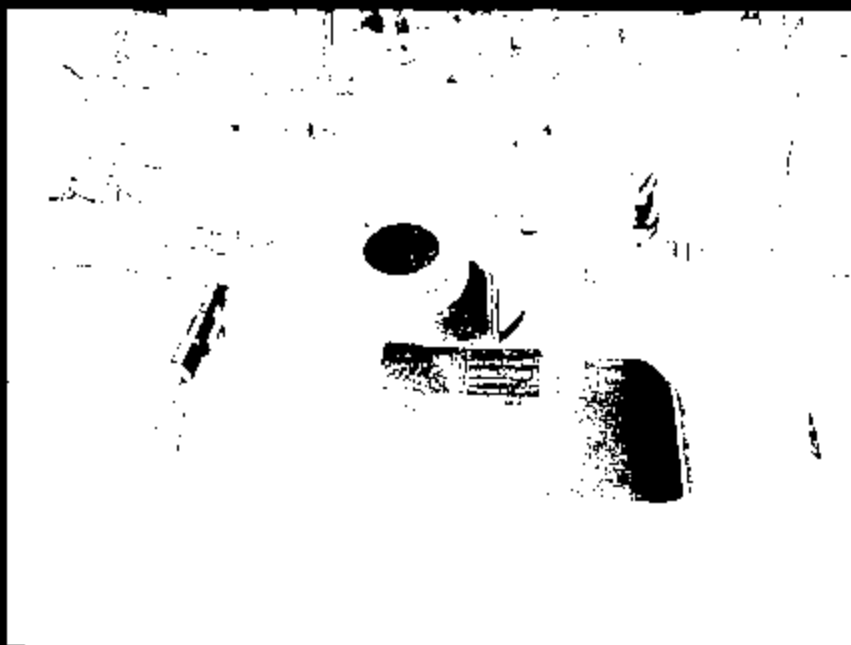
151- COMPONENT LOCATION VIEWS



1LNLM82W8PY [REDACTED]
Under hood photos
1993 Town Car

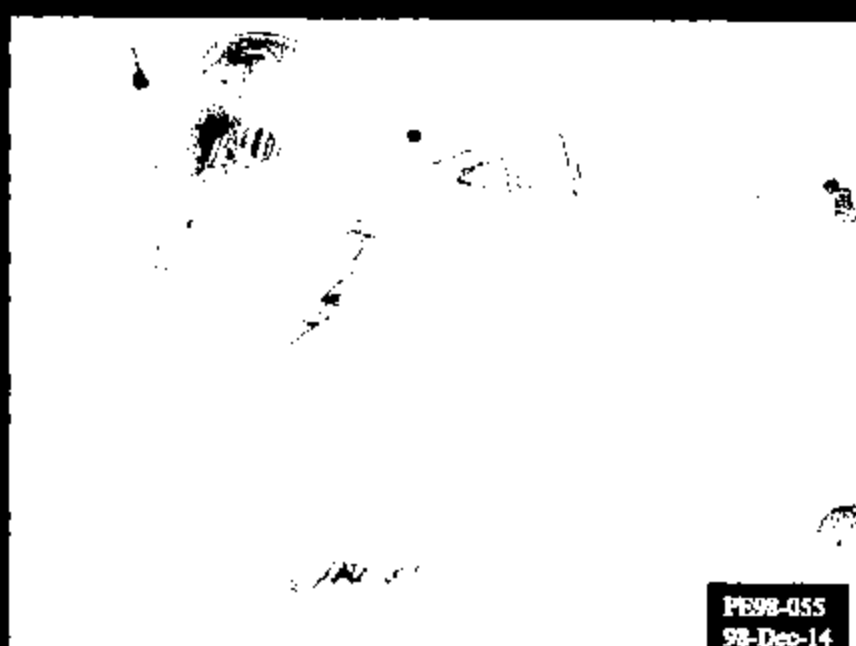
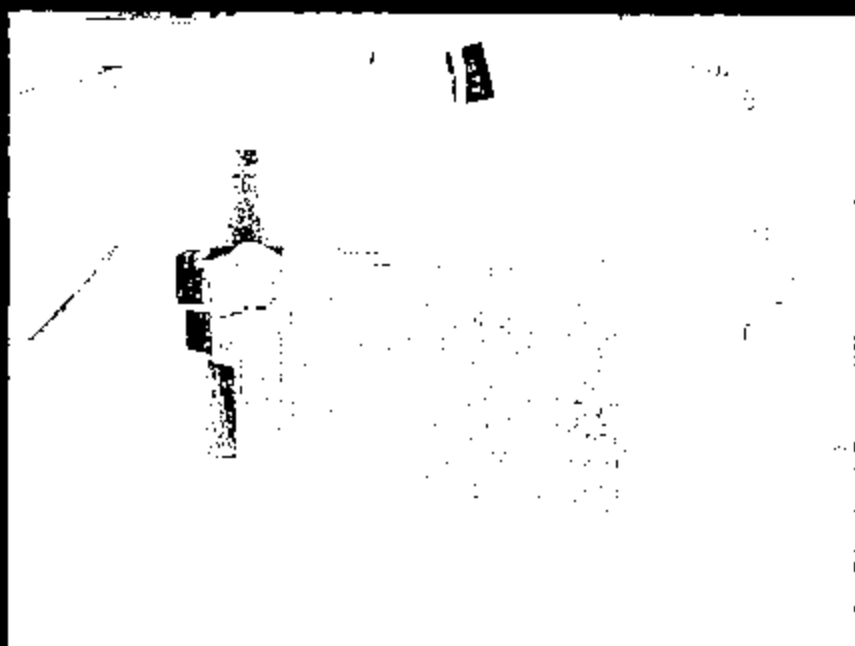
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PE98-055
98-Dec-14

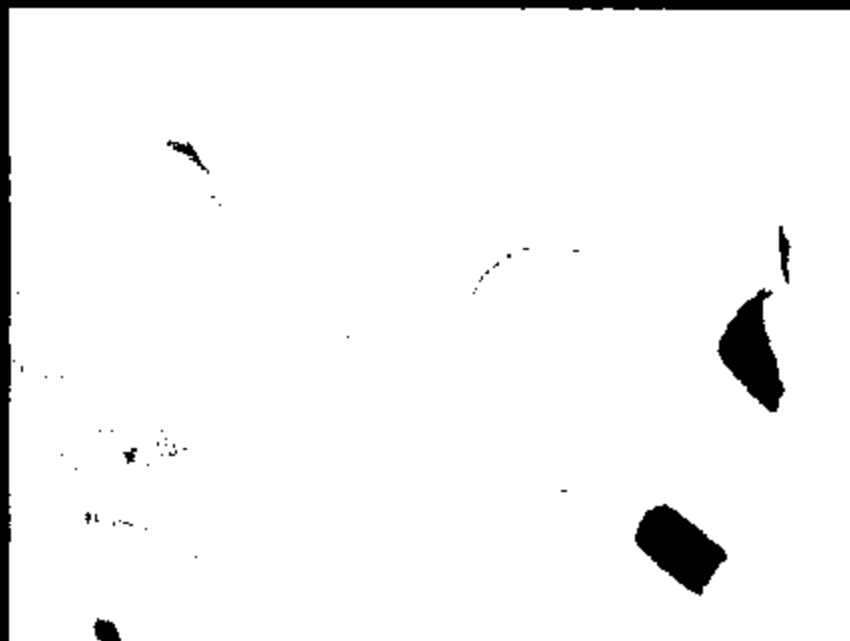
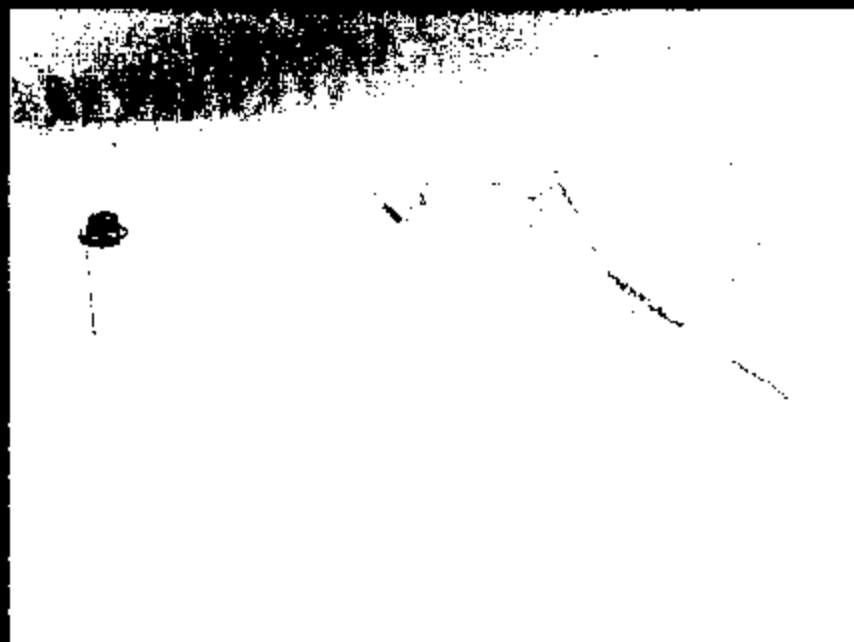
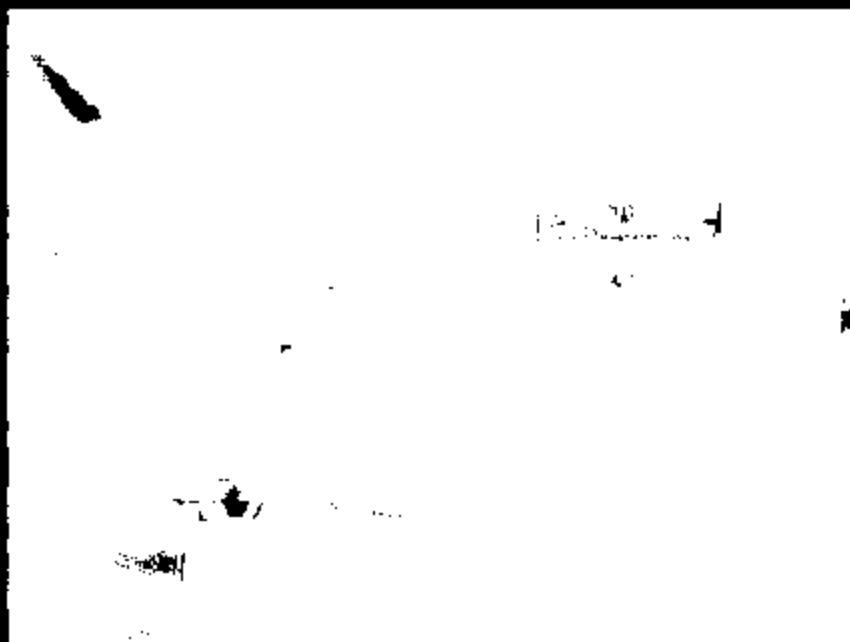
8713 4249



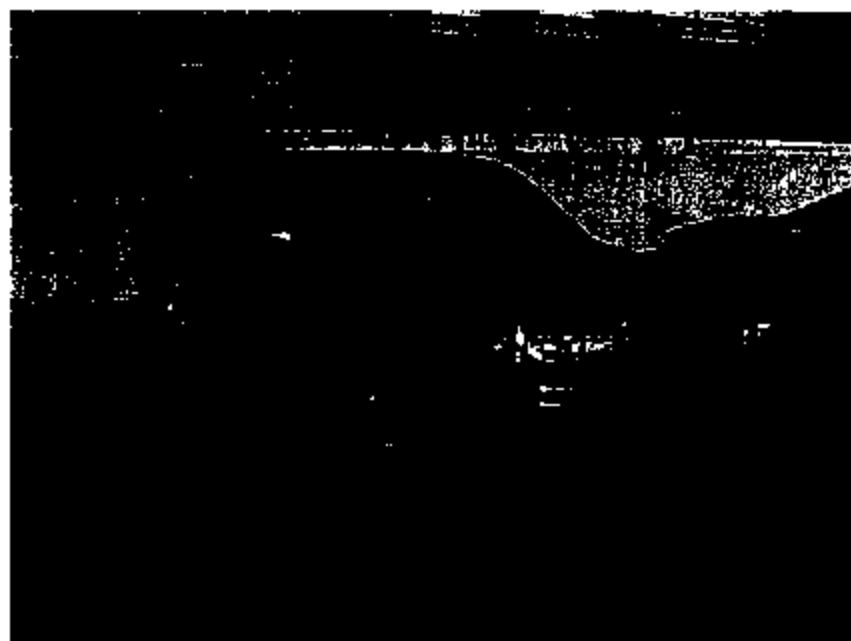
P698-055
98-Dec-14



PE98-055
98-Dec-14



FE98-055
98-Dec-14



9713 4253

PE98-055
98-Dec-14

Drawing F2YC-8F924-AB
Speed control deactivation

3713 4264



3713 4256

Photos FZVC-6F924-AB
Speed control deactivation

3713 4257

Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08

Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



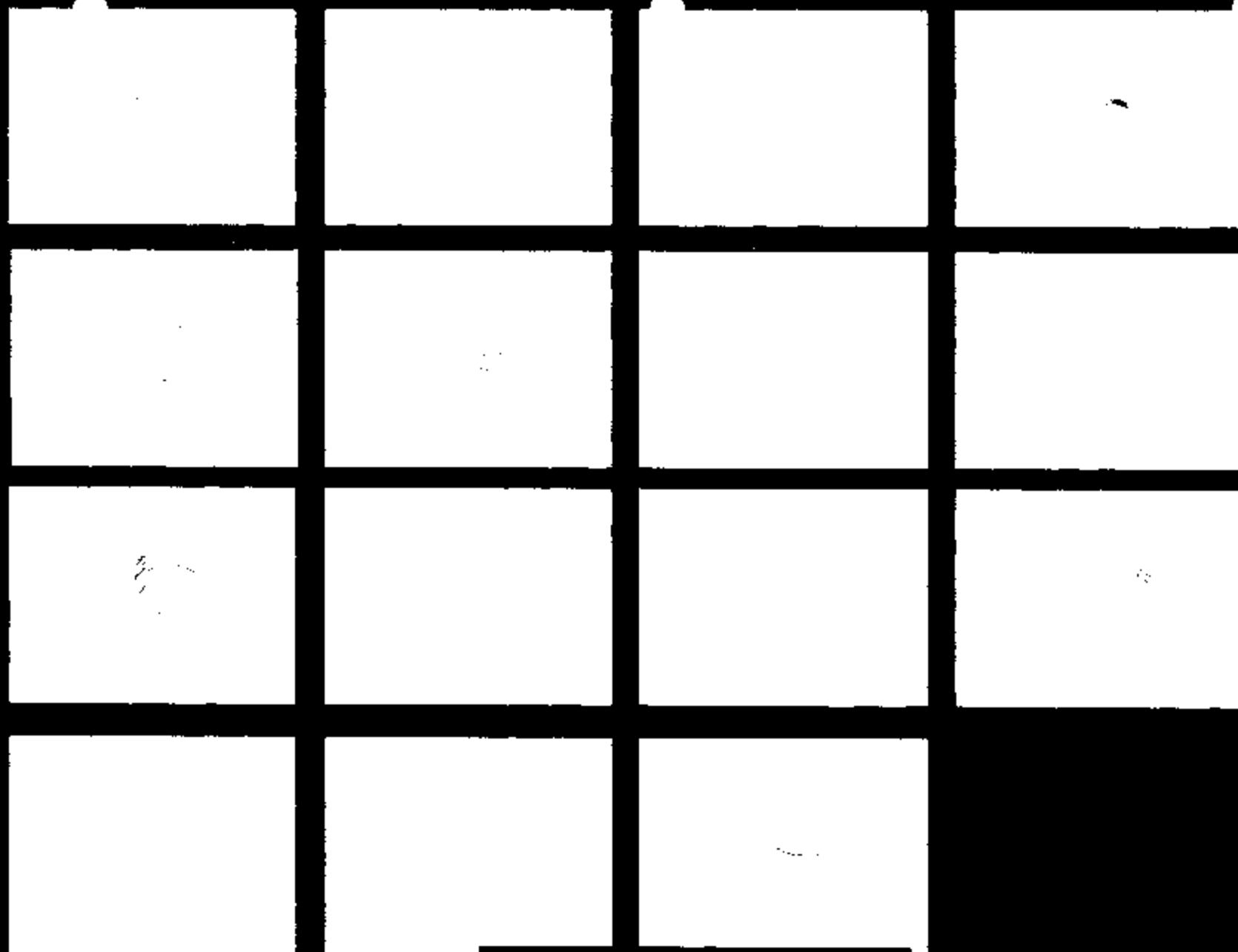
Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



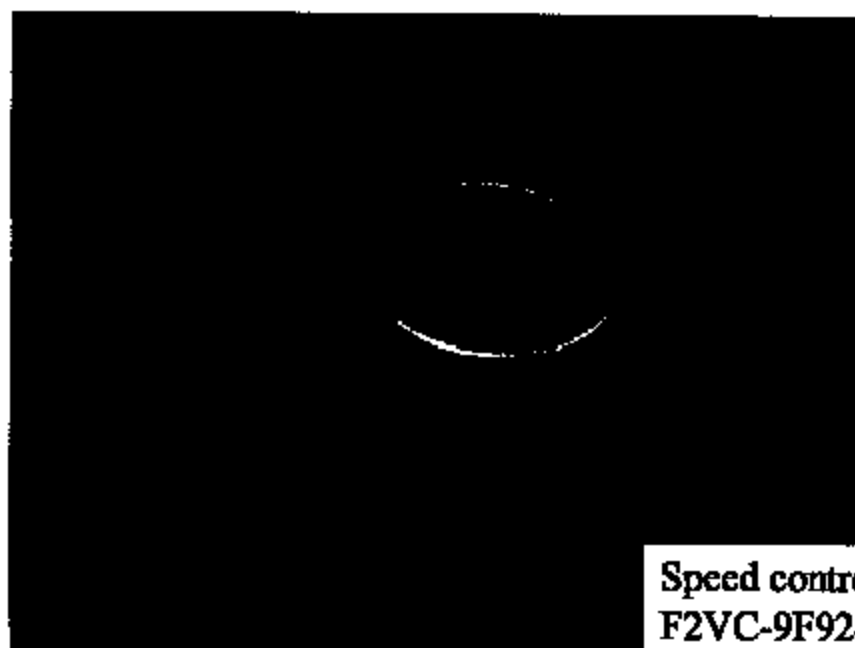
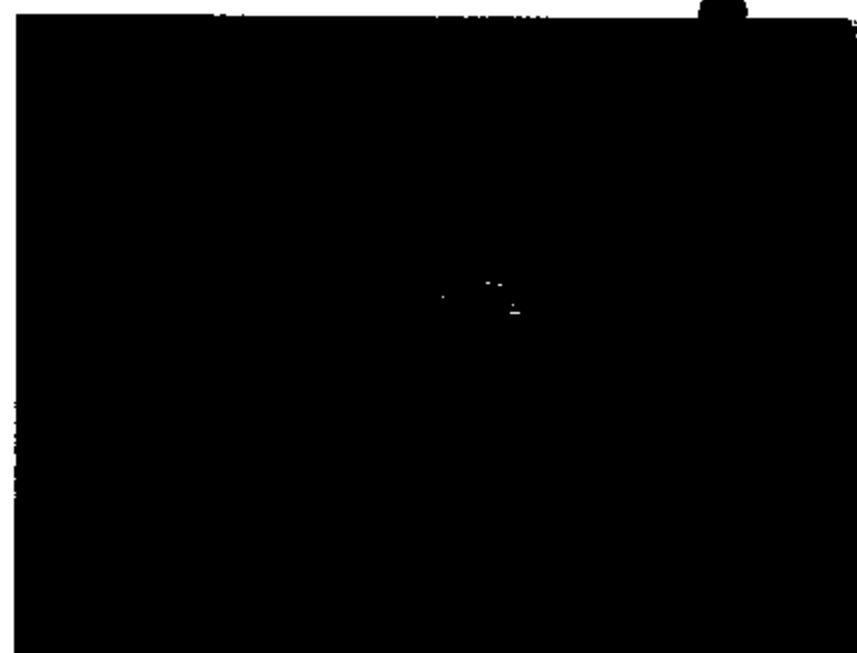
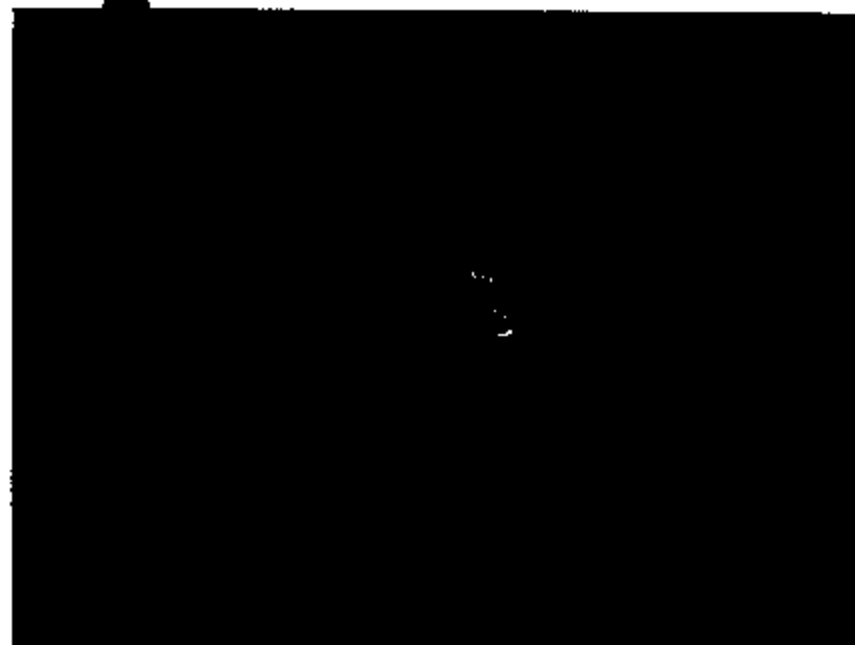
Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08



Speed control deactivation switch
F2VC-9F924-AB

PE98-055
99-Jan-08

REMOVAL AND INSTALLATION (Continued)

3. Install three screws that retain the contact assembly and tighten to 2-3 N·m (18-26 lb-in). Remove tape from contact assembly.
4. Route the contact assembly harness down the column and connect to main wiring.
NOTE: If a new contact assembly is installed, remove the lock mechanism after assembly is secured to column.
5. Install steering column shroud.
6. Install lower trim panel.
7. Install tilt lever if equipped.
8. Position steering wheel on steering shaft and install new steering wheel retaining bolt. Tighten to 31-45 N·m (23-33 lb-ft).

NOTE: Route contact assembly wiring through steering wheel as wheel is being positioned.

9. Connect speed control/horn connector to clockspring contact assembly connector.
CAUTION: Make sure wires are positioned; that no interference is encountered when installing air bag module.
10. Position air bag module on steering wheel and connect clockspring contact connector.
11. Install air bag module on wheel and install four n and washer assemblies. Tighten to 4-5.6 N·m (35-50 lb-in) for Town Car and 2.7-3.7 (24-32 lb-in) for Crown Victoria / Grand Marquis.
12. Connect battery ground cable and air bag back power supply. Refer to Section 01-20B.
13. Verify air bag warning indicator.

Deactivator Switch

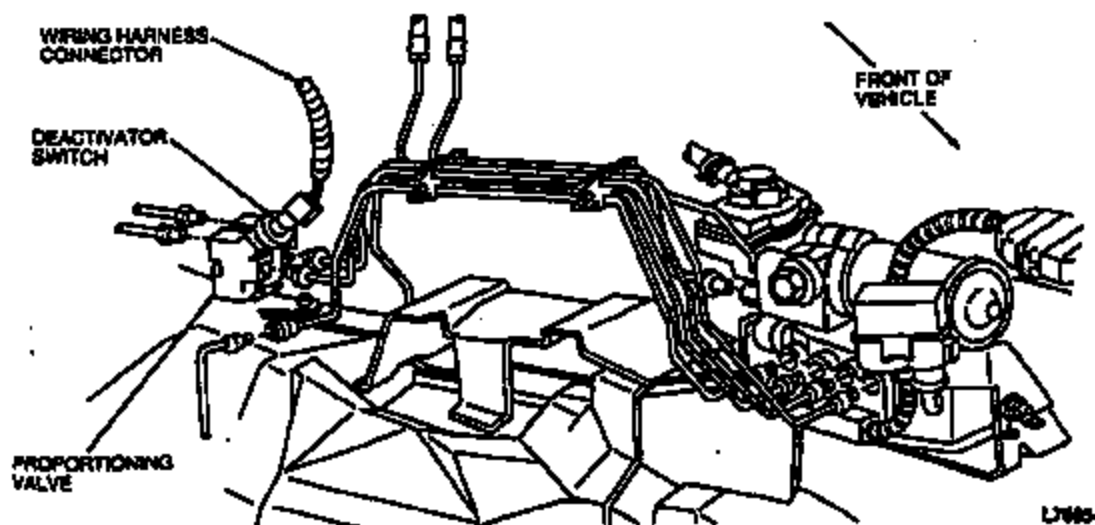
Removal

1. Remove electrical connector from switch.
2. Unscrew switch and remove from brake proportioning valve or junction block.

Installation

1. Screw switch into proportioning valve or junction block. Tighten to 15-20 N·m (12-14 lb-ft).
2. Attach electrical connector.
3. Bleed brake lines as outlined in Section 05-08 ABS brakes, or Section 05-06, non-ABS brakes.

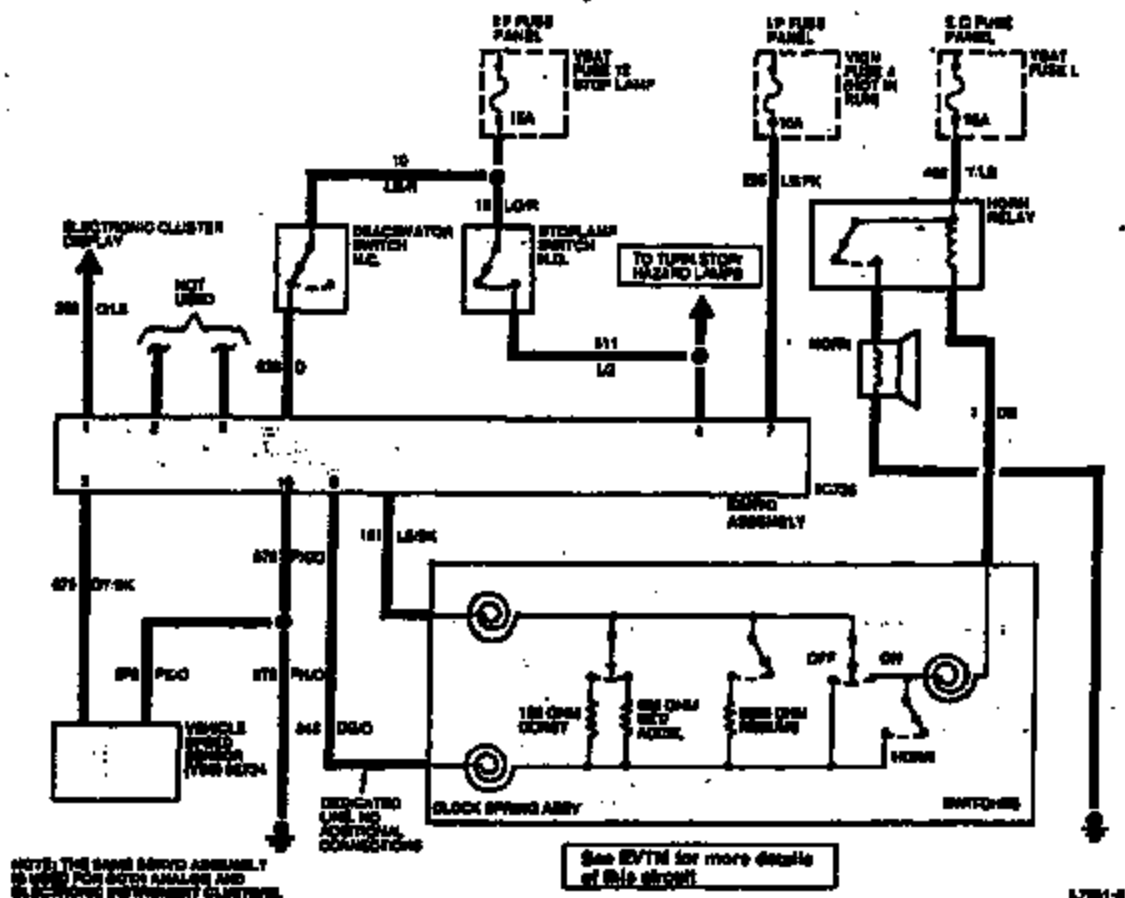
Proportioning Valve Location



U765

DIAGNOSIS AND TESTING (Continued)

Town Car



3713 4269

VOQ's & Owner/Field
Reports

11/24/98

PE Opening Reports (PE98-055)
1992 Lincoln Town Car Engine Fires

NO.	Source	ST	VIN	M/Y	
1	813241	FL	1LNLM82W5N	92	- 9/10/91
2	824016	TX	1LNLM81W2N	92	- 3/16/92
3	808265	FL	1LNLM82W7N	92	- 7/30/92
4	821667	LA	1LNLM81W9N	92	- 6/25/92
5	979634	TX	1LNLM82W5N	92	- 11/25/91
6	521137	OK	1LNLM81W2N	92	- 3/10/92
7	F.D.R.	GA	1LNLM82W3N	92	- 5/20/92
8	804418	OH	1LNLM81W8N	92	- 4/1/92
9	541041	FL	1LNLM81W3N	92	- 7/16/92
10	F.D.R.	FL	1LNLM81W2N	92	- 4/7/92
11	F.D.R.	FL	1LNLM82W7N	92	- 2/5/92
12	A805260	FL	1LNLM81W0N	92	- 1/17/92
13	820316	FL	1LNLM81W3N	92	- 7/31/92
14	I/Net	FL	1LNLM81W8N	92	- 4/27/92
15	536206	MS	1LNLM83W9N	92	- 6/25/92
16	819621	LA	1LNLM82W5N	92	- 5/15/92
17	I/Net	FL	1LNLM82W4N	92	- 3/10/92
18	F.D.R.	GA	1LNLM82W1N	92	- 5/15/92
19	A804221	FL	1LNLM81WP2	93	- 8/21/91
20	823462	MS	1LNLM81W5P	93	- 4/30/93
21	F.D.R.	FL	1LNLM81WXP	93	- 10/20/92

Typo in
VIN?

Ray -

TC underhood fire reports
from Tom Cooper.

Can we get 70 Texas to inspect
2 vehicles?

12/18/86

B² 12/17

PC86-058-- Additional Fire Since Opening

FL	11A1LMB2V480N	92	Sep-86	Period for 2 days, engine fire, drivers side mid-way, fire dept said last pump running
MD	11A1LMB1V480N	92	Oct-86	Period for about half hour, fire under hood
TX	11A1LMB2V480N	92	92	Light fire damage left side of engine compartment
TX	11A1LMB3V480N	92	Mar-86	Fire at left side of engine compartment, parked 24 hours
TX	11A1LMB2V480N	92	Mar-86	Parked 45-50 min., engine compartment fire
NY	11A1LMB1V480N	92	Aug-86	Period for 14 hours, fire in left side of engine compartment near master cylinder
CA	11A1LMB1V480N	92	Feb-86	Period 5 min., fire underhood on drivers side
FL	11A1LMB1V480N	92	Nov-86	Period 20 min, fire underhood on left side
NE	11A1LMB1V480N	92	Oct-86	Fire underhood while parked in garage
TX	11A1LMB1V480N	92	Oct-86	Parked 9 hours, fire in engine compartment in area of brake master cylinder and left front wheel
	11A1LMB1V480N	92	Aug-86	Fire originated around left side of engine
	11A1LMB1V480N	92	Sep-86	Fire originated around left side of engine
	11A1LMB2V480N	92	May-86	Fire originated at the brake pressure switch
	11A1LMB2V480N	92	Jan-86	Fire originated at left side of engine compartment where electrical distribution located (Relays)
	11A1LMB2V480N	92	Jun-86	Period in garage, electrical fault in clutch (ESC) (brake pressure switch to speed control amplifier)
	11A1LMB1V480N	92	Jun-86	Period 5 hours, fire at left front fender area
TX	11A1LMB2V480N	92	May-86	Period 4 hours, fire originated in the drivers side of the engine compartment, above tender well
FL	11A1LMB2V480N	92	Oct-86	Fire originated in the front drivers side of the engine compartment
	24EC0005411N	92	Jul-86	Caught on fire while sitting in parking lot, drivers side, brake pressure switch
	24EC0005411N	92	Jun-86	Period several hours in carport, then pattern surrounded brake booster
FL	24EC0005411N	92	Sep-86	Parked in garage, fire under hood. (Calsonic-Pum Inc.)

NO. 446 P.2

Provided to Ford (Jan 7, 1999)

PEHS-085-- Additional Fires Since Opening

ST	VIN	MY	F/Date	Summary
FL	1LNLM83W3NY	92	Aug-98	Fire originated in the front drivers side of the engine compartment
FL	1LNLM82W3NY	92	Jul-97	Fire originated in the front drivers side of the engine compartment
FL	1LNLM81W4NY	92	Dec-97	Flames from left edge of hood and fender, spread to house
NC	1LNLM82W3NY	92	Sep-98	While parked the vehicle caught on fire on the left side front underneath the hood
FL	1LNLM81W3NY	92	Nov-98	Underhood fire while parked
FL	1LNLM81W3NY	92	Sep-98	Fire underhood on drivers side

PAGE 02

3713 4272

DOT MTR NR 001 MSCZ:11 6651.4 1998

JAN 07 99 11:25

Project 2025—Additional Open House Scheduled

	FILE NO.	DATE	DESCRIPTION
Pie In.	70-1000000000	70-1000000000	Pie in engine compartment left side
Pie In.	70-1000000000	70-1000000000	Engine compartment fire left side (PORT ST. LUCIE)
Pie In.	70-1000000000	70-1000000000	Engine fire, Motor No.
VOC	70-1000000000	70-1000000000	Pie in the engine compartment on drivers side, engine F8V-4924-A, repair mfr
VOC	70-1000000000	70-1000000000	Pie at drivers side front wheel area and bottom of windshield
Pie In.	70-1000000000	70-1000000000	Engine compartment fire, about all inside passenger cylinder
Traffic	70-1000000000	70-1000000000	Engine compartment fire left side of engine while parked
VOC	70-1000000000	70-1000000000	Pie in engine compartment near left front wheel, structure fire destroyed home
Pie In.	70-1000000000	70-1000000000	Pie left side of engine compartment, BAKER FORD-MOORE, LA
Pie In.	70-1000000000	70-1000000000	Pie left side of engine compartment
Pie In.	70-1000000000	70-1000000000	Exhaust fire in driver's side rear of the engine compartment
Pie In.	70-1000000000	70-1000000000	Exhaust fire in driver's side rear of the engine compartment
Pie In.	70-1000000000	70-1000000000	Exhaust fire in driver's side rear of the engine compartment
Subv. Vt.	70-1000000000	70-1000000000	Pie left side of engine compartment
Subv. Vt.	70-1000000000	70-1000000000	Pie left side of engine compartment

 AUTO SAFETY HOTLINE VEHICLE OWNER'S QUESTIONNAIRE NATIONWIDE 1-800-424-9393 DC METRO AREA 202-366-2125		FOR AGENCY USE ONLY DATE RECEIVED _____ REFERENCE NO. _____ DAY TIME TELEPHONE NO. (AREA CODE) _____	
OWNER INFORMATION (TYPE OR PRINT) NAME and ADDRESS _____ _____ _____		Do you authorize NHTSA to provide a copy of this report to the manufacturer of your vehicle? YES ☐ NO ☐ In the absence of an authorization, NHTSA WILL NOT provide your name or address to the vehicle manufacturer.	
SIGNATURE OF OWNER _____		DATE _____	
VEHICLE INFORMATION			
VEHICLE IDENTIFICATION NO.* _____ *LOCATED AT BOTTOM OF WINDSHIELD ON DRIVER'S SIDE		VEHICLE MAKE _____ VEHICLE MODEL _____ MODEL YEAR _____	
CURRENT ODOMETER READING _____ DATE PURCHASED _____ ☐ NEW ☐ USED		DEALER'S NAME, CITY & STATE _____ ENGINE SIZE (CID/CYL) _____ NO. CYLINDERS _____ ☐ TURBO ☐ DIESEL ☐ GAS ☐ FUEL INJECTION	
TRANSMISSION TYPE ☐ MANUAL ☐ AUTOMATIC	ANTILOCK BRAKES ☐ YES ☐ NO	RESTRAINT SYSTEM ☐ DRIVERSIDE AIRBAG ☐ MOTORBELT ☐ PASSENGERSIDE AIRBAG ☐ 3-POINT BELT ☐ 3-POINT BELT	CRUISE CONTROL ☐ YES ☐ NO DRIVE/STEER ☐ FRONT ☐ REAR ☐ 4-WHEEL
FAILED COMPONENT(S)/PART(S) INFORMATION (REPORT TIRE INFORMATION ON BACK)			
COMPONENT _____	PART NAME(S) _____	LOCATION ☐ LEFT FRONT ☐ RIGHT REAR	FAILED PART(S) ☐ ORIGINAL ☐ REPLACEMENT
NO. OF FAILURES _____	DATE(S) OF FAILURE(S) _____ MILEAGE AT FAILURE(S) _____ VEHICLE SPEED AT FAILURE(S) _____	MANUFACTURER CONTACTED ☐ YES ☐ NO	NHTSA PREVIOUSLY CONTACTED ☐ YES ☐ NO
APPLICABLE ACCIDENT INFORMATION			
ACCIDENT ☐ YES ☐ NO	FIRE ☐ YES ☐ NO	NUMBER PERSONS INJURED _____	NUMBER OF FATALITIES _____
PROPERTY DAMAGE EST. _____		POLICE REPORTED ☐ YES ☐ NO	
NARRATIVE DESCRIPTION OF FAILURE(S), ACCIDENT(S), INJURY(S)			
CONTINUE ON BACK IF NEEDED			

The Privacy Act of 1974
Public Law 93-579
 This information is requested pursuant to authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your responses may

be used to assist the NHTSA in determining whether a manufacturer should take appropriate action to correct a safety defect. If the NHTSA proceeds with administrative enforcement or litigation against a manufacturer, your responses, or a statistical summary thereof, may be used in support of the agency's action.

Field to show Return Address (no stamp needed) Fasten with tape or staple and mail																
INFORMATION ON TIRE FAILURE(S) (IF APPLICABLE)																
TIRE IDENTIFICATION NO.*																
D	O	T										MANUFACTURER/TIRE NAME				SIZE
* The identification number consists of 7 to 10 letters and numerals following the letters DOT. It is usually located near the rim flange on the side opposite the whitewall or on either side of a blackwall tire.																
NARRATIVE DESCRIPTION (CONTINUED)																

3713 4275

3713 4278

Memphis, TN
1LNLMB2WOP [REDACTED]
Investigation - CQIS

CQIS Report Number: WJ1A115 Program Type: Q
Report Source: MSE - FCSD - QSPS

Orig Spt #: 225951-08
Report Date: 10/09/1998

R E P O R T S U M M A R Y

VEHICLE: 1993 TOWN CAR, SIGN, SEDAN - VIN : 1LMWLG2W0PT
Engine : 4.6L ROMEO BASE EFI Odometer: 51,500 MILES
Operating Environ: WCC : 3D05
Vehicle Use : 1 Rsp. Act:

SYMPTOM: 3 01 0 00 CHASSIS SERVICE BRAKE SYSTEM
OTHER (CODE NOT AVAILABLE) OTHER (CODE NOT AVAILABLE)

Additional Symptom:
Other Veh. With Concern: Severity Rating - Customer: Engineering:

Causal Component: 2B264 Feature: SWITCH BRK PRES WRN L
Causal Factor: Feature: LOC:
Causal Condition: Photo: Images: 0
Component Test Status: Return Loc:
Vehicle Fixed?: YES Customer satisfied?: Repair Effectiveness (%): 100

C O M M E N T S

CONCERN INITIALLY THE CUSTOMER'S CONCERN WAS THAT THE VEHICLE WOULD NOT COME OUT OF PARK. WHILE IN THE DEALERSHIP, AN UNDERHOOD FIRE STARTED, CAUSED BY A LEAKING BRAKE FLUID THROUGH THE SWITCH INTO THE CONNECTOR.

REPAIR REPLACED THE SPEED CONTROL SWITCH AND CONNECTOR. REPLACED THE STOP LAMP SWITCH FOR THE ORIGINAL CUSTOMER'S CONCERN. PER TECHNICIAN, THIS IS THE THIRD UNIT THAT HAD AN UNDERHOOD FIRE THAT APPEARED TO ORIGINATE FROM THIS AREA. THE OTHER TWO WERE TOO DAMAGED TO DETERMINE THE SPECIFIC LOCATION OF THE POINT OF THE ORIGIN. THE SWITCH AND CONNECTOR ARE PRESENTLY IN MY POSSESSION IN THE MEMPHIS REGIONAL OFFICE.

AUDIT 10/14/1998 09:56AM BRENDA WENDEL MSE - FCSD - QSPS
DEALER ID 68523 CHANGED TO 12096 BY WENDEL

C O N C E R N D E T A I L S

D I A G N O S T I C I N F O R M A T I O N

Symp. Verif?: Ease of Diagnosis: Level of Assistance:
Comp. Timing: Base Timing: MIL light on? :
Test Stand : Road Test : SD Number:
Prior Repair Attempts: Repair Prior to Call: NO

DTCs MOBO: K0BC:
K0ER: CB:

Equipment/Procedure Used Effective? Equipment/Procedure Used Effective?

S E R V I C E A C T I O N S

Repair Type	Component Number	Number Type	Description	Causal Comp.
RPL	2B264	SERVICE	SWITCH BRK PRES WRN L	YES

V E H I C L E D E T A I L S

Vehicle Build Date: 08/10/1992 Warranty Start Date: 02/08/1993
Date of Sale: 02/08/1993 Selling Dir (Mkt, Dir, Sub): 12096
Dealer Special Order: Gross Vehicle Weight:
LH/RR Drive:

E N G I N E

Engine: 4.6L ROMEO BASE EFI Tag: [REDACTED]
Bld Dt: Calb: [REDACTED] Serial #: W

Post-It Fax Note	7871	Case 12/10
By: [Signature]	From: [Signature]	Ca: [Signature]
Phone:	Phone:	27842
Fax:	Fax:	42268

Page: 02

CQIS DETAIL REPORT

12/07/98 18:14:14

CQIS Report Number: NJ1A135 Program Type: Q
Report Source: MSS - PCSD - QSTS

Orig Rpt #: 225951-98
Report Date: 10/09/1998

Trans: AOD-E 459 ELEC Q/D Part #:
Bld Dt: Serial #:

Model: Plt: Shift:
--- AXLE ---

Axle: S.S 3.08 CONVENTIONAL Id Tag Code: Bld Dt:
Serial #: Plt:

--- ADDITIONAL ---
Tire : P215/70R15 WSW Brand :
Radio : ELETR PREMIUM AM/FM STRO/CSYE A/C : ATC AIR CONDITIONER
Paint : BLUE EXTERIOR PAINT FAMILY : AQUAMARINE FROST C/C

----- AFTER MARKET MODIFICATIONS -----
NO AFTER MARKET MODIFICATIONS DATA AVAILABLE FOR THIS VEHICLE

----- REPORT ORIGINATOR - REPAIR FACILITY - CUSTOMER INFORMATION -----
Orig/Caller : Title: OTHER

Repair Dir: 12098 - SCHILLING L-H/MONROVIA INC Phs:(901) 794-4000
City: Memphis State : Tennessee
Country: UNITED STATES Region : Memphis - 23

Claim #/Date : 07/19/1998

Customer name : City :

----- CQIS VIN HISTORY -----
NO CQIS VIN HISTORY AVAILABLE FOR THIS VEHICLE

--- SUPPLEMENTAL SURVEY: NONE ---

----- VEHICLE'S WARRANTY HISTORY (365 days only) -----
NO VEHICLE WARRANTY HISTORY AVAILABLE FOR THIS VEHICLE



Memphis, TN
VIN 1LNLM82WOPY [REDACTED]
part number F2VC-9F924-AB 2056

PE98-055
98-Dec-14

3713 4279

Memphis, TN
VIN 1LNLM82WOPY [REDACTED]
part number F2VC-9F924-AB 2056

PE98-055
98-Dec-14

3713 4280

 * Note printed by NABRAMC2 on 5 Jan 1999 at 17:03:21 *

From: PORTER --DRBN007 Date and time 12/18/98 17:04:06
 To: NABRAMC2--DRBN005
 RENGLIS1--DRBN005
 DGOEL --DRBN005
 KGRIBBLE--DRBN005
 SLAROUCH--FORN001
 JNEME --DRBN005
 GSTEVEN1--DRBN005
 HNELFER3--DRBN006

SEOWN --DRBN007
 JEVANS8 --DRBN005
 JGREGOIR--DRBN005
 NLAPPOINT--DRBN005
 JMCINERN--DRBN005
 RNEVI --DRBN005
 CTHOMAS5--DRBN005

FROM: F. J. Porter USART(UTC -05:00)
 Subject: 97924 Update (19981218)

1992-1993 Town Car F2VC-97924-A Brake Pressure Switch Investigation

TEAM:

AVT E&E Chassis Electronics:	Fred Porter	x84-53722	fporter
AVT Chassis Engineering:	Joe Evans	x32-23832	jevans8
	Barry Egan	x32-19512	began
AVT E&E E&C:	Rob English	x33-73225	renglis1
AVT Design Analysis:	Norm LaPointe	x59-42685	nlapoint
AVT E&E OPE:	Jim Gregoire	x33-79962	jgregoir
E&E Prod. Veh. Safety:	William Abranczyk	x32-23284	wabrancz
	Ray Nevi	x59-47688	rnavi
Large Luxury VC Safety:	John McInerney	x32-20276	jmcinern
	Joe Neme	x39-08133	jneme
AVT Materials Engineering:	Greg Stevens	x32-16686	gsteveni
	Kan Gribble	x32-38658	kgribble
	Clark Thomas	x59-41313	cthomas5
Central Lab Services:	Steve LaRoucha	x84-54876	slarouch

INFORMATION:

NHTSA letter: 9898-055

Vehicles identified: 21 initially identified.
 20 additional vehicles reported since publication of
 the investigation.

Warranty: A total of 89 warranty claims are identified in AMS on the
 F2VY-97924-A for 1992 and 1993 Town Cars.

Two COIS reports (WJIAA135 & VDMAA322) mention underhood fire
 in connection with the brake pressure switch.
 WJIAA135 occurred at 51,500 miles.
 VDMAA322 occurred at 56,802 miles.

Supplier: The pressure switch was manufactured by Texas Instruments. The
 switch was purchased in assembly with the brake proportioning
 valve bought from Surfaces.

Contacts: Surfaces - Mike Thomas (248)542-6520 (MILITE Industries)
 TI - Rob Sharp (248)305-5729

TI - Russ Baumann (508)236-3314
 TI - Charlie Douglas (508)236-3657

Function: The brake pressure switch is a redundant switch for turning off the speed control function.

X-Rays: Taken by Steve LaRouche, Norm LaPointe & Clark Thomas on 12/17/1998. Original photographs and part are in Steve LaRouche's possession.

ON-GOING ACTIVITY:

2 service parts have been ordered from Fairlane Ford for X-ray and other testing by Central Lab Services.

Meeting with representatives of TI is planned for 12/22/1998 to discuss intended operation of the switch. The meeting will be at the Central Laboratory Conference room off of the lobby.

QUESTIONS: (in no particular order)

- 1) What is the normal current in the brake pressure switch?
- 2) Was cruise control standard on Town Car in 1992 and 1993?
- 3) Under what circumstances is brake fluid flammable?

According to Clark Thomas & Mary Hage, brake fluid is flammable at approximately 300 degrees F.

- 4) What is the repair history for vehicles that have exhibited a problem?
 Repair history for the two CPIS vehicles are being gathered by Fred Porter.
- 5) What other vehicles use this brake pressure switch? What are their electrical configurations?

MODEL YEAR	92	93	94	95	96	97	98
Town Car	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	
Crown Vic	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	
Grand Marquis	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	
Monoline	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
Club Wagon	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
F-Series		XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
Bronco		XXXX	XXXX	XXXX	XXXX		
Taurus SHO		XXXX	XXXX	----			
Capri			XXXX	XXXX	----		
Windstar			XXXX	XXXX	XXXX	XXXX	XXXX
Falcon				XXXX	XXXX	XXXX	XXXX
Explorer					----	XXXX	XXXX
Ranger					----	XXXX	XXXX
Expedition						XXXX	XXXX
Navigator							XXXX

XXXX = used in model year

---- = may have been used in model year

6) Is this switch still in use? If not, why not? If so, what design changes have been implemented since 1992/1993?

Charlie Douglas of TI is investigating the design changes that may have been implemented on the brake pressure switch beginning in 1992.

7) What fault codes are stored if the brake pressure switch fails?

Regards,

Fred Porter	OV - fporter	fporter@ford.com
Chassis E/E Systems Applications		(313) 845-3722
Bldg 5 - Mail Drop 5030 - Cubicle 3E004		fax: 390-4145

 * Note printed by WABRAMC3 on 5 Jan 1999 at 13:07:08 *

From: FPORTER--DRBN007 Date and time 12/17/98 00:48:51
 To: WABRAMC3--DRBN005 RCLAYTON--DRBN005
 BEGEN --DRBN007 RENGILIS1--DRBN005
 JEVANS8 --DRBN005 JGREGOIR--DRBN005
 KRIBBLE--DRBN005 NLAPPOINT--DRBN005
 JMCINERN--DRBN005 JNAME --DRBN005
 RNEVI --DRBN005 GSTEVEN1--DRBN005
 CTHOMAS5--DRBN005 DGOHL --DRBN005
 RWELFER3--DRBN005

FROM: F. J. Porter USABT(UTC -05:00)
 Subject: (U)

1992-1993 Town Car F2VC-9F924-A Brake Pressure Switch Investigation

TEAM:

AVT EESS Chassis Electronics:	Fred Porter	x84-53722	fporter
AVT Chassis Engineering:	Joe Evans	x32-23832	jevans8
	Barry Egan	x32-39512	began
AVT EESS BOS:	Rob English	x33-73225	renglis1
AVT Design Analysis:	Born LaPointe	x59-42566	nlapoint
AVT EESS OPS:	Jim Gregoire	x33-79962	jgregoir
EESS Prod. Veh. Safety:	William Abramczyk	x32-23284	wabramcz
	Ray Nevi	x59-47888	rnevi
Large Luxury VC:	Joe Name	x39-08133	jname
	Ron Clayton	x32-24025	rclayton
Large Luxury VC Safety:	John McInerney	x32-20276	jmcinern
AVT Materials Engineering:	Ron Gribble	x32-38658	rgribble
	Clark Thomas	x59-41313	cthomas5
	Greg Stevens	x32-36686	gsteven1

INFORMATION:

NHTSA letter: PE98-055

Vehicles identified: 21 initially identified.
 20 additional vehicles reported since publication of the investigation.

Warranty: A total of 89 warranty claims are identified in AMS on the F2VY-9F924-A for 1992 and 1993 Town Cars.

Two COIS reports (WJIAA135 & VDUA122) mention underhood fire in connection with the brake pressure switch.
 WJIAA135 occurred at 81,800 miles.
 VDUA122 occurred at 86,802 miles.

Supplier: The pressure switch was manufactured by Texas Instruments. The switch was purchased in assembly with the brake proportioning valve bought from Surfaces.

Contacts: Surfaces - Mike Thomas (248)543-6520 (MILITE Industries)
 TI - Andy McGuirk (508)236-3080.

Function: The brake pressure switch is a redundant switch for turning off the

speed control function.

ON-GOING ACTIVITY:

Norm LaPointe and Clark Thomas will meet with engineers from Central Laboratory to x-ray one part on 12/17/1998.

QUESTIONS: (in no particular order)

- 1) What is the normal current in the brake pressure switch?
- 2) Was cruise control standard on Town Car in 1992 and 1993?
- 3) Under what circumstances is brake fluid flammable?
- 4) What is the repair history for vehicles that have exhibited a problem?
- 5) What other vehicles use this brake pressure switch? What are their electrical configurations?
- 6) Is this switch still in use? If not, why not? If so, what design changes have been implemented since 1992/1993?
- 7) What fault codes are stored if the brake pressure switch fails?

Regards,

Fred Porter	CV - fporter	fporter@ford.com
Chassis E/E Systems Applications		(313)845-3722
Bldg 8 - Mail Drop 5030 - Cubicle 3E004		fax: 390-4145



Central Laboratory
15000 Century Drive
Dearborn, MI 48120-1267

January 15, 1999

Preliminary Findings:

The cup is partially covered with a greenish residue. Residue appears to be primarily an oxide of the brass contact material with possibly a sulfur compound. This suggests transfer of oxide or corrosion product from the brass contacts to the cup.

The stationary contact exhibits intergranular cracks which indicate stress corrosion cracking (SCC). SCC is caused by combination of a specific corrosive environment and a sustained tensile stress (can be localized). Ammonia, ammonia compounds, sulfur compounds, and moisture are known to cause SCC in brass. The contact material has been reported to be 360 brass, which is highly susceptible to SCC.

The presence of brake fluid on the switch side of the diaphragm has been determined. Black residues in the hex port and on the cup, converter, and disc appear to be compounds which may have formed from a reaction between decomposition products (acids) of the polyester base, the brake fluid, and metals in the switch. This suggests that the brake fluid was present on both sides of the diaphragm during the thermal event.

All three diaphragms exhibit what appears to be mechanical damage. The damage does not match up with any mating parts of the switch. This suggests that damage may have occurred prior to assembly. The diaphragm has become brittle and cracked in the vicinity of the damage. Brake fluid has become entrained between the layers (Teflon and capton) of the diaphragms.

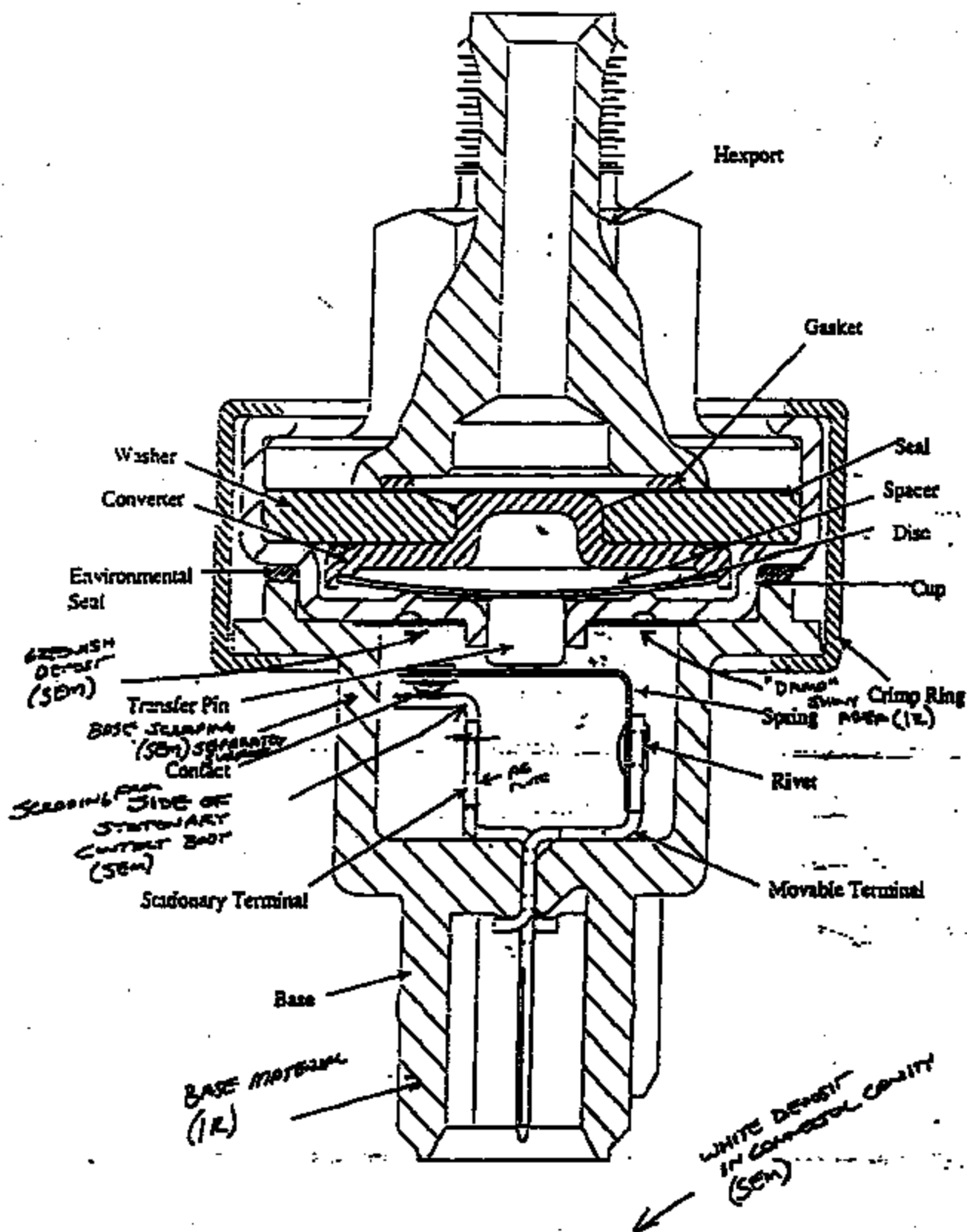
The post of the movable contact melted back into the bulkhead between the switch and terminal cavities of the base. There is also arc damage (localized melting) to one corner of the bridge of the stationary contact. This damage appears fresh (surfaces bright and shiny) which suggests that it may have occurred in the later stages of the thermal event.

The terminals exhibit deposits which appear to be primarily sulfur compounds of the terminal material (tin plated brass). Although these deposits appear visually similar to the deposit found on the cup, they appear to be of different composition.

The white residue found in the connector cavity contains elements found in dry chemical fire extinguishers (Muscovite and phosphorus).

Steve LaRouche

Hydraulic Pressure Switch Cross Section



3713 4288

Ft. Lauderdale, FL
1LNL081W6N
CQIS

Page: 01

CQIS DETAIL REPORT

12/07/98 18:14:12

CQIS Report Number: VDUA322 Program Type: Q
Report Source: MSS - FCSD - QSF5Orig Rpt #: 134596-97
Report Date: 04/21/1997

REPORT SUMMARY

VEHICLE: 1992 TOWN CAR, STAND, SEDAN
Engine: 4.6L ROMEO BASE EFI
Operating Environ:
Vehicle Use:VIN: 1LWLM81W8W
Odometer: 56,802 MILES
WCC: 5F07
Rsp. Act:SYMPTOM: 7 04 2 45 UNKNOWN SOURCE CONCERNS
SMOKEFIRE/SMOKE
UNDERHOOD

Additional Symptom:

Other Veh. With Concern: Severity Rating - Customer: Engineering:

Causal Component: 2A574

SWITCH ASY LOW AIR P

Causal Factor:

Feature:

Loc:

Causal Condition:

Photo:

Images: 0

Component Test Status:

Return Loc:

Vehicle Fixed?: YES

Customer Satisfied?:

Repair Effectiveness (%): 100

COMMENTS

---TYPE--- COMMENT TEXT

CONCERN

THERE WAS SMOKE FROM UNDER THE HOOD.

REPAIR

THE BRAKE PRESSURE SWITCH CAUGHT ON FIRE AND BURST THE WIRING WITH THE KEY OFF. PREVIOUS VEHICLES WITH FIRES STARTING IN THIS AREA WERE BURNT TO THE DEGREE THAT WE COULD ONLY GUESS WHAT CAUSED THE FIRE. THIS VEHICLE FIRE STOPPED SOON ENOUGH. WE REPLACED THE BRAKE PRESSURE SWITCH.

AUDIT

04/23/1997 10:25AM DATA ENTRY

MSS - FCSD - QSF5

SYMPTOM 3 01 0 00

CHANGED TO 7 04 2 45

BY WBAKERS

CONCERN DETAILS

DIAGNOSTIC INFORMATION

Sympt. Verif?:

Ease of Diagnosis:

Level of Assistance:

Comp. Timing:

Base Timing:

MIL light on? :

Test Stand :

Road Test :

SD Number:

Prior Repair Attempts:

Repair Prior to Call: NO

DTCs KMO:

KMER:

KMER:

CB:

Equipment/Procedure Used

Effective?

Equipment/Procedure Used

Effective?

SERVICE ACTIONS

Repair Type	Component Number	Number Type	Description	Causal Comp.
RPL	2A574	SERVICE	SWITCH ASY LOW AIR P	YES

VEHICLE DETAILS

Vehicle Build Date:	04/07/1992	Warranty Start Date:	10/02/1992
Date of Sale:	10/02/1992	Selling Dlr (Mkt, Dlr, Sub):	11627
Dealer Special Order:		Gross Vehicle Weight:	
LM/RR Drive:			

---ENGINE---

Engine: 4.6L ROMEO BASE EFI

Tag: 20

Bld Dt:

Calb: 218JRO5 A

Serial #: W

---TRANSMISSION---

Trans: AOD-E 4SP ELEC O/D

Part #:

Bld Dt:

Serial #:

Model:

Plt:

Shift:

Page: 02

CQIS DETAIL REPORT

12/07/98 18:14:12

CQIS Report Number: VDUA322 Program Type: Q
Report Source: MSS - FCSD - QSP5Orig Rpt #: 134598-97
Report Date: 04/21/1997

----- AXLE -----
 Axle: 8.8 3.08 CONVENTIONAL Id Tag Code: BLD Dt:
 Serial #: Flt:

----- ADDITIONAL -----
 Tire : P215/70R15 WSW Brand :
 Radio : ELNIR PREMIUM AM/FM STRO/CSTE A/C : ATC AIR CONDITIONER
 Paint : BLUE EXTERIOR PAINT FAMILY ----- CLEAR CRYSTAL BLUE FROST C/C

----- AFTER MARKET MODIFICATIONS -----
 NO AFTER MARKET MODIFICATIONS DATA AVAILABLE FOR THIS VEHICLE

----- REPORT ORIGINATOR - REPAIR FACILITY - CUSTOMER INFORMATION -----
 Orig/Caller : Title: OTHER

Repair Dir: 11627 - Ft Lauderdale L-M Inc Ph#: (954) 779-2060
 City: Ft Lauderdale State : Florida
 Country: UNITED STATES Region : Orlando - 24

Claim #/Date : 129844

Customer name : City :

----- CQIS VIN HISTORY -----

Date	CQIS Report #	Prog	Sympt	Cat	Causal	Part Description	Dealer Id
04/22/1997	VDUA322	ELNIR	ELECT.		VALVE-FT DISC BRK P		11627

--- SUPPLEMENTAL SURVEY: NONE ---

----- VEHICLE'S WARRANTY HISTORY (365 days only) -----

Dealer ID	Repair Date	Repair Order	Repair Odometer (Miles)	Rpr Causal	Service Part Number	Labor
11627	04/21/1997		56802			

3713 4290

3713 4291

Vero Beach, FL
2MECM75W1ND [REDACTED]
1982 Grand Marq - VOQ

Page: 1

CQIS Detail Report

01/07/99 10:05:51

CQIS Report Number: WKKR018 Program Type: RDSR
Report Source: MMS - FCSD - QSTSOrig Rpt #: 214749-98
Report Date: 08/11/1998

REPORT SUMMARY

Vehicle: 1992 GRAND MARQUIS, LS , SEDAN VIN: 2HGECH75W1MX728795
 Engine: 4.6L ROMEO BASE EFI Odometer: 90,000 MILES
 Operating Environ: MCC: 7Q01
 Vehicle Use: Rsp. Act:

Symp: 2 05 2 99 ELECTRICAL NORM/SPD CTRL/LIGHTER
 SPEED CONTROL CONCERN NOT LISTED

Addl Symptom:

Other Veh. with Concern: Severity Rating - Customer: Engineering:

Causal Component: 9F924 SWITCH SPD CTRL
 Causal Factor: Feature: Loc:
 Causal Condition: OTHER Photo: Images: 0
 Component Test Status: Return Loc:
 Vehicle Placed: YES Customer Satisfied?: Repair Effectiveness (%): 100

COMMENTS

Type	Comments
CONCERN	FIRE UNDER THE HOOD NEAR THE BRAKE BOOSTER.
REPAIR	THE CAUSE OF THE FIRE WAS BELIEVED TO BE THE DEACTIVATOR SWITCH, 9F924. WE HAVE SEEN SMALL FIRES START FROM CONTAMINATED SWITCHES BEFORE. REPLACED THE SWITCH.
AUDIT	08/13/1998 09:51AM DATA ENTRY: MMS - FCSD - QSTS
	ODOMETER 0 M CHANGED TO 90000 M BY SDAVIS20
AUDIT	08/13/1998 09:51AM DATA ENTRY: MMS - FCSD - QSTS
	SYMPTOM 2 05 0 00 CHANGED TO 2 05 2 99 BY SDAVIS20

CONCERN DETAILS

DIAGNOSTIC INFORMATION

Symp. Verif?: Ease of Diagnosis: Assistance Level:
 Comp. Timing: Base Timing: MIL Light on?:
 Test Stand: Road Test: SD Number:
 Prior Repair Attempts: Repair Prior to Call: NO
 DTCs KOEO: KOEC:
 KOER: CR:

SERVICE ACTIONS

Repair Type	Component Number	Number Type	Description	Causal Comp.
RFR	9F924	SERVICE	SWITCH SPD CTRL	YES

VEHICLE DETAILS

Vehicle Build Date: 04/02/1992 Warranty Start Date: 05/08/1992
 Date of Sale: 05/08/1992 Selling Dlr (Mkt, Dlr, Sub): 11636
 Dealer Special Order: Gross Vehicle Weight:
 LH/RH Drive:

ENGINE

Engine: 4.6L ROMEO BASE EFI Tag:
 Mld Dtl: Calh: 2187800 A Serial #: W Plt:

3713 4292

Page: 2

CQIS Detail Report

01/07/95 10:05:52

CQIS Report Number: NREKAA019 Program Type: EDSR
Report Source: MMS - FCSD - QSPSOrig Rpt #: 214749-98
Report Date: 08/11/1998

----- VEHICLE DETAILS -----

----- TRANSMISSION -----

Trans: AOD-E 4SP ELEC O/D

Part #:

Bld Dt:

Serial #:

Model:

Plt:

Shift:

A X L E

Axle: 8.0 3.73 CONVENTIONAL

Id Tag Code:

Bld Dt:

Serial #:

Plt:

----- ADDITIONAL -----

Tire: P215/70R15 WSW

Brand:

Radio: ELECTRONIC AM/FM STEREO/CASSETTE

A/C:

ATC AIR CONDITIONER

Paint: NEUTRAL EXT PAINT FAMILY A

TITANIUM FROST C/C

----- REPORT ORIGINATOR - REPAIR FACILITY - CUSTOMER INFORMATION -----

Orig/Caller:

Title: OTHER

Repair Dir: 11607

- VERO BEACH LINCOLN-MERCUY INC Phs: (561) 667-8272

City: Vero Beach

State: Florida

Country: UNITED STATES

Region: Orlando - 24

Claim #/Date: 65098

Customer Name:

City:

----- CQIS VIN HISTORY -----

NO VIN HISTORY AVAILABLE

----- SUPPLEMENTAL SURVEY: *** NO SURVEY DESCRIPTION *** -----

NO SURVEY AVAILABLE

----- VEHICLE'S WARRANTY HISTORY (365 days only) -----

Repair Dealer Id Date	Repair Odometer Order (Miles)	Rpr Causal Service Part Number Labor Mtr Cond. Pfx Base Sfx Operation
10159 03/20/1997	68200	

VEHICLE IN FIRE SERVICE

VEHICLE - ON FIRE, LIKE LIGHTER FLAME

VEHICLE CAME IN - SIGNIFICANT DAMAGE

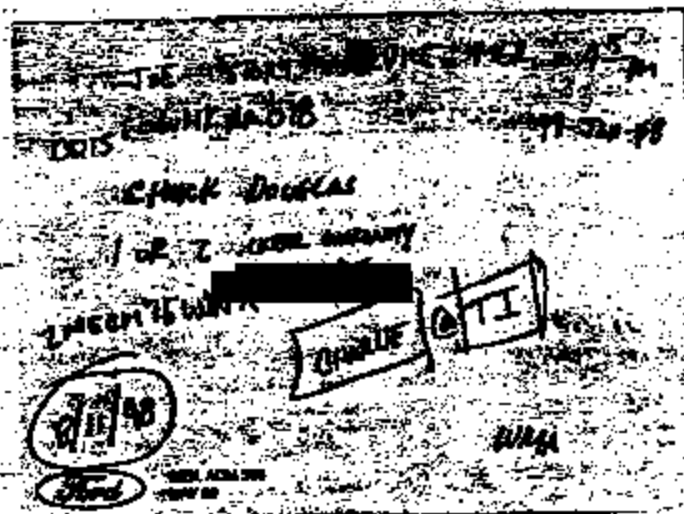
THIRD VEHICLE - DEALERSHIP EMPLOYEE'S FATHER
BUILDING OR HOUSE BURNED

CONTACT 99-JAN-98 CHUCK DOUGLAS - TECHNICIAN
4:15 PM

CONTACT 99-JAN-23 10:25 AM CHUCK DOUGLAS -

HAS ANOTHER SWITCH WORKER '92 TRUCK CAR

99-JAN-25 12:10 PM TRUCK TO CHUCK DOUGLAS 809688227142



VEHICLE IN FOR SERVICE

SWITCH - ON FIRE, LIKE LIGHTER FLAME

ANOTHER VEHICLE CAME IN - SIGNIFICANT DAMAGE

THIRD VEHICLE - DEALERSHIP EMPLOYEE'S FATHER
BUILDING OR HOUSE BURNED

CONTACT 99-JAN-98 CHUCK DOUGLAS - TECHNICIAN
4:15 PM

WMA

3713 4298

Dallas, TX
1LNL82WXNY
Investigation - VOQ



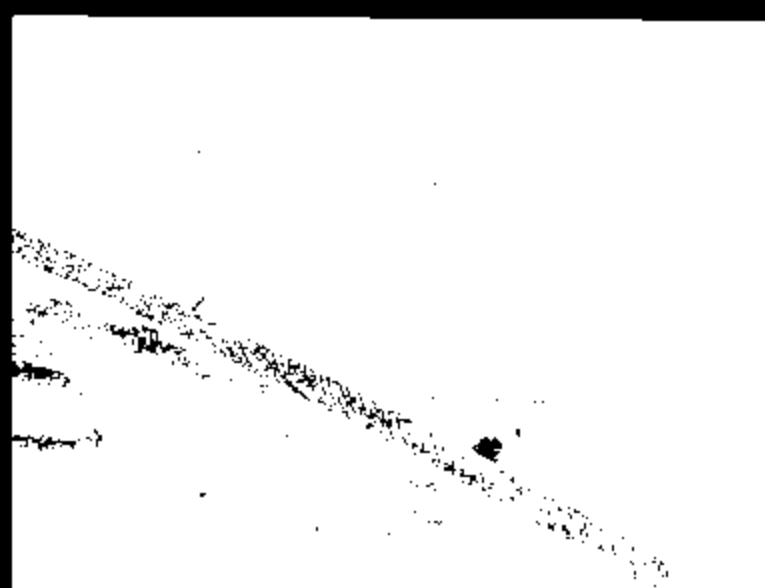
3713 4297

1LNLM92WXNY [REDACTED] 1992 Lincoln Town Car - Dallas, TX, 99-Jan-13

WLOK 020

3713 4236

1LNL92WXNY [REDACTED] 1992 Lincoln Town Car - Dallas, TX, 99-Jan-13



3713 4289

1LNLM92WXNY 1992 Lincoln Town Car - Dallas, TX, 99-Jan-13

PL 92-034

ROSEY

STATE FARM

K26

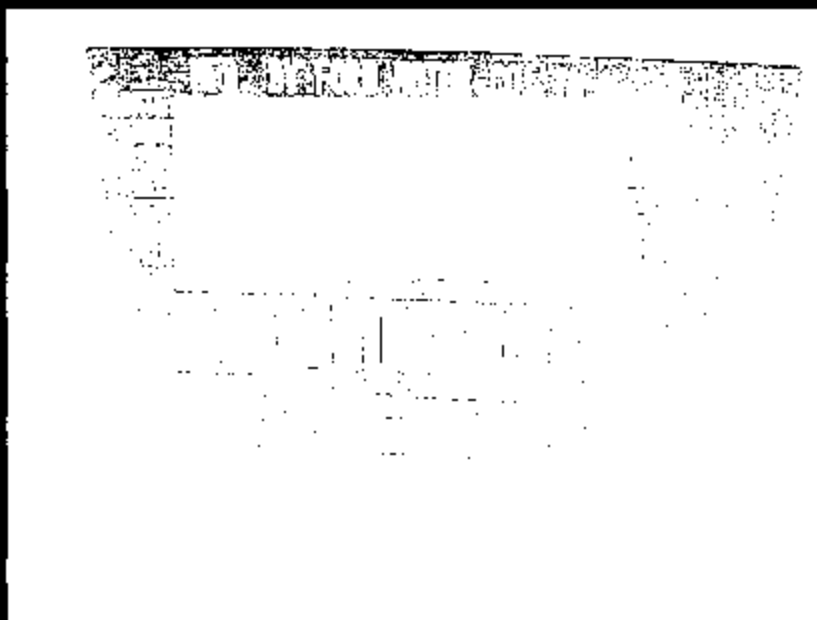
Houston, TX
1LNLMS2W1PY
Investigation - VOQ



Switch A

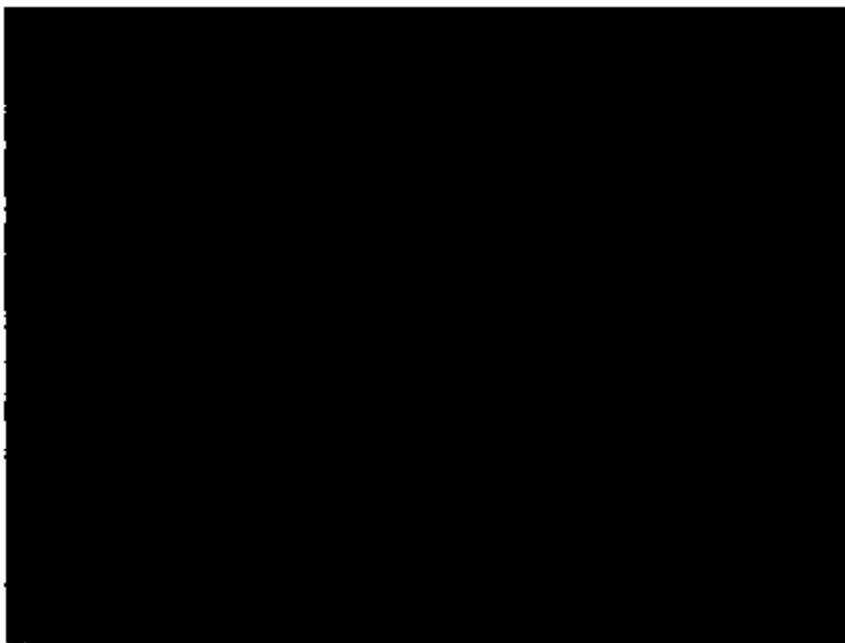
3713 4301

1LNLM92W1PY 1993 Lincoln Town Car - Houston, Tx 99-Jan-14 PE98-055



3713 4302

1LNLM92W1PY 1993 Lincoln Town Car - Houston, Tx 99-Jan-14 PE98-055



Switch A

F2VC-9F924-AB 2281

3713 4303



ALLSTATE

K-17 BLUE

3713 4304

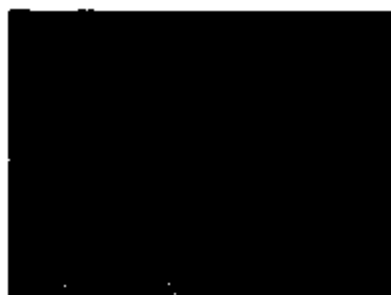
Houston, TX
1LNLM83W5NY
Investigation - VOQ

Switch B



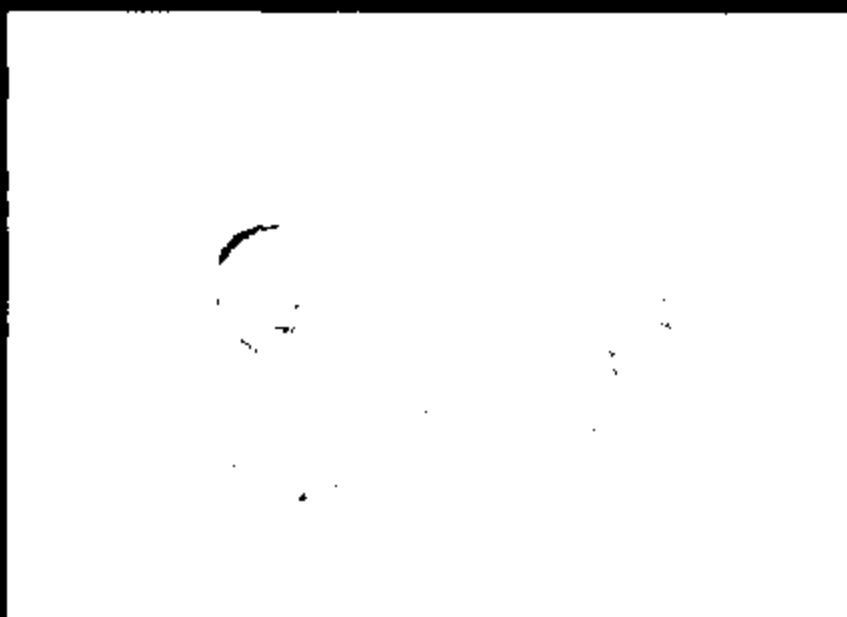
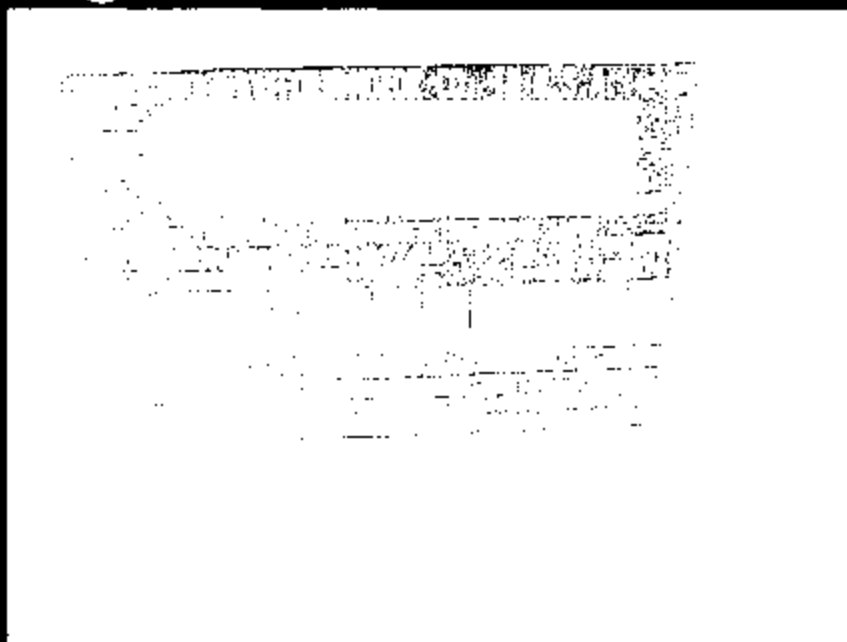
3713 4305

1LNLM83W5NY 1992 Lincoln Town Car - Houston, TX 99-Jan-14 PE98-055



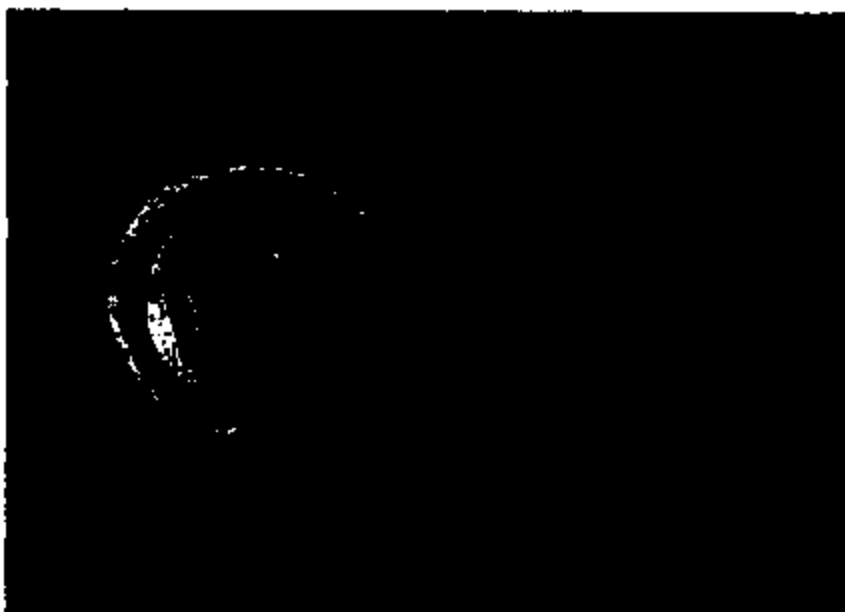
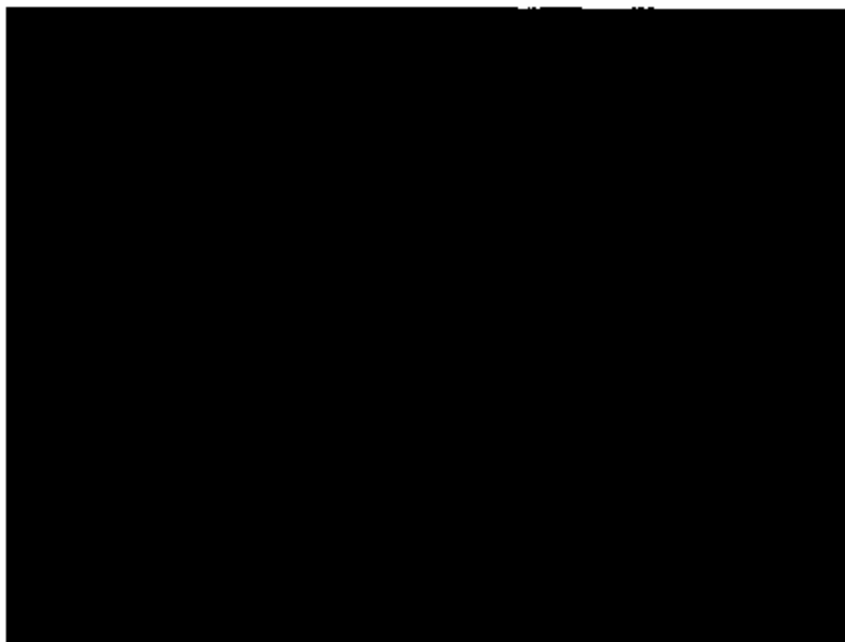
3713 4308

1LNL83W5NY [REDACTED] 1992 Lincoln Town Car - Houston, TX 99-Jan-14 PE98-055



3713 4307

1LNLM83W5NY 1992 Lincoln Town Car - Houston, TX 99-Jan-14 PE98-055

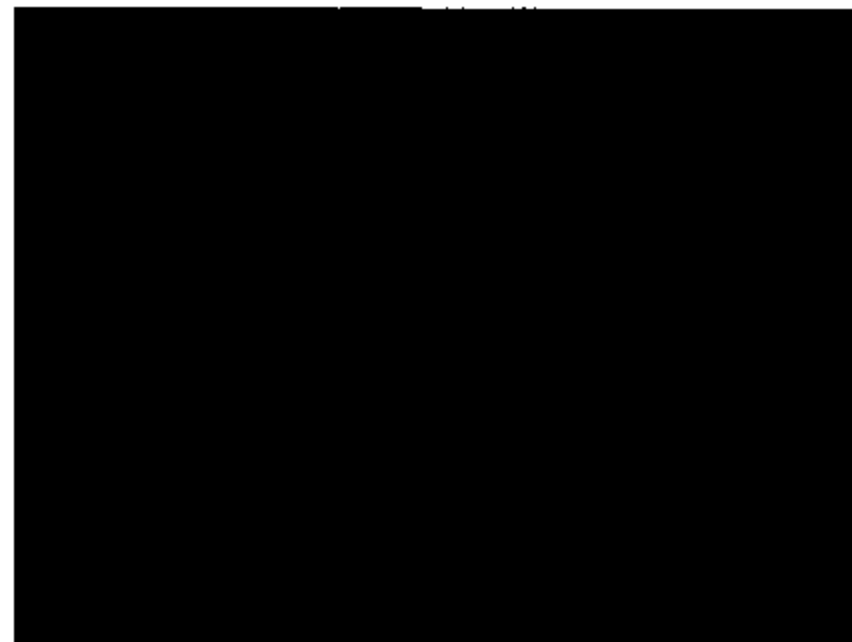
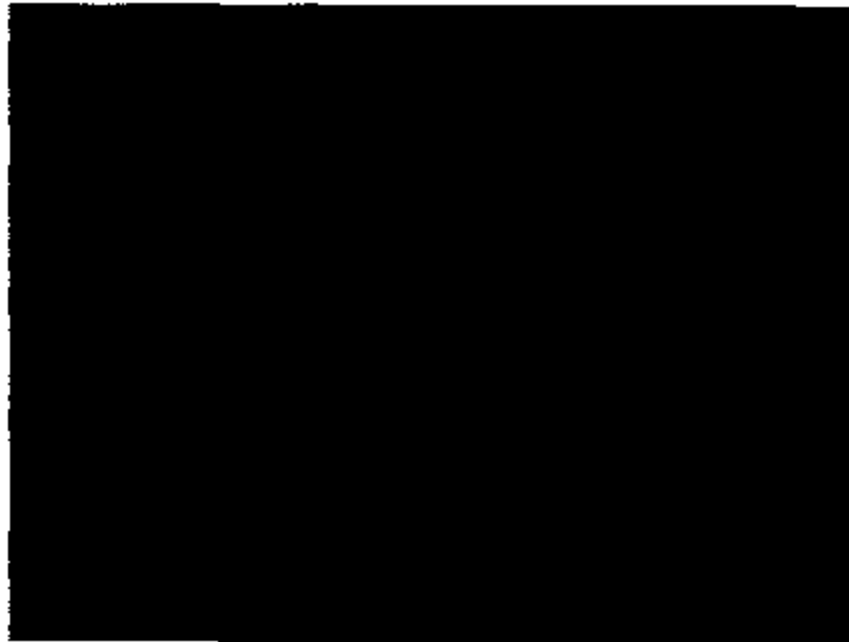


Switch B

F2VC-9F924-AB 2114

3713 4308

1LNLM83W5NY 1992 Lincoln Town Car - Houston, TX 99-Jan-14 PE98-055



Switch B

F2VC-9F924-AB 2114

3713 4309

1LNLM83W5NY [REDACTED] 1992 Lincoln Town Car - Houston, TX 99-Jan-14 PE98-055

WZM 1847N1
LWSTON 92 TC

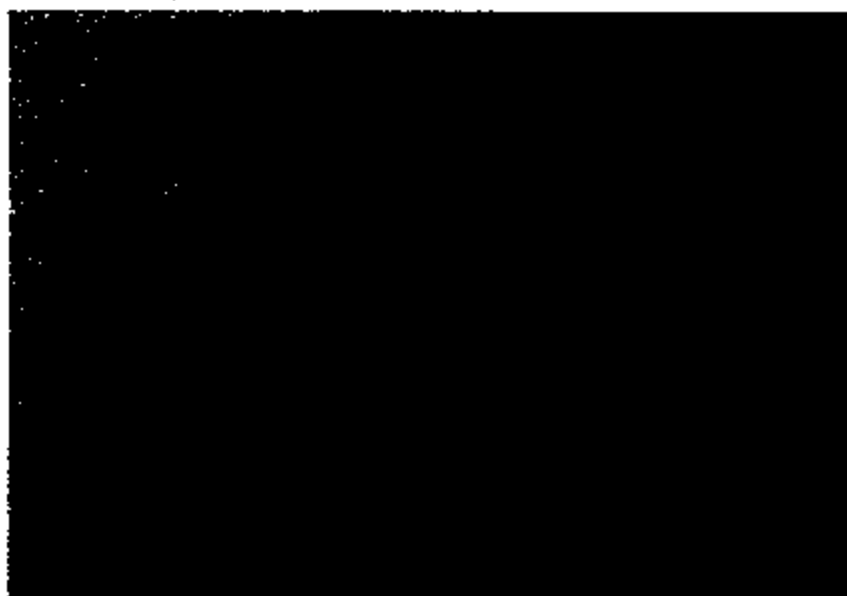
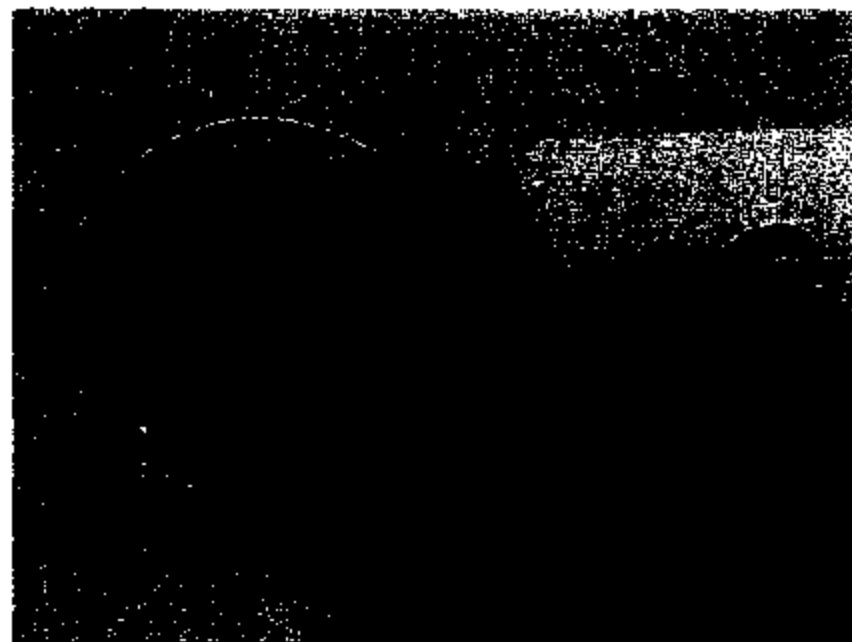
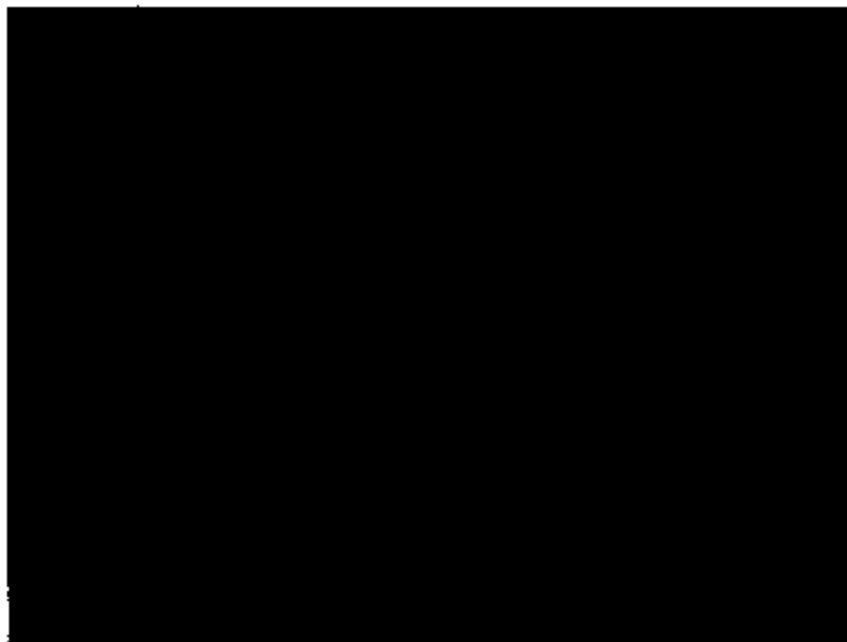
3713 4310



Switch C

3718 4311

1LNLM81W2NY [REDACTED] 992 Lincoln Town Car - Houston, TX 99-Jan-14 PE98-055



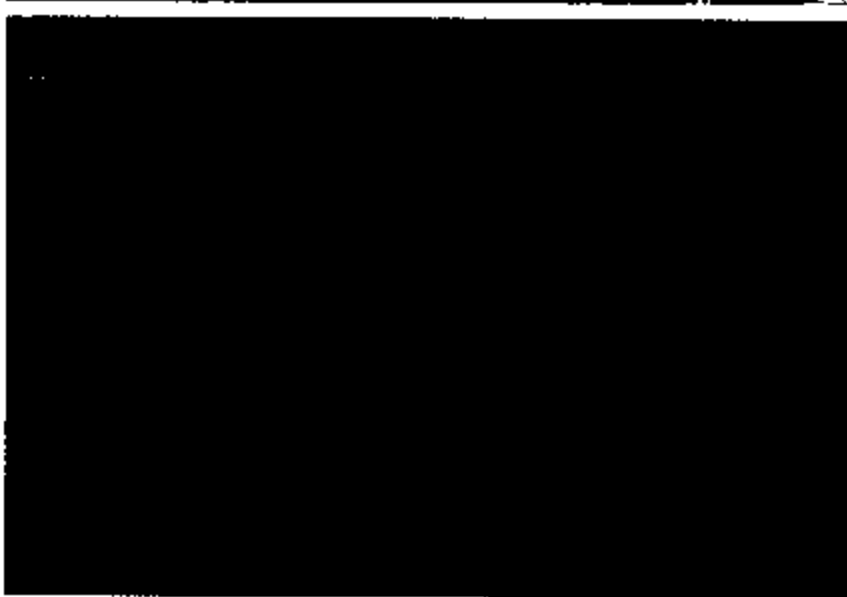
Switch C

F2VC-9F924-AB 2003

3718 4312

37134313

HOWTO 92 TC.
142182W711 [REDACTED]



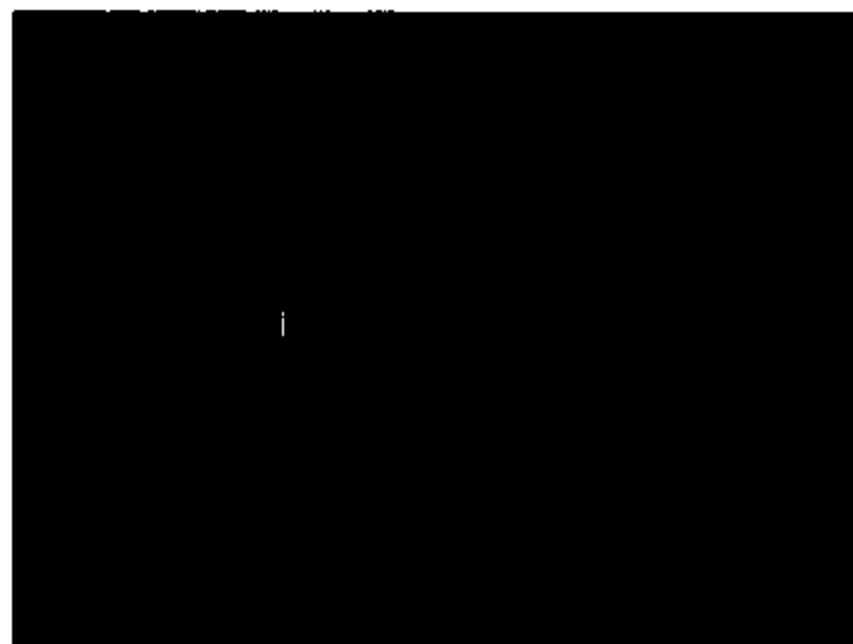
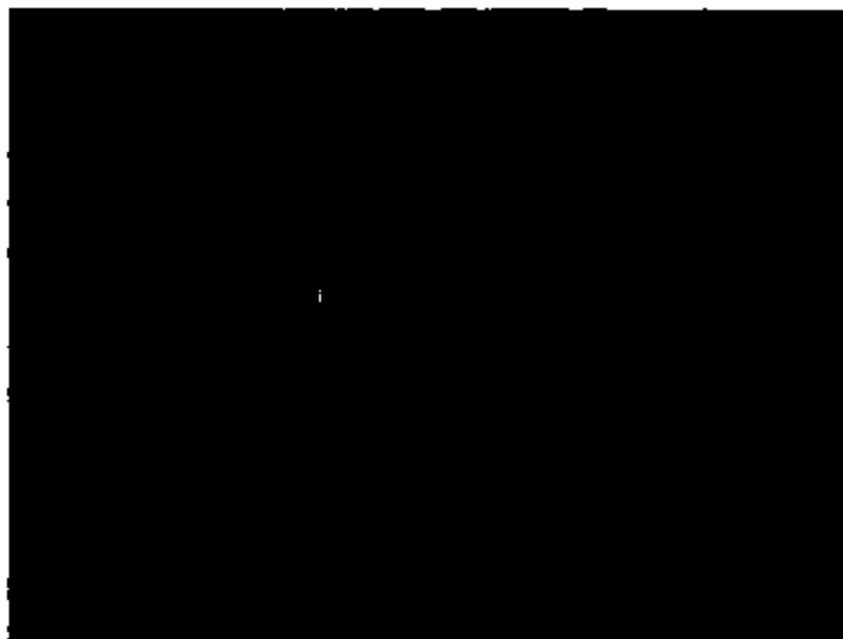
3713 4314

1LNLM82W7NY [REDACTED] 1992 Lincoln Town Car - Houston, TX 99-Jan-14

1698 055

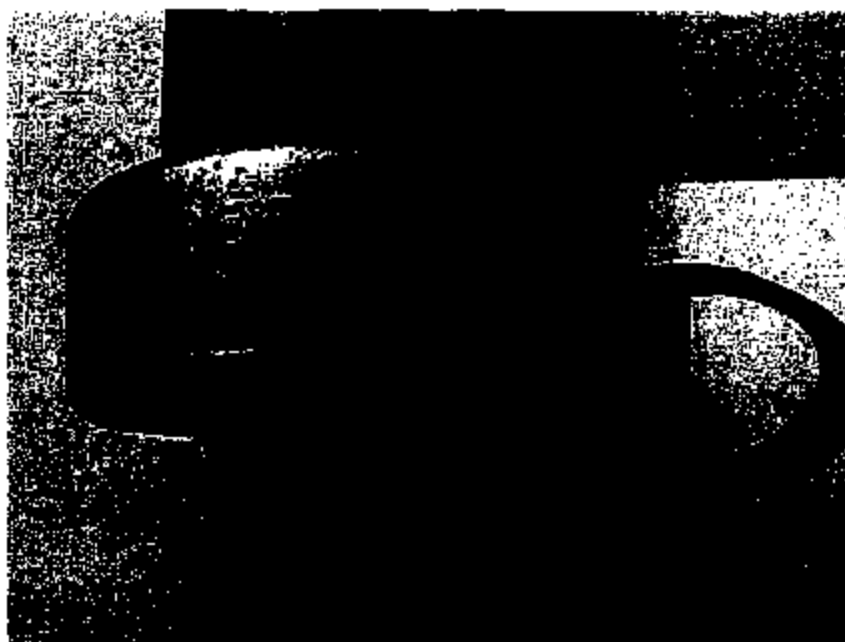
3713 4315

VERBODEN TOEGANG
97 EV POWERS
-ZFALD71WIV>



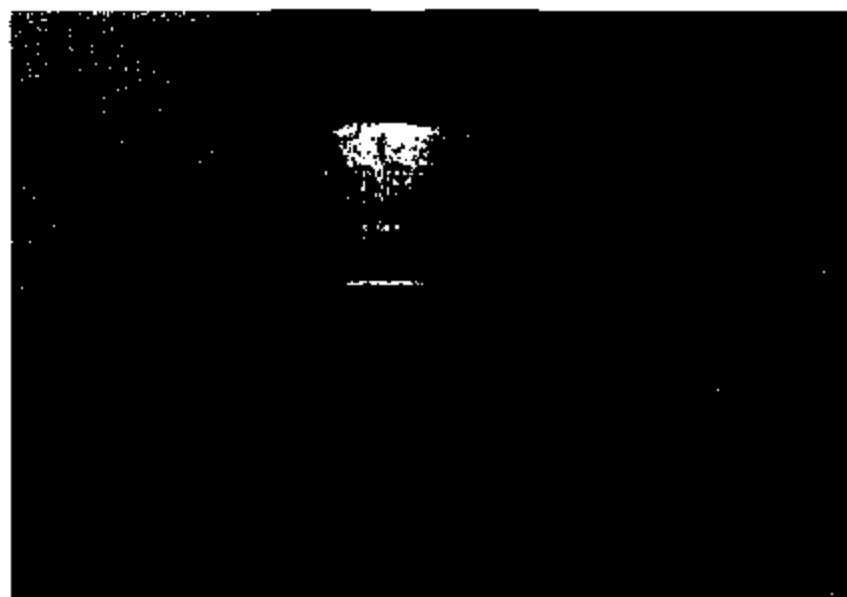
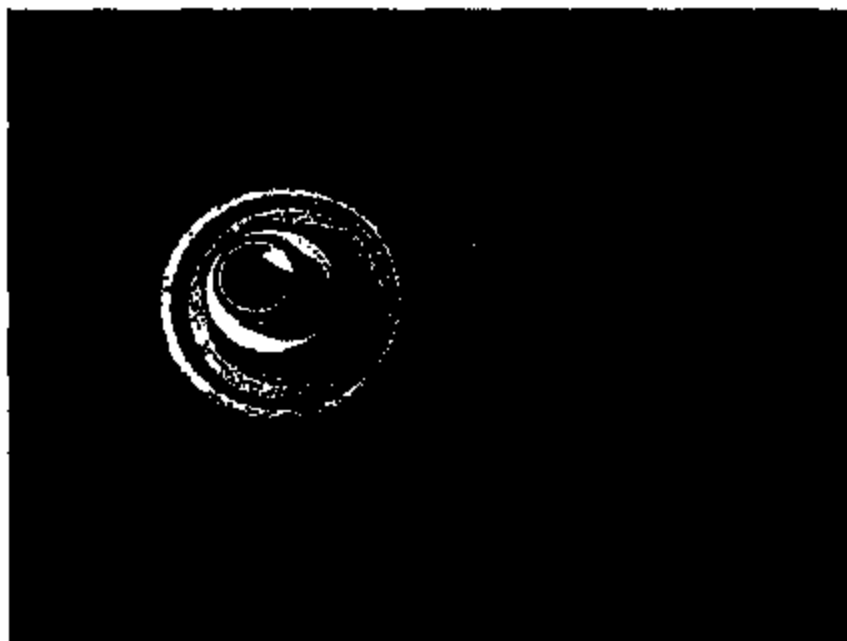
Switch D
F2VC-9F924-AA 6329A

2FALP71W1VX 1997 Crown Victoria - Police - Vero Beach, FL 99-Jan-20



Switch D
F2VC-9F924-AA 6329A

2FALP71W1VX 1997 Crown Victoria - Police - Vero Beach, FL 99-Jan-20



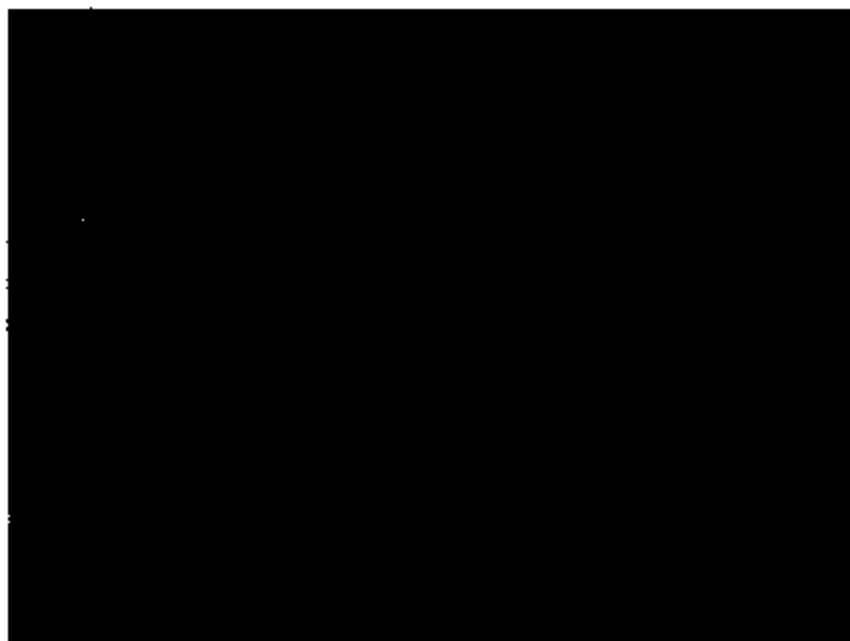
Switch D
F2VC-9F924-AA 6329A

3713 4316

2FALP71W1VX 1997 Crown Victoria - Police - Vero Beach, FL 99-Jan-20

3713 4319

1992 T.C.
VED BACH FL
ILNLMGWIN



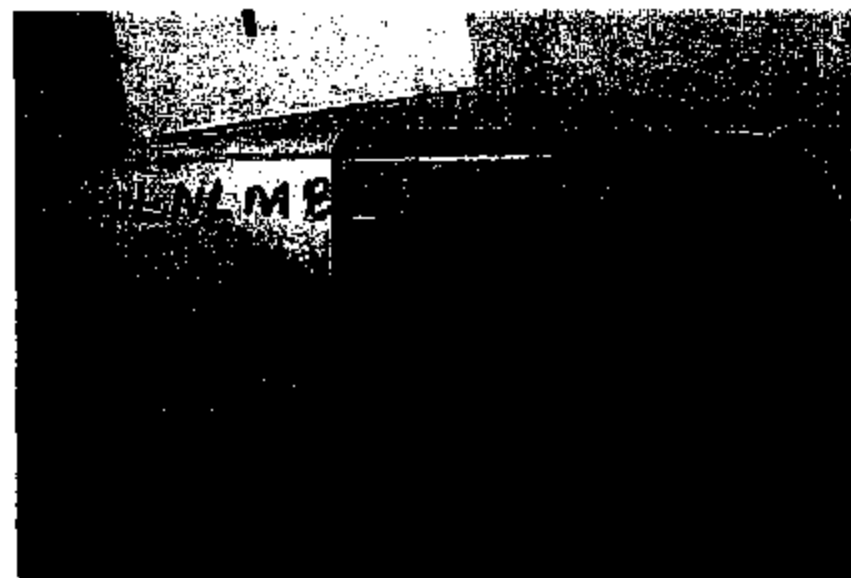
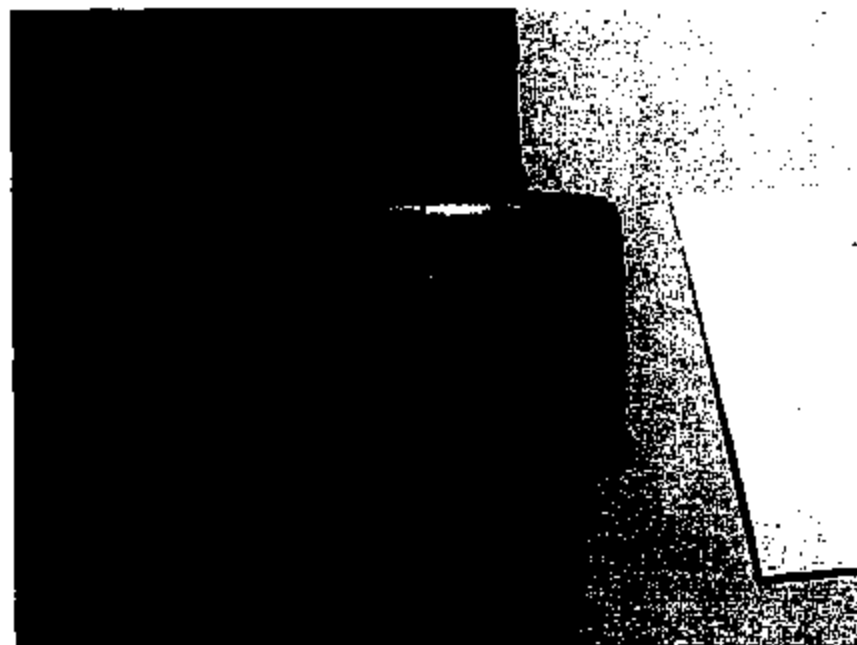
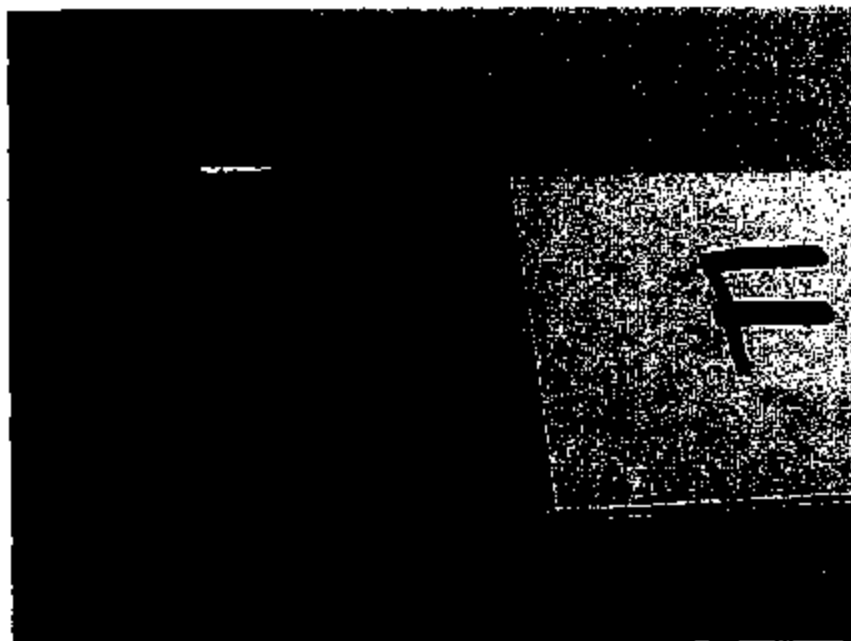
Switch F

F2VC-9F924-AB 2126

Leaky switch

3713 4320

1LNLM82W1NY 1992 Lincoln Town Car - Vero Beach, FL 99-Jan-25 PE98-055



Switch F

F2VC-9F924-AB 2126

Leaky switch

1LNLM82W1NY 1992 Lincoln Town Car - Vero Beach, FL 99-Jan-25 PE98-055

3713 4321

Sample	VIN	Plate/Date Code	Condition	Hoop, Washer, Connector, and Spacer	Findings		
					Steel	Cup	Downstroke Cavity/Insertion
Recycled (Stearns, 1983 Tonne Car)	1LNLMG2W0P	F2AC2000	Partially burned.	Black residue containing glycol based material (probably brake fluid) and a metal particle. Indicates presence of brake fluid on fluid and switch sides of seals.	Environmental seal and gasket intact and appear to have had good sealing. All three Kaplan seals are intact and exhibit little cracks which most likely formed a leak path. Damage appears to have resulted in seal failure to another. Damaged Kaplan driven and controlled by unknown mechanism.	Green deposits on face of cup contain elements from brass contacts indicating transfer of contact material to cup probably as oxide, sulfide, or corrosion product. Glycol based material (probably brake fluid) also detected in this area.	Steel separated below spring ring. Transfer pin with movable contact extending. Stationary contact exhibits loss of material due to corrosion, evidence of chiseling, stress corrosion cracking. Base of movable contact roughed back into hollowed between switch and terminal cavities. Appears to have occurred in later stages of event. Surfaces of terminals covered with black and green deposits which appear to be under components of the terminal assembly.
A (1983 Tonne Car, Houston)	1LNLMG2W0P	77712201	Burned	Exhibits thin contact material detected at lifting end of hoop. Indicates possible flow of fluid back through seals. Traces of silicone detected.	Control and sensor/seal and wiring. Clamped fragments Kaplan seals intact.	Deposits on face of cup contain elements from brass contacts indicating transfer of contact material to cup probably as oxide, sulfide, or corrosion product.	Steel, stationary contact, movable contact, and terminal wiring.
B (1983 Tonne Car, Houston)	1LNLMG2W0P	F2AC2114	Burned	Elements from contact material detected at lifting end of hoop. Indicates possible flow of fluid back through seals.	Not permitted to disassemble switch.	Deposits on face of cup contain elements from brass contacts indicating transfer of contact material to cup probably as oxide, sulfide, or corrosion product.	Transfer pin and movable contact extending. Stationary contact exhibits crack in similar location as that in Recycled sample.
C (1983 Tonne Car, Houston)	1LNLMG2W0P	F2AC2003	Burned	Elements from contact material detected at lifting end of hoop. Indicates possible flow of fluid back through seals. Black deposit in cavity contains traces of hydrocarbon and silicone.	Gasket appears damaged. Environmental seal missing. Damage to Kaplan seals currently being evaluated.	Deposits on face of cup contain elements from brass contacts indicating transfer of contact material to cup probably as oxide, sulfide, or corrosion product.	Steel, stationary contact, movable contact, and terminal wiring.
D (1987 Crown Victoria)	2HALPTN1W1	F2AC2117	Apparent leakage.	Black residue containing glycol based material (probably brake fluid) and a metal particle. Indicates presence of brake fluid on fluid and switch sides of seals.	Environmental seal and gasket intact and appear to have had good sealing. Kaplan seals exhibit damage similar to that found in Recycled sample. All three exhibit little cracks which most likely formed a leak path.	Dark green deposits on face of cup contain elements from brass contacts indicating transfer of contact material to cup probably as oxide, sulfide, or corrosion product. Deposits appear to have formed a bridge between movable contact and cup. Liquid in isolator and on face of cup is glycol based (probably brake fluid).	Switch cavity and terminal cavity contain glycol based material (probably brake fluid). Contacts appear intact. Dark green deposits on movable and stationary contacts contain elements from brass contact material. Transmits appear clean (no apparent deposits or corrosion).
E (1911 from carver)		F2AC2137	No leaks or other apparent problems.	Black residue containing glycol based material (probably brake fluid) and a metal particle. Indicates presence of brake fluid on fluid and switch sides of seals.	Environmental seal and gasket intact and appear to have had good sealing. Kaplan seals exhibit damage similar to that found in Recycled sample. Causing an unknown apparent leakage damage in housing.	Face of cup appears clean and dry.	Switch cavity and terminal cavity appear clean and dry. No apparent deposits or corrosion.
F	1LNLMG2W0P	F2AC2128	Apparent leakage	Black residue containing glycol based material (probably brake fluid) and a metal particle. Indicates presence of brake fluid on fluid and switch sides of seals.	Environmental seal and gasket intact and appear to have had good sealing. Kaplan seals exhibit damage similar to that found in Recycled sample. All three exhibit little cracks which most likely formed a leak path.	Dark green deposits on face of cup contain elements from brass contacts indicating transfer of contact material to cup probably as oxide, sulfide, or corrosion product. Liquid in isolator and on face of cup is glycol based (probably brake fluid).	Switch cavity and terminal cavity contain glycol based material (probably brake fluid). Stationary contact is intact, but does show stress corrosion cracking in progress in bridge area (same location as in Recycled sample). Movable contact appears to have separated as a result of loss of material (~50% of thickness) due to corrosion. No evidence of heating or arc damage. Dark green deposits on movable and stationary contacts contain elements from brass contact material, as well as sulfur. Transmits exhibit green deposits (currently being analyzed). Deposits covered in from both sides of terminal between switch and terminal cavities, but do not meet.

Brake Pressure Switch
Evaluation Plan for Field Returns

DATE CODE P/N

Sw #	Message	Date of update		
Category	Step #	Action	Notes/Date	Comments
Field Info	1	Lag Field Info into Switch Log via		
	2	Photograph Switch		
	3	Record any unusual external visual observations		See note below
	4	Check for Connector engagement		If not correct conduct X-Ray to determine fit-up between base lip and red seal
Switch & Connector assembly	5	Wire 1 to Wire 2 Resistance		
	6	Wire 1 to Harport Resistance		
	7	Wire 2 to Harport Resistance		
	8	Separate Harness from Switch		
Connector only	9	Visually Connector Seal		Visual check of Red Seal, Dirt lines, Indentation mark. Indentation mark must be 360 degrees.
	10	Wire 1 to Wire 2 resistance		
	11	Current Loadings Wire 1 to Wire 2		
	12	Check for full engagement of connector		Visual check of dirt lines on mated mating base
	13	Check wire insulation		
	14	Check wire gray seals		
	15	Cut wire insulation to check for corrosion		Cut insulation longitudinally to check for wiring along wires. If signs of corrosion, identify color, save samples for chem Lab.
Switch only	16	Reassemble Switch to Calibration Stand		
External Unpressurized	17	Terminal 1 to Terminal 2 Resistance		
	18	Terminal 1 to Harport Resistance		
	19	Terminal 2 to Harport resistance		
	20	Base to Harport Resistance		
	21	Current Loadings Terminal 1 to Harport		
	22	Current Loadings Terminal 2 to Harport		

25 Voltage drop at 750 mA

Switch
External
Pressurized

24 Switch Opening Pressure
25 Switch Closing Pressure
26 Proof Test for Leakage
27 Repeat Steps 17 through 25 at 180 psig

Do not perform on parts from Undersized line, as may disturb diaphragm/other condition
Do not perform on parts from undersized line, as may disturb diaphragm/other condition
Do not perform on parts from Undersized line, as may disturb diaphragm/other condition

Switch
Internal

Refer to Protocol Established
By Norm LaPointe & Steve LaPointe
and Al Hopkins (TI) for the Memphis Post.

Norm/Steve, please e-mail Aziz a copy of the
protocol. Aziz will format it in a flow chart format
and insert here.

Data Entry

Log All data from this sheet into Switch Log
Aziz will review Switch Log to include calls for this
data.

Photographs, Elemental maps etc must be retained and
referenced by Switch #

Log Updated 8/14/2005

Qty #	Bar Date Code	Vehicle	VIN	Brand	Mileage	Leased?	Region F1	Region F2	Region F3	Term/Lease	Current Location of Bld.	Current Status	Comments
Minneapolis													
A		Team Car		Mer. Fle			Year	Year	Year		Control Lab		
B		Team Car		Automated Flo							Control Lab		
C		Team Car		Automated Flo							Control Lab		
D		Team Car		Automated Flo							Control Lab		
E		Control Via Police Car		Control Flop			Year?	Year?	Year?		Control Lab		
F		Team Car		Suburban							Control Lab		
G		Team Car		Control Flop			Year?	Year?	Year?		Control Lab		
H	2005	Team Car	20050000	Suburban	79184						Control Lab		
I	2005	Team Car	20050000	Suburban	71609						Control Lab		
J	2005	Team Car	20050000	Suburban	80007						Control Lab		
K	2005	Team Car	20050000	Suburban	98848						Control Lab		
L	2005	Team Car	20050000	Suburban	47000						Control Lab		
M	2005	Team Car	20050000	Suburban	80000						Control Lab		
N	2005	Team Car	20050000	Suburban	80014						Control Lab		
O	2005	Team Car	20050000	Suburban	77						Control Lab		
P	2005	Team Car	20050000	Suburban	77						Control Lab		
Q	2005	Team Car	20050000	Suburban	80004						Control Lab		
R	2005	Team Car	20050000	Suburban	91000						Control Lab		
Team V. Up. of 2005 to 2005													
1	2005	Team Car	20050000	Suburban							Control Lab		
2	2005	Control Via Police Car	20050000	Suburban	100000						Control Lab		With Connector and servo
3	2005	Control Via Police Car	20050000	Suburban	77						Control Lab		With Connector and servo
4	2005	Control Via Police Car	20050000	Suburban	40000						Control Lab		With Connector and servo
5	2005	Team Car	20050000	Suburban	78100						Control Lab		With Connector
6	2005	Team Car	20050000	Suburban	77						Control Lab		With Connector
7	2005	Team Car	20050000	Suburban	77						Control Lab		With Connector
8	2005	Team Car	20050000	Suburban	100000						Control Lab		With Servo, Prop Value
9	2005	Team Car	20050000	Suburban	77						Control Lab		With Connector, Prop Value, Servo
10	2005	Control Via	20050000	Suburban	78100						Control Lab		With Connector, Prop Value, Servo
11	2005	Team Car	20050000	Suburban	77						Control Lab		With Connector, Prop Value, Servo
12	2005	Team Car	20050000	Suburban	77						Control Lab		With Connector
13	2005	Team Car	20050000	Suburban	100000						Control Lab		With Connector and Servo

Work Plan- Brake Pressure Switch

Root Cause Investigation-

Identify the combustibles?

AVT EESE Materials Engineering

Identify the contaminants in returned parts?

Central Lab analysis

Identify source of contaminants?

Central Lab analysis

Identify causes of brake fluid leakage?

Central Lab and Texas Instrument

Identify heat source(s) start event?

AVT EESE Chassis Electronics

Create Event in Lab

AVT EESE Chassis Electronics

Collect Field Samples

LVC - Safety

Root Cause Investigation Tasks

What are the combustibles?

AVT EESE Materials Engineering

Are the switch materials compatible with brake fluid?

by 2/18/99

Are the switch materials compatible with brake fluid in an electric field?

by 2/18/99

Are the switch materials compatible with brake fluid and contaminants?

by 2/18/99

Are the switch materials compatible with contaminated brake fluid in an electric field?

by 2/18/99

Flash points for all materials?

by *completed*

TI provided to Norm LaPointe

Get Dow assistance

by 2/16/99

How can a fire start with the switch given the constraints:

Continuous Battery voltage applied between switch electrical components and the hydraulic connection, circuit fused at 15 amps, inductive load current of 0.5 amps switched when speed control is turned off, the switch cavity contains a black material containing at least copper, zinc, sulfur, and brake fluid (probably containing water), vehicle underhood temperatures.

By 2/22/99

What is the difference in the base materials that look different?

Texas Instruments by *complete*

Color of plastic base identifies calibration. Also, plastic material change from Cellanex 4300 to Noryl GTX430 in MY 1995 when P/N changed from F2VC to F2AC

What are the material call-outs for 1992 and 1993?

Texas Instruments by 2/15/99

Brake Pressure Switch

P2VC-0P224-A8

Material List for MY 92/93

Component Name	Material	Callout
Gasket	Elastomer Ethylene Propylene	JBL Compound # E-7104-70
Diaphragm	Kapton, Polyimide	Dupont 500 FN131L, 3 Diaphragms per switch
Base	PBT, Plastic	Grade Celanex 4300
Crimp Ring	Aluminum	Grade # 8083
Spacer	Kapton, Polyimide	Dupont #200H, Friction Reducer on Dia
Pivot	Brass	CDA 280
Transfer Pin	Ceramic	Staxite, L-3 Grade
Environmental Seal	Silicone	JBL Compound # 87819
Converter	Cold Rolled Steel	Grade # 1008
Washer	Cold Rolled Steel, Zinc Plated	Grade # 1080
Cup	Cold Rolled Steel	Grade 1010
Spring Arms	Beryllium Copper	Grade # C17200
Movable Contact	Silver Plated Copper	Oxygen Free Cu, Fine Silver
Stationary Terminal	Brass + Silver Inlay	CDA 280
Movable Terminal	Brass	CDA 280
Disc	Stainless Steel	Grade 302
Hexport	Cold Rolled Steel, Zinc Plated	C10L10
Thread Cap	LDPE, Plastic	

What are the contaminants in returned parts?

Central Lab analysis

Results of Memphis part analysis by 2/18/99

Results of testing with corrosion simulation?

AVT EESE Chassis Electronics by *complete*

Black corrosion recreated in lab on virgin parts. Given to Lab for analysis

TI analysis results of the Memphis parts (crease marks in diaphragm, etc)?

Texas Instruments by *complete*

TI gave to Norm LaPointe on 2/10/99. Crease mark caused by degradation of Kapton. TI chemical analysis matches Ford analysis.

What is source of contaminants?

Central Lab analysis by 2/18/99

What causes brake fluid leakage?

By 2/24/99

Central Lab and Texas Instrument

What does TI DFEMA say about this failure mode?

Texas Instruments by 2/16/99

TI identifies potential for leaks. Copy to Norm Lapointe.

What are TI in-process test failures?

Texas Instruments by completed

TI provided IP and Weibull test reports to Fred Porter and Norm Lapointe. First leak observed at 994,000 cycles. Test suspended at 1.6 million cycles. Leaker was by Kapton diaphragm.

Provide TI end-of-life lab test parts to Norm Lapointe.

TI by 2/18/99

Does the event occur only on vehicles with ABS?

LVC-Safety by 2/18/99

Characterize the real vehicle brake pressure seen at the switch.

AVT Chassis Brakes by

Characterize the real vehicle brake pressure during ABS and TC events seen at the switch.

AVT Chassis Brakes by

DOE work plan for TI activities.

TI by 2/16/99

Correlate Lab test cycle Kapton wear with field mileage Kapton wear.

TI and Central Lab by 2/29/99

What heat source(s) start event?

AVT EESE Chassis Electronics

Analysis of harness pig-tails

AVT EESE OPD by 2/18/99

Use thermocouple to record switch temperature during and after driving.

AVT EESE OPD by 2/18/99

Recreate Event in Lab

AVT EESE Chassis Electronics

What does it take to start an event? by on-going

If a switch is contaminated can it start the event? by on-going

Switch with clean Brake fluid inside is being monitored for increase in leakage current.

If current is stopped does combustion stop?

Collect Field Samples

LVC - Safety

Collect Brake Pressure switches and speed control servos with harnesses attached.

By 2/22/99

Miscellaneous

Can the switch act as a fuse?

Team

by complete

No.

Could a fuse (e.g. 2 amp) be added in series between the stop lamp fuse and the brake pressure switch? Failure parameters would have to be known.

What are descriptions from AWS and CQIS?

LVC-Safety

by 2/18/99

What are we seeing in returned Speed control modules (FRACAS)?

Visteon Speed Control

by 2/17/99

Provide color photos of Econoline?

Texas Instruments

by complete

There are no color photos.

Brake Pressure Switch Test Log
Updated 2/18/99

Category	Test	Location	Test Parameters	Results Update
Lab Simulation of Potential Ignition in Switch	1	TI	Various Levels of Brake Fluid, Water, Detergent 14Vdc to one terminal, hezport grounded	100+ hours into test, max current 5mA No significant change with time
	2	TI	Various Levels of Brake Fluid, Water, Detergent 1 Amp through switch terminals	100+ hours into test No significant temperature rise with time
	3	AVT	Brake Fluid in Switch, 24 VDC to one terminal Hezport Grounded	> 200 hours into test, max current 7mA No significant change with time
	4	AVT	Brake Fluid in Switch, 24 VDC to one terminal Hezport Grounded, Ambient at 100 C	18 hours into test max current 5mA No significant temperature rise with time
	5	AVT	Brake Fluid in Switch, 16 Amps Through switch terminals	Temperature rise of 20 C above room temp Delta T reached steady state at 20 C
	6	TI	Build heater element into Switch Heat off failure	Expected update 2/19
Life Cycle Reliability of Pressure Switch	7	TI	0-1400 psig pressure pulses at 135C ambient per ES	Parts at 600k cycles, no leaks. Will continue to failure
Diaphragm Wear	8	TI	0-1400 psig pressure pulses at 135C ambient	Parts withdrawn every 200k cycles, characterized for wear
Field vs Lab Correlation	9	Central Labs	Various Field returns, from dealer lots, junkyards	Parts in Central Labs, being processed
Design Of Experiments	10	TI	Various Levels of Brake Fluid, Water, Under ES conditions, to failure	Test being structured. Expected Phase One to begin 2/19
Evaluating Factors				
Effecting Diaphragm Wear				
On-Vehicle Characterization of Pressure & Temperature Profile in Town Car	11	AVT	Monitor Pressure and Temperature at Switch Location for ABS and non-ABS braking events.	Logistics being worked out.

Bill Abramczyk

FPS Suite500

X 23284

AUTOMOTIVE SAFETY OFFICE - FAIRLANE PLAZA SOUTH

L W (LOU) CAMP, DIRECTOR

M L (MARY) COOPER, AA

LCAMP

84-54320

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ADVANCED SAFETY & EUROPEAN REGULATIONS

N W (NICHOLAS) LEWIS, MGR
(TRN), AA

ADVANCED SAFETY WORLDWIDE

D N (DAVID) HOUTSON, MGR
M (MARTIN) KOSKUNA, AA
B J (BRIAN) BARKER
C B (CAROL) BAILEY
P J (JOE) WICKHAM

SAFETY REGULATIONS EUROPEAN

(TRN), MGR
S (SHAWN) CHECKMORE, AA
J (JAMES) ABRAHAM
B B (BARRY) COOKE
B (BRIAN) HARDING
M J (MICHAEL) LOWE
R (ROY) PURCELL
K (KEVIN) SCHROETER
S (STEVE) SCHWARTZ
L O (LOU) STANNY

SAFETY REGULATIONS EUROPEAN

W F (WILLIAM) GAGLIARDI, MGR
K A (KEVIN) KOSKUNA, AA

ACCIDENT AVOIDANCE, STATE & CONSUMER REGULATIONS

M J (MICHAEL) STANCO, MGR
J B (JEFF) GARDNER
W R (WILLIAM) GARDNER
L C (LINDA) HARRING
N (NANCY) HARRING
J F (JEFF) WILSON

FORD OF MEXICO SOFT AUTO REGULATIONS

N M (NICHOLAS) ARELLANO
H M (HAROLD) ARELLANO

IMPACT DYNAMICS & OCCUPANT PROTECTION REGS.

B E (BRIAN) HENSON, MGR
M J (MICHAEL) BARTOLO
P W (PAUL) BUTLER
C E (CHARLES) CHRISTOPHER
R W (ROY) HULTMAN
W B (STEVE) HARRIS

IRIS SAFETY & REGULATIONS

E I (EDWARD) FARRER, MGR (C)
W F (WILLIAM) FARRER

SAFETY DATA ANALYSIS & TESTS

E S (EDWARD) GRUSH, CTS
K A (KEVIN) GRUSH, AA
J B (JACK) EDWARDS
P A (PAUL) FAY (C)
J C (JOE) MAHER
J T (JIM) MAHER
I (IRVING) PAREKH
R (RAMONDO) SPENCO (C)
M K (MAY) SULLIVAN

VEHICLE SAFETY ASSURANCE

W J (WILLIAM) KOSKUNA, MGR
M V (MICHAEL) BREWER, AA

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C H (CHAS) BROWN
R C (ROD) CRAWFORD
P D (PETE) DUCHASNE
S (STEVE) FINKELSTEIN
U (URS) HAHN
T E (TOM) LARLEY
J B (JAMES) PRYBYLSKI
P C (PAUL) SANDER
S J (STEVE) SOUTHGATE
S L (STEPHANE) SWENNEY
D P (DAVE) TONG
P M (PAT) WARREN

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M E (MICHAEL) TOWNSHIP, MGR
K M (KEVIN) ADAMS (C)
L (LARRY) BRAY (C)
A D (ALLAN) BRIDGE (C)
O (OLIVER) BRIDGE (C)
T A (TOM) THIBODEAU (C)
P C (PAUL) WITKOWSKI (C)

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D J (DAVID) SMITH, MGR (C)
S (SHAWN) CHECKMORE, AA
W S (WILLIAM) CATTIN (C)
S C (SCOTT) CURTIS
A (ALAN) HARRISON
I F (IRVING) MILLER
T (TOM) MILLER (C)
D (DAVID) STORMS (C)
F (FRANK) LIPER (C)
P T (PETE) WILLIAMS

TRUCK SAFETY ASSURANCE

R J (ROD) FLETCHER, MGR
O S (OSCAR) WISOLEK, AA
M (MICHAEL) ABDELL (C)
D N (DAVID) CLURY (C)
K J (KEVIN) GIBNEY (C)
J J (JOHN) HAY (C)
R (ROD) KAHN
S M (SCOTT) KERNADHAN
G E (GEOFF) MAY
J L (JERRY) MCPHEARSON, JR
K M (KEVIN) MCKENNA (C)
J K (JIM) WAGNER (C)
R G (RON) WOOD

PRODUCTION VEHICLE SAFETY & COMPLIANCE

W J (WILLIAM) KOSKUNA, MGR
A B (ARLEN) EDEL, AA

CAR SAFETY INVESTIGATIONS

R A (RAY) HEN, MGR
D J (DAVID) POLANSKI, AA
W M (WILLIAM) ABRAHAMCZYK
D K (DAVID) BREWER
P M (PAT) ECHERTY
P R (PAUL) WEBER
R E (ROD) WHEATON

COMPLIANCE INVESTIGATIONS

R F (ROGER) KOLASSA, MGR
P A (PAUL) ANTON
R J (JOHN) SLAPAK
L A (LARRY) WILKINS

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R J (JOHN) WHELOCK, MGR
L M (LARRY) EDWARDS
F G (FRANK) GAUNT
J (JULIA) GOWAN
P J (PAUL) GURK
D (DAVE) YU

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M (MICHAEL) BRAND
S A (STEVE) JOHNSON

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J E (JOHN) KUNZ, MGR
S C (SCOTT) BAUER
D L (DAVID) FENNETT
K E (KEVIN) KOSKUNA
A D (ALAN) KOSKUNA
J H (JOHN) RENOUF

FACILITIES & ADMINISTRATION

A O (ANDREW) MITCHELL
S A (STEVE) MITCHELL

SA SUPPORT SERVICES

C (CAROL) BOOKER
S V (VANCE) EDWARDS
D K (DAVID) GUCK

AA=Administrative Assistant
CTS=Corporate Technical Specialist
SPV=Supervisor
EA=Executive Assistant
MGR=Manager
(C)=Co-located
SAP=SA/PCA

AUTOMOTIVE SAFETY OFFICE - FARMLANE PLAZA SOUTH LISTING (continued)

MANUFACTURING, STD. & SYL. ENGINEERING P. 041-7800

JA (JIM) GALLAS, MGR	JOALLAS	32-2837
M (MONTA) ANDRE, AA	MANORE	34-85761

EXTERNAL & STRATEGIC STANDARDS

LT (LOU) DODD, MGR	LDODD	32-73628
LL (LARRY) DALL, AA	LDALL	32-44246
G R (GRAHAM) CHATBURN	GCHATBURN	32-23727
C R (CARL) DYER	CDYER	32-21775
KL (KEITH) LANDON	KLANDON	32-18283
F V (FRED) OWENS	FOWENS	32-73611
M L (MIKE) SMITHLO	MSMITHLO	34-88482
TA (TAC) WILLIAMSON	TWILLIAMSON	32-43823

MANUFACTURING & PROCESS STANDARDS

P G (PETER) WHITEHEAD, MGR	PWHITEHEAD	32-40827
D (DICK) BRIDGES, (SAB)	DBRIDGES	32-38627
K (KEITH) HANSEN, (SAB)	KHANSEN	32-38627
M R (MIKE) MARTIN-KUCK	MKUCK	32-38628
K W (KEVIN) KRAMER	KKRAMER	32-21848
C E (CARL) KRAMER	CKRAMER	32-21848
H E (HARRY) LIPP	HLIPP	34-88484
L (LARRY) SCHNEIDER	LSCHNEIDER	32-38627
CA (CARL) TAPPEE	CTAPPEE	32-41828

MATERIALS & PARTS STANDARDS

A J (AL) SHAWVER, MGR	ASHAWVER	32-38628
M E (MARTIN) BARCOCK	MBARCOCK	32-41118
A P (ALVIN) COCKMAN	ACOCKMAN	32-32194
C A (CARL) FREEMAN	CFREEMAN	32-41118
H R (HARRY) KILLIAN	HKILLIAN	32-41118
R G (RICK) MOORE	RMORE	32-33394
A E (ALVIN) RADKE	ARADKE	32-38628
B V (BOB) REYNOLDS	BREYNOLDS	32-38628
S (SAM) XU	SXU	32-78628

STANDARD INFORMATION MANAGEMENT

K J (KEVIN) BRONK, MGR	KBRONK	32-44828
M R (MIKE) CORNEN-SCHMIDT, AA	MCORNEN-SCHMIDT	32-37381
J L (JIM) PRINCE, II	JPRINCE	32-38628
J M (JEANNE) HALL	JHALL	34-87228
R H (BOB) HARRIS	RHARRIS	34-88161
TA (TOM) KYLE	TKYLE	32-31483
M (MICHAEL) LONG	MLONG	34-81483
TE (TOM) LONG	TLONG	32-31483

VEHICLE STANDARDS

TA (TED) RUSHMORE, MGR	TRUSHMORE	32-44844
S A (SHERRY) SMITHRO	SSMITHRO	32-38628
L (LORETTA) DUNHAM	LDUNHAM	34-87228
N S (NANCY) MCINTYRE	NMCINTYRE	32-41888
E P (EDWARD) SAMRANO	ESAMRANO	34-88487
J P (JOHN) SCHMIDT	JSCHMIDT	32-78628
P A (PAT) WILL	PWILL	32-88781

VEHICLE HOMOLOGATION & COMPLIANCE P. 041-7800

K (KEVIN) WILLIAM, MGR (C)	KWILLIAM	34-78628
B (BOB) FARMANER (C)	BFARMANER	34-78628

TRUCK & LARGE VEHICLE HOMOLOGATION

J E (JIM) MICHAEL, MGR	JMICHAEL	32-28628
C (CAROL) MOWRE, AA	CMOWRE	34-88228

ENVIRONMENTAL SYSTEMS

E H (ED) BOYER, SPV	EBOYER	32-41828
JA (JIM) BAILEY	JBAILEY	32-38628
G D (GAIL) HONEST	GHONEST	34-88611
R A (RICK) FAJON	RFAJON	32-84841
T R (TIM) BOYLE	TBOYLE	32-41828

HOMOLOGATION PLANNER - LARGE VEHICLE

G L (GEOFF) ANDERSON	GANDERSON	32-88628
J (JIM) WARD	JWARD	32-74827

SAFETY SYSTEMS

D E (DICK) RIZZY, SPV	DRIZZY	32-88628
D H (DAVE) CHAM	DCHAM	32-38628
D J (DAVE) ROBERTS, II	DROBERTS	32-41828
S J (STEVE) MYOUST	SMYOUST	34-88611
D J (DAVE) PERRY	DPERRY	34-88627
L O (LARRY) PETERSON	LPETERSON	32-38627
M (MICHAEL) REA	MREA	32-38628
D (DICK) LRA	DLRA	32-41712

WHOLE VEHICLE

S (SHAW) DOATES, SPV	SDOATES	32-41828
R J (BOB) BEATTIE	RBEATTIE	32-78627
P G (PAUL) BOLMANA	PBOLMANA	32-38627
J L (JIM) CARTER	JCARTER	32-21827
H (HARRY) GALEN	HGALEN	32-38628
K V (KEVIN) GATZKE	KGATZKE	32-38628
J B (JOHN) LANE	JLANE	34-81183
M I (MICHAEL) BALKIN	MBALKIN	32-88628
J L (JIMMY) PABSON	JPABSON	32-88621
D A (DAN) SANCHEZ (C)	DSANCHEZ	32-38628
A E (ALVIN) VRAO	AVRAO	32-88628
J S (JOHN) WOLTCZAK	JWOLTCZAK	32-38628

ENVIRONMENTAL & SAFETY STANDARDS

H.D. PHILIP PETRAKAKIS, VICE PRESIDENT

PPETRAKAKIS 32-32187

L (LINDA) HART, EA	LHART	32-3728 (FAX)
WALTER WERNERST	WERNERST	34-784-8182
K (KEVIN) WILLIAM	KWILLIAM	34-786-2828
T J (TOM) O'BRIEN, EA	TOBRIEN	32-38628
NANCY	NHALL	34-88627
G L (GAIL) HONEST	GHONEST	32-38628
L (LARRY) PETERSON	LPETERSON	32-38628
L (LARRY) PETERSON	LPETERSON	32-38628
G L (GAIL) HONEST	GHONEST	32-38628
K (KEVIN) WOLTCZAK	KWOLTCZAK	32-38628

FAX NUMBERS

ASO	L.V. Camp	32-87728
ASO	N.E. Camp	34-786-8822
ASO	SLITE 311	32-38628
ASO	SLITE 400 - WEST	32-38628
ASO	SLITE 400 - EAST	32-38628
ASO	SLITE 400 - EAST	32-38628
ASO	SLITE 400 - WEST	32-38628
ASO	SLITE 700	32-38628
ASO	SLITE 700 - AMORE	32-38628
ASO	TRAFFORD HOUSE	34-786-3728 or 2828
ASO	CLINTON	34-786-3828
ASO	WERNERST	34-786-8828
ASO	SOUTH - O'BRIEN	34-88628
ASO	NORTH	32-38628
ASO	VEHICLE PROGRAM CTR	32-38628
ASO	WINDY HALL	32-38628
ASO	PL & BUS PLANNING	32-38628
ASO	WASHINGTON	34-886-7228

VIDEO COMPLIANCE (PICTEL) LOCATIONS

ASO Pictel (Board Room)	ASO DEARBORN	327-1782 and 327-1752
ASO PICTEL (CR 800-600)	ASO SWIFT	380-1827
L.V. CAMP		32-87728
CSA Pictel (Sta. 400)	CSA PICTEL	32-88628 and 321-8861
Dearborn-Other Ford Locations	PROFE. WERNERST	
2nd Floor VEH Program Ctr	32-38628	
TRAFFORD HOUSE-ENGLAND	34-786-3828	

COMPLIANCE ROOMS

LOCATION	PROPS ID	PHONE No.
311	PPS-311	32-44844
Board Room - 400	PPS-400	32-44844
400 East	PPS-400E	32-44844
400 West	PPS-400W	32-3728
400 East	PPS-400E	32-44844
400 West	PPS-400W	32-3728
700A	PPS-700A	34-88628
700 B	PPS-700B	NP
700-C	PPS-700C	34-88628

3713 4340

DESCRIPTION (Continued)

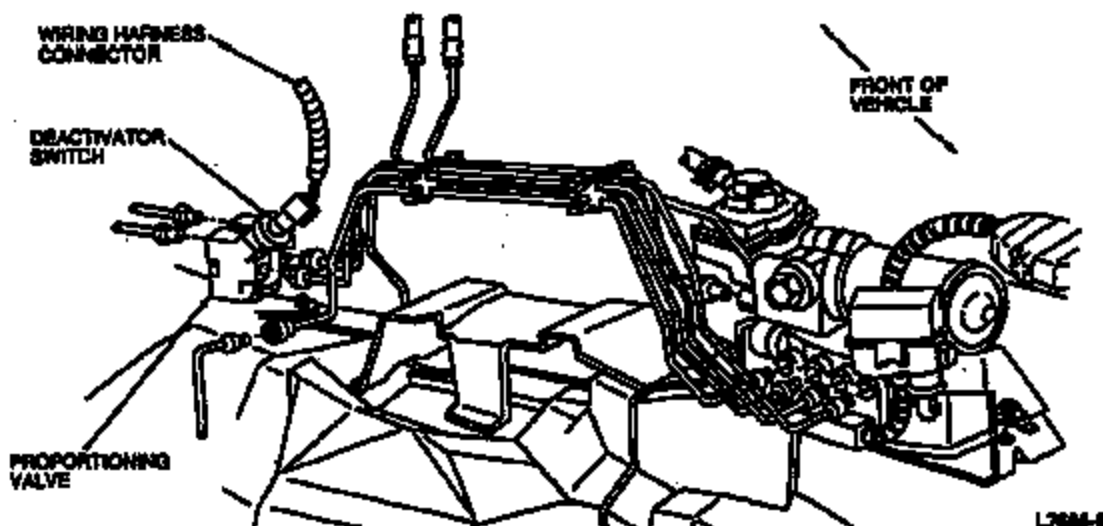
Item	Part Number	Description
1A	N010000-000	Screw
2	—	Actuator Cable Adjuster Fitting
3	0A025	Speed Control Actuator

(Continued)

Item	Part Number	Description
4	—	Accelerator Cable
5	0C735	Speed Control Servo
6	0C900	Speed Control Bracket Plate
A	—	Tighten to 3-4 N-m (27-35 Lb-in)

Deactivator Switch

The deactivator switch is a normally closed switch and replaces the vacuum dump valve as a redundant safety feature in the system. Normally when the brake pedal is depressed, an electrical signal from the brakelamp circuit to the speed control servo will disengage the system. Under increased brake pedal efforts (5-10 lbs, engine running), the deactivator switch mounted in the brake line will open and remove power to the speed control servo clutch, releasing the throttle independent of the speed control servo control. The deactivator switch is located at the rear brake proportioning valve (ABS brakes) or junction block (Non-ABS brakes) below the brake booster.



L7004-0

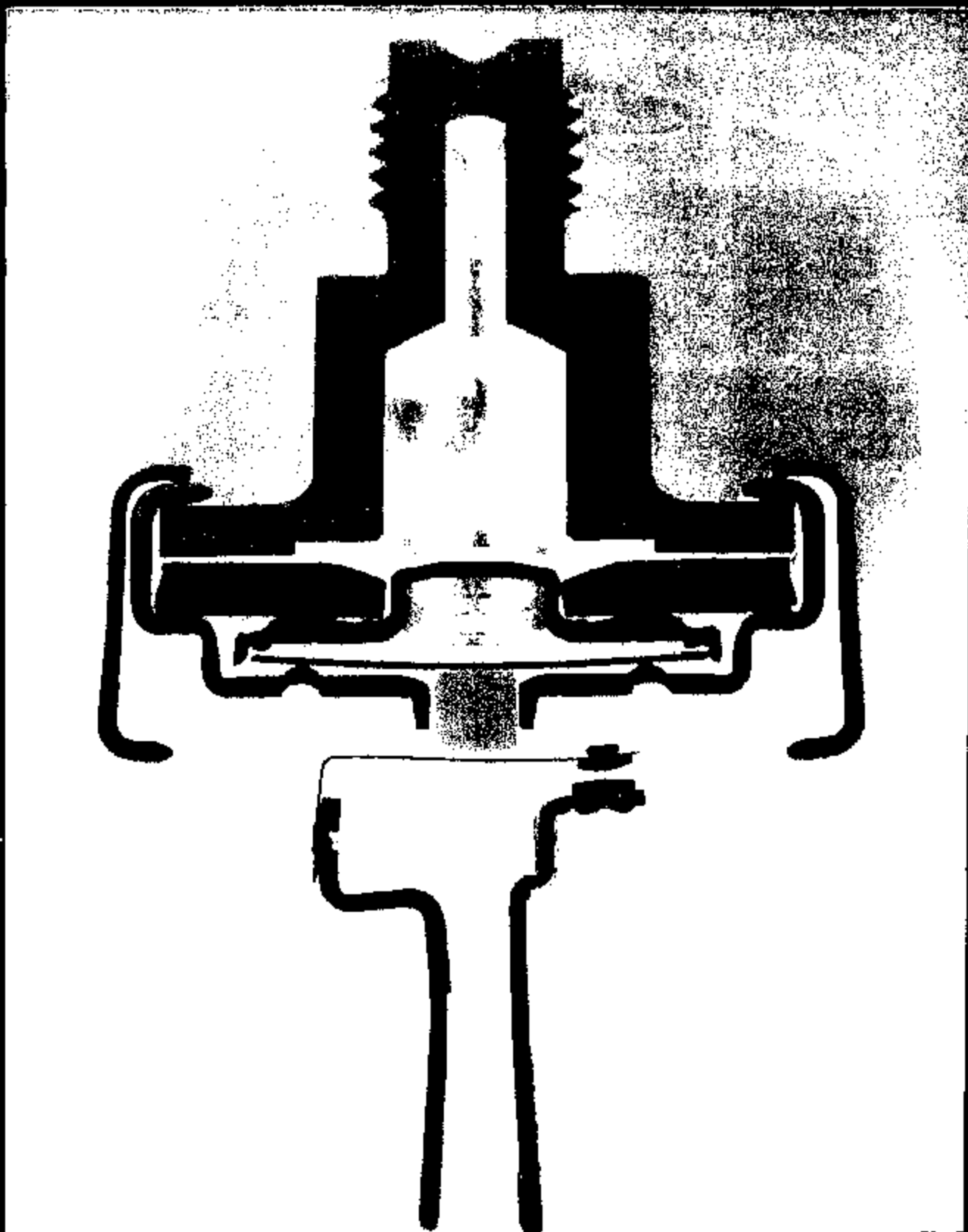
Vehicle Speed Sensor (VSS)

The vehicle speed sensor (VSS)(0E731) is mounted to the transmission.

OPERATION

System Activation

To operate the speed control system, the engine must be running and vehicle speed must be greater than 48 km/h (30 mph). The system is activated by pressing the ON switch in the steering wheel. Then the operator must depress and release the SET/ACCEL switch. Current speed will then be maintained until a new speed is set, the brake pedal is depressed or the OFF switch is depressed.



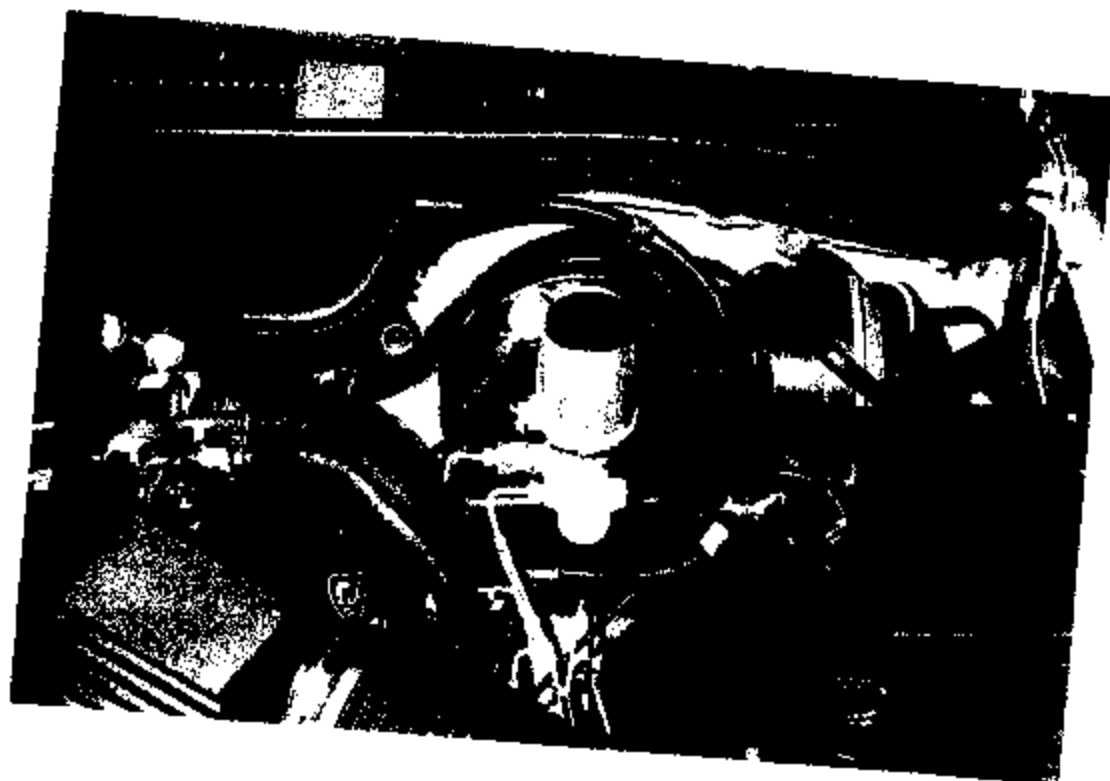


Speed control deactivation switch
F2VC-9F924-AB

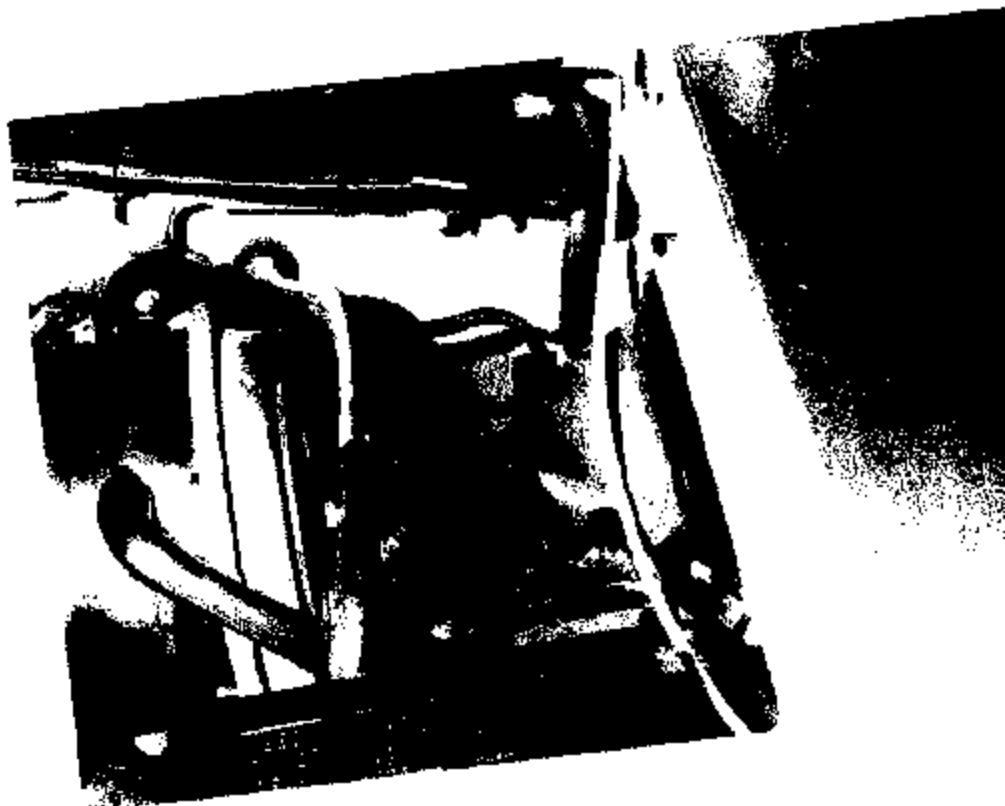
PE98-055
99-Jan-08

1991 Lincoln Town Car
1LNCM81WXY

PE98-05
99-Jan-2



1991 Lincoln Town Car PE88-055
1LNCM81WXM 99-Jan-27



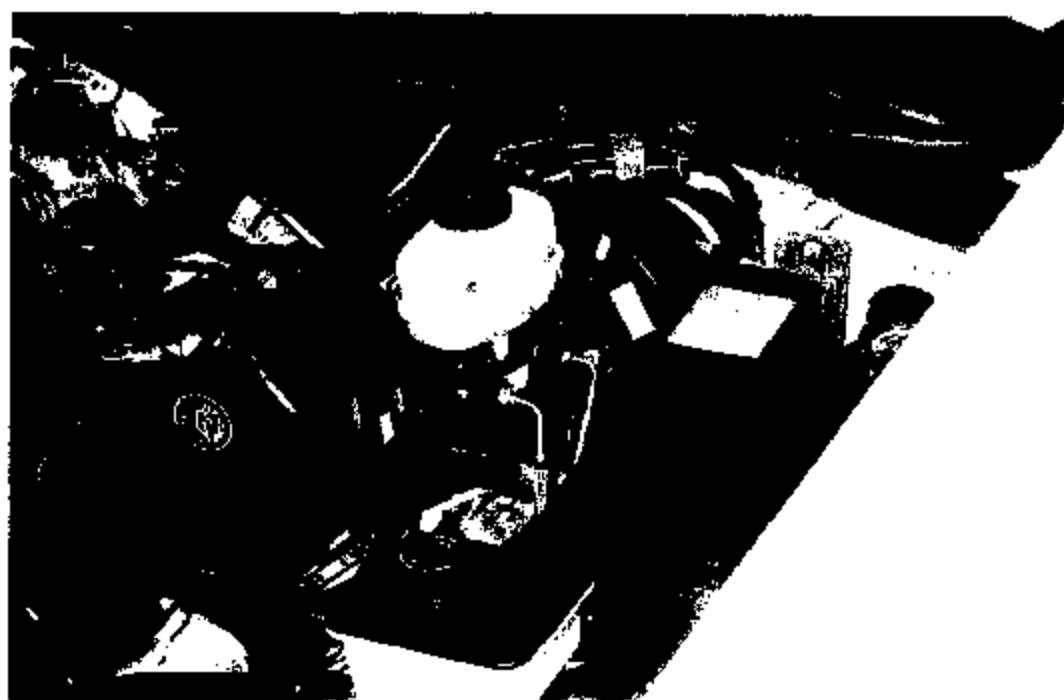
1991 Lincoln Town Car PE98-055
1LNCM81WXY 99-Jan-27



3713 4346

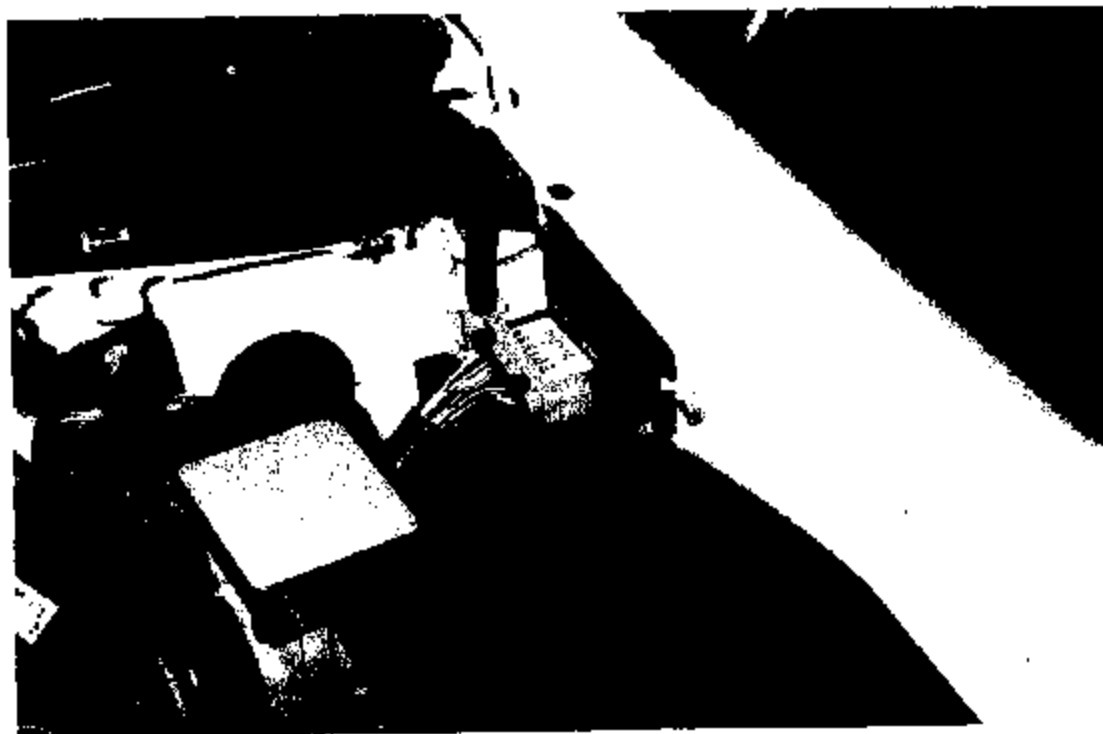
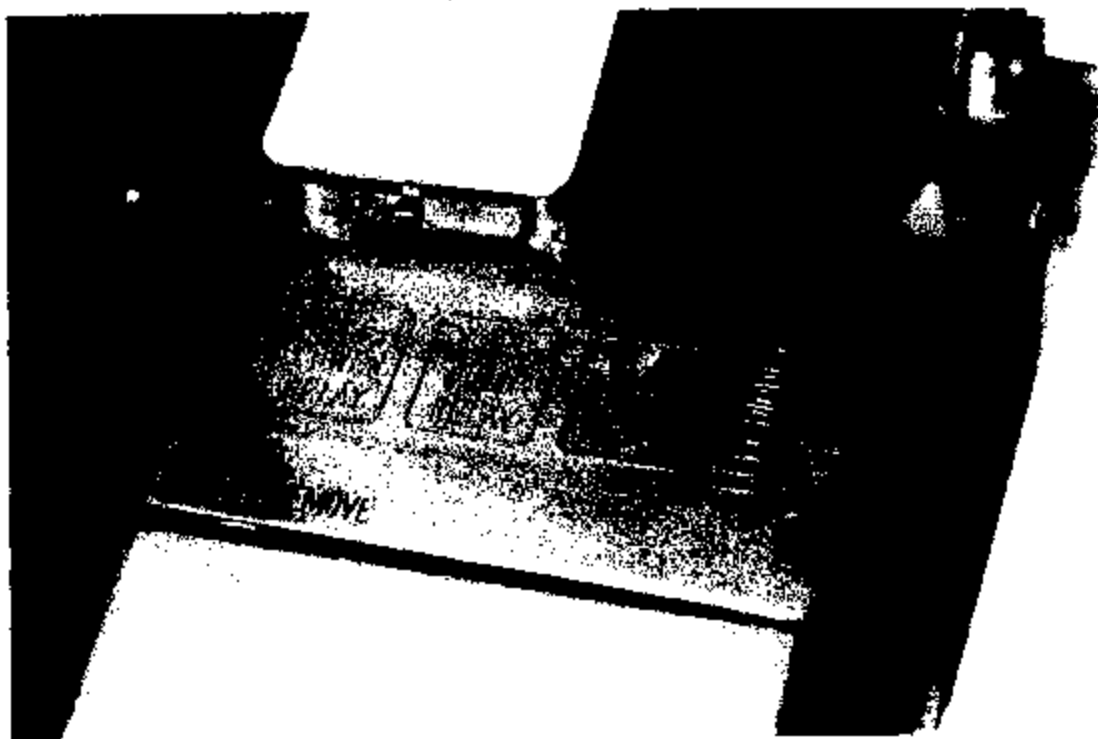
1992 Lincoln Town Car
1LNLM82W3NY

PE98-055
99-Jan-27



1992 Lincoln Town Car
1LNLM82W3NY

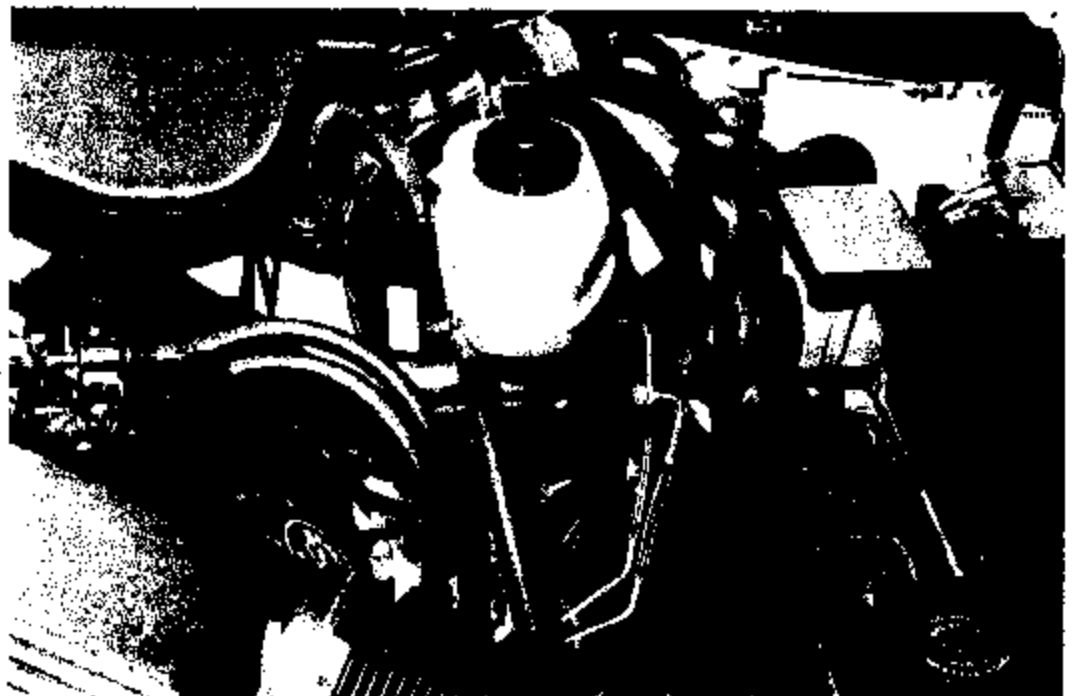
PE98-055
99-Jan-27



3713 4348

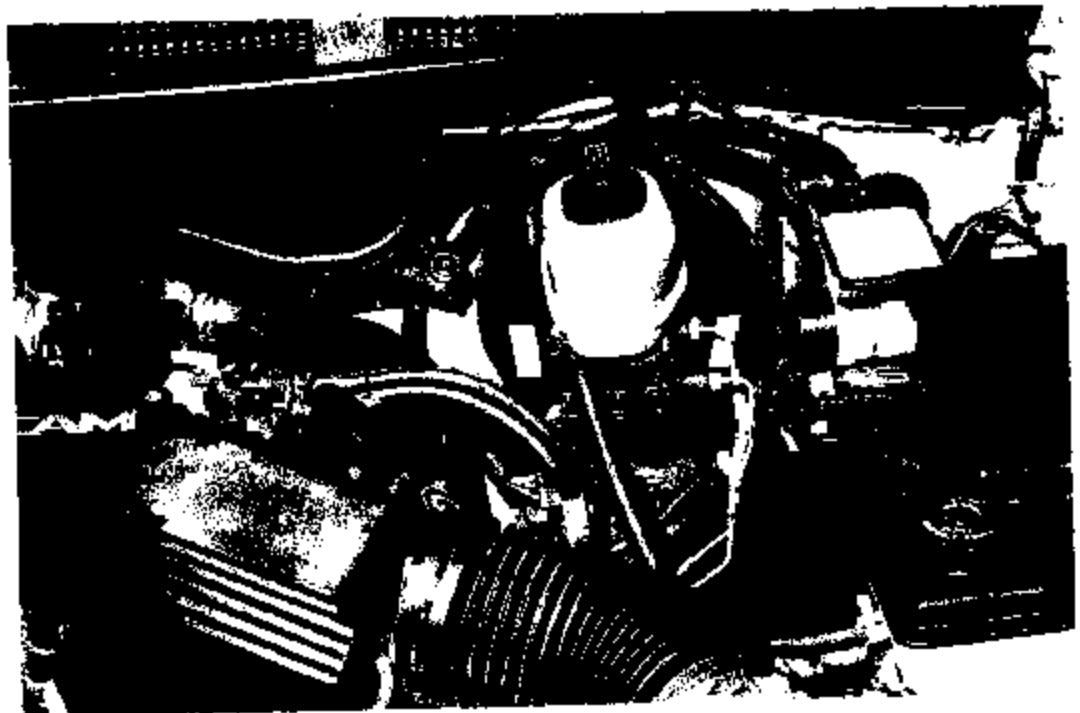
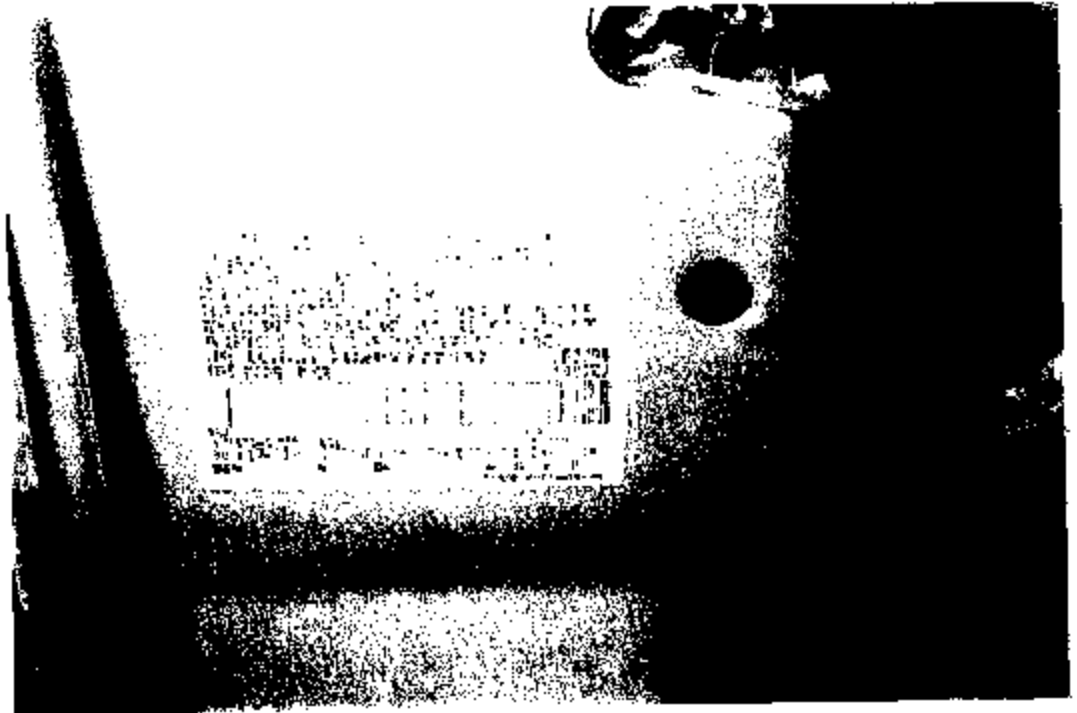
1992 Lincoln Town Car
1LNLM82W3NY

PE98-055
99-Jan-27



3713 4349

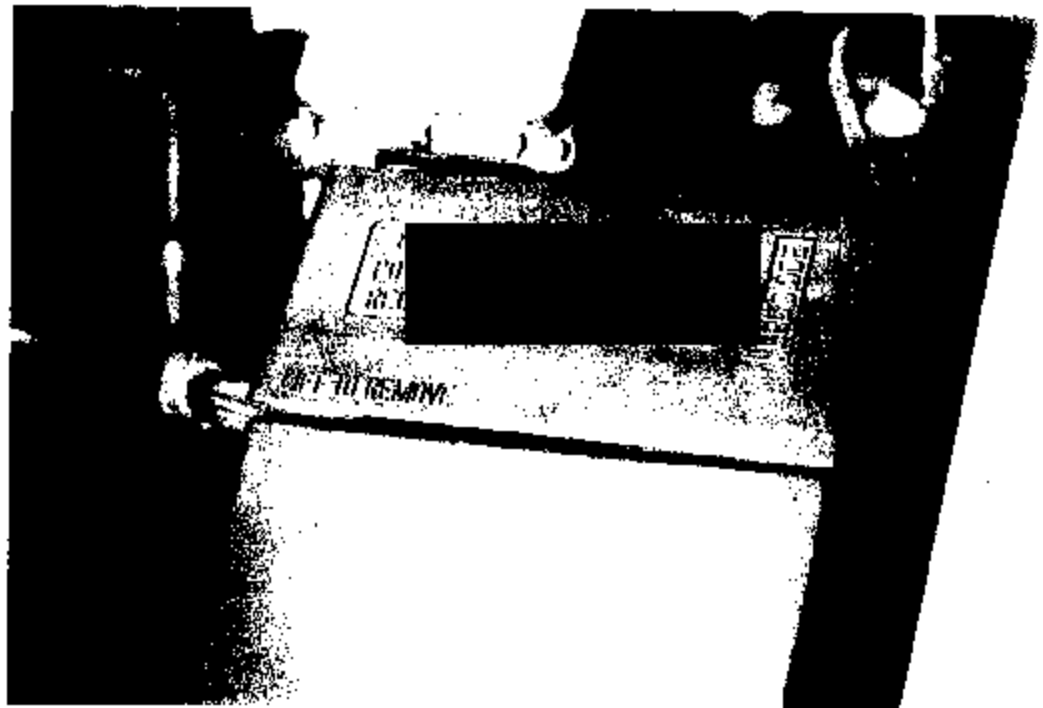
1993 Lincoln Town Car PE98-055
1LNLM82W2PY [REDACTED] 9-Jan-27



3713 4350

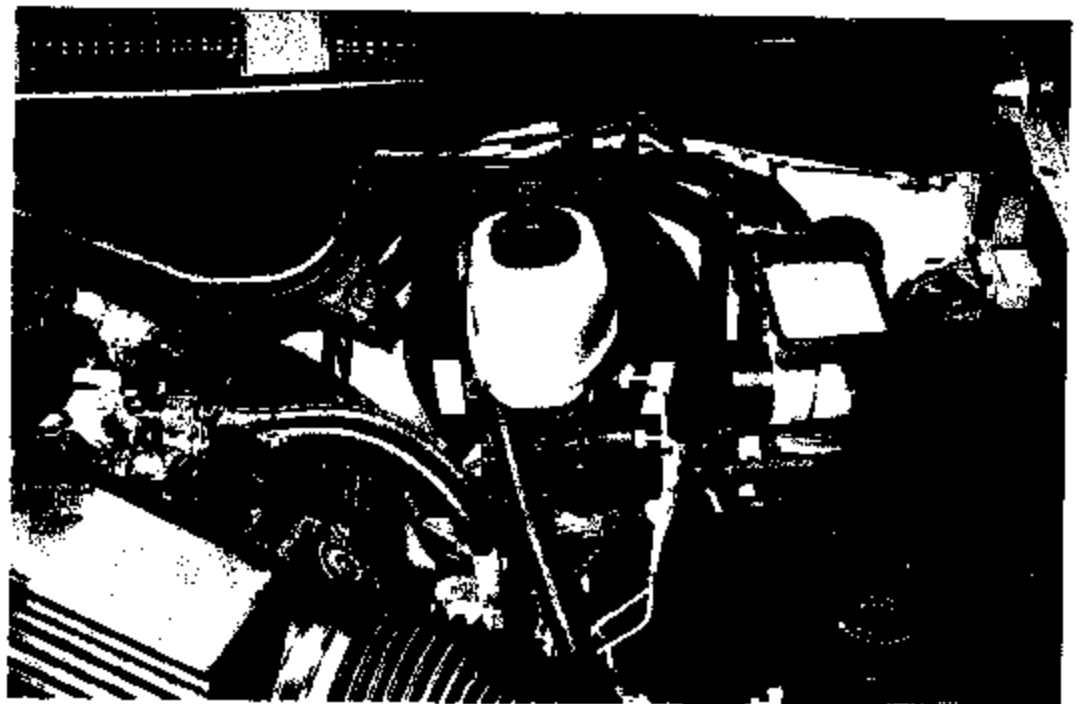
1993 Lincoln Town Car
1LNLM82W2PY

PE98-055
99-Jan-27



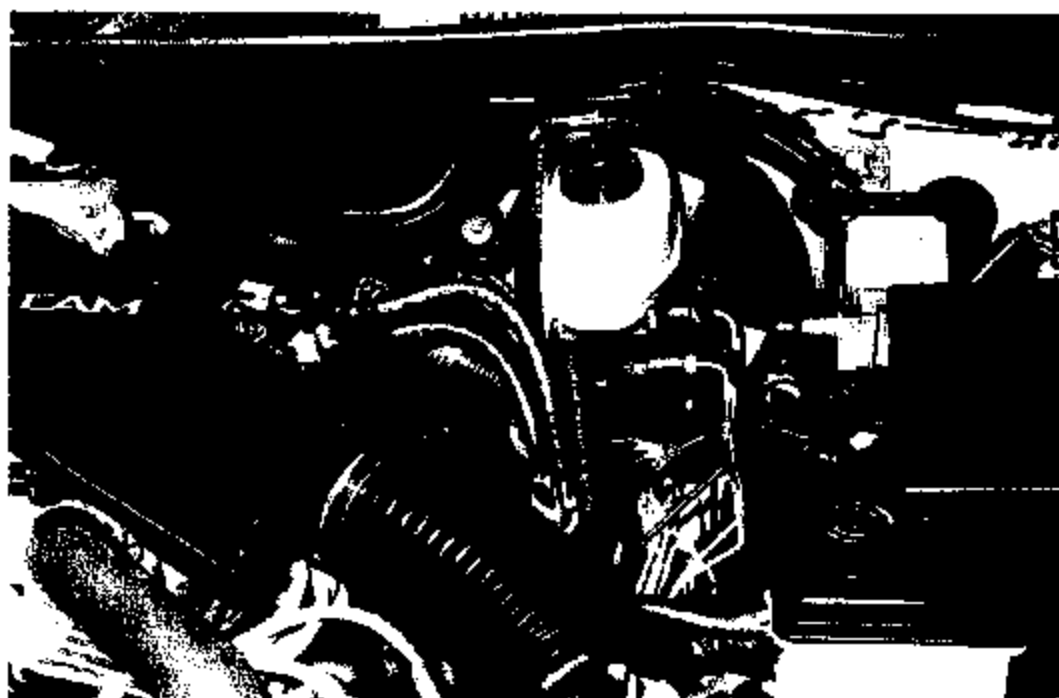
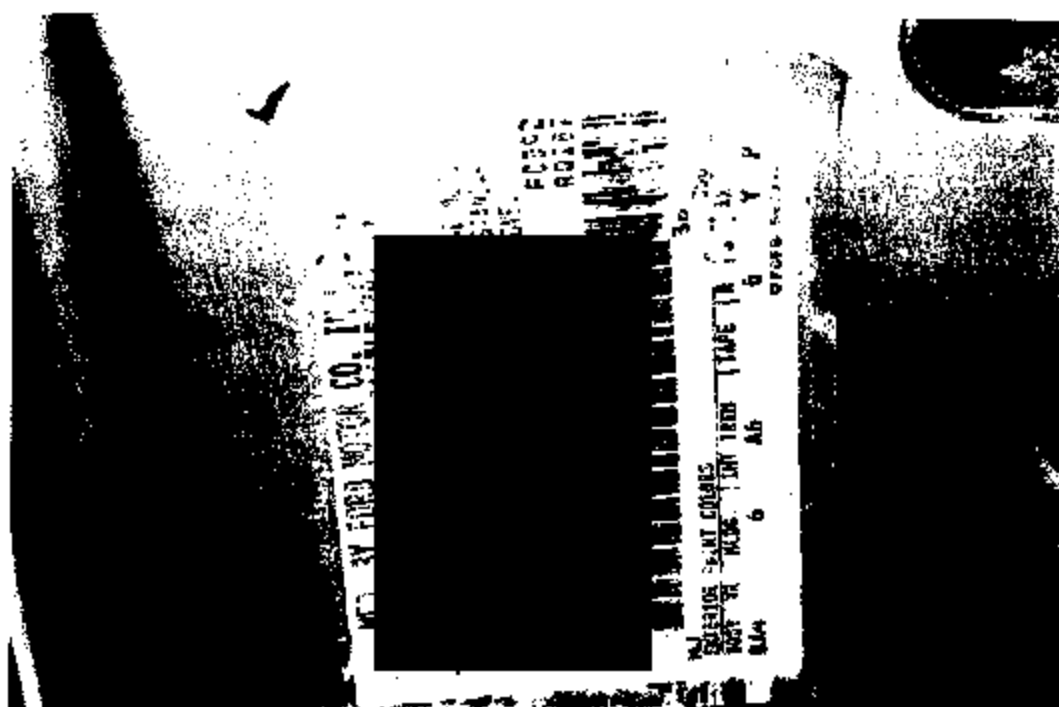
1993 Lincoln Town Car
1LNLM82W2PY [REDACTED]

PE98-055
99-Jan-27



1994 Lincoln Town Car
1LNLM81W2RY

PE98-055
99-Jan-27



3713 4353

1994 Lincoln Town Car
1LNLM81W2RY [REDACTED]

PE98-055
98-Jan-27



1994 Lincoln Town Car
1LNLM81W2RY [REDACTED]

PE98-055
99-Jan-27



3713 4355

Vehicle/Customer Information/Incident Info

Model Year: 1992 Make: Lincoln Town Car VIN#: 1LNLM31WZN Miles: 15,498
Inspection Date/Location: 3/22/99 / System Engineering & Lab, Tyler, TX Vehicle Owner: Allstate Insurance
Incident date: 2/21/99 Approximate mileage at incident: 15,489
Inspector Name: R. E. Allbritton, EAA Service Associate

Requested Information

1. Area of fire origination? (engine compartment quadrant, component(s), etc.)

Left rear of the engine compartment near the master cylinder.

2. Identify if any underhood relays show evidence of overheating

No relay in the underhood Relay/fuse panel showed any evidence of internal overheating.

3. Identify if any fuses or fuse links were blown or show evidence of other damage.

No underhood fuses, fuse links or large master fuses were blown. Fuse #12 underdash was blown. No other underdash fuses were blown or damaged.

4. Determine if the correct fuse for the stop lamp switch in the fuse box.

Yes, 15 amp

5. Identify if there any damage to wiring in the area where the fire was started (ie chafing, missing insulation)

Insulation was burnt from the Red and Green wires (8" from connector) for the brake pressure switch. Other wires in the surrounding harnesses had heat damage from the fire but insulation was still intact.

6. Assess whether the air suspension pump show evidence of overheating.

The air suspension pump appeared normal, no evidence of overheating.

7. Identify if there were any aftermarket modifications to the vehicle? (specifically car alarm, trailer tow, remote starter)

Wheel chair lift in trunk. The wheel chair lift was tested by System Engineering and Laboratories and operated normally after the incident. The lift has been transferred to another vehicle.

8. If possible, identify if the vehicle was involved in a natural disaster/accident that required significant vehicle clean up? If so where was the cleanup performed?

The vehicle has not been involved any natural disaster or accident.

9. If possible, identify vehicle repair history?

Windshield Wiper repair and problems with the brake lamps, speed control and shift release, fuse #12 blown. #12 fuse was replaced. Check out and repair was performed by Fairway Ford, Tyler Texas.

10. Any other information that may be pertinent to the incident.

Owners drove from their home to a restaurant for dinner and parked the vehicle. After they were in the restaurant (10 - 15 minutes) someone entering the restaurant reported smoke coming from a white Lincoln. People at the restaurant assisted in extinguishing the fire. The customer previously had difficulty getting the vehicle out of park and the brake lamps and speed control have been inoperative and repaired.

Parts that we would like from vehicle, if possible to acquire.

1. ☐ Brake pressure switch (do not remove connector, cut wires and remove with open end wrench.)
2. ☐ Sample of brake fluid at prop valve (in sealed glass container)
3. ☐ Relay pack located on LH fender
4. ☐ EDIS 8 Module located on LH fender
5. ☐ Speed control module located on LH fender
6. ☐ Air suspension compressor located under air filter
7. ☐ Air suspension relay.
8. ☐ Photograph of door jam VIN Sticker
9. ☐ other suspect parts.

Comments:

Allstate and their attorneys requested that **No Parts Or Material Be Removed From The Vehicle.**

Photos:

1. ☐ Certification label on drivers door
2. ☐ Exterior Fire Damage
3. ☐ Master Cylinder
4. ☐ Relay panel
5. ☐ Brake Pressure switch & Proportioning valve
6. ☐ EDIS - Electronic Distributorless Ignition System Module
7. ☐ Fuel hose connections at fuel rail
8. ☐ Other items of significance.

Comments:

VIN 1LNLM82W6PY614995

Mileage N/A

The vehicle was inspected 3-17-99 at Insurance Auto Auction in Aurora, Illinois with John Kessler of State Farm Insurance.

The vehicle appeared to be in good condition and there is no evidence of collision damage. Also there is no indication the vehicle was ever used as a tow vehicle. The valve cover had been removed at a prior time.

The fire started on the left side of the engine compartment and burned with such intensity that the hood and all components on the left side of the engine melted. No brake fluid was available for analysis. The brake pressure switch and the #12, 15 amp fuse were removed and forwarded to Ford Motor Co.

In a discussion with the State Farm representative I learned that the original State Farm inspector had determined the fire started as a result of a leaking valve cover gasket and removed the valve cover during the initial inspection. I was also told that the owner of the vehicle is a real estate agent and was showing property when the fire occurred. The owner arrived early for her appointment and left the car idling in the driveway. After a while she noticed smoke, raised the hood and the fire spread. There was no indication of how long the vehicle was left running before the fire occurred.

The enclosed photographs detail the extent of the damage.

Dwight D. Muller

Vehicle/Insurance Information/Incident Info

Model Year: **Make Lincoln VIN 1LNLM2W1PY - Mileage (at inspection): **Could Not Determine****
 Inspection Date/Location: **3-12-95** **Vehicle Owner: **D. Kennedy****
 Insurance Auto Auction Auction #11
 Incident Date: **Unknown** Approximate Mileage at Incident: **Unknown**
 Inspector Name: **ORVILLE Mullins**

Inspected Info

Area of fire origination (engine compartment, hood, trunk, etc.)
Left Side of Engine Compartment
 Identify if any evidence shows signs of internal overheat
Could not determine
 Identify if any flames or fumes from engine were observed or signs of other damage
#12 15 AMP FUSE - blown - being returned
 Determine if the correct fuse for the map lamp switch in the fuse box
15 AMP
 Identify if there was any damage to wiring in the area where the fire was started (in chafing, missing insulation)
Could not determine
 Assess whether the air suspension pump shows evidence of internal overheating
Could not determine
 Identify if there were any aftermarket modifications to the vehicle? (specifically car alarm, trailer tow, or remote start)
None
 If possible, identify if the vehicle was involved in a natural disaster/incident that required significant vehicle clean up? If so when was cleaning performed?
Could not determine - doubtful
 If possible, identify vehicle repair history
could not determine
 Any other info that may be pertinent to the incident...

Parts that you would like from vehicle if possible in inventory

Brake pressure switch (preferably with wire signal transducer attached and still attached to pump valve)
Exhaust - being returned
 Sample of brake fluid or pump valve (in sealed glass container)
consumed by fire
 Relay pack located on LH fender apron (with as much wiring as possible)
consumed by fire
 ABS II module located on LH fender
consumed by fire
 Speed control module located on LH fender
consumed by fire
 Air suspension compressor located under air filter
consumed by fire
 Air suspension valve
consumed by fire
 Photograph of door jam VIN number
ATTACH 153
 Other suspect parts

was not advised to return pump valve

VIN 1LNLM81W6NY

Mileage. 157,404

The vehicle was inspected 3-18-99 at Shilling Lincoln, Memphis Tennessee.

The vehicle appeared to be in excellent condition and there is no evidence of collision damage. Also there is no indication the vehicle was ever used as a tow vehicle. The vehicle has been maintained at the dealership and the file contains numerous repair orders reflecting maintenance. The under hood area has a normal dust build up and it does not appear the area has ever been steam cleaned or pressure washed.

SERVICE FILE HISTORY

- 4-21-94 RO#62594 43,156 miles
Anti-Lock brake light on No charge
- 7-9-94 Outside repair ticket. Replace pads, turn rotors. 48,344 miles
- 7-11-94 Replace rear pads and turn rotors.
- 7-13-94 Anti-Lock brake light on Replace module, RO#68000 48,632 miles
- 7-19-94 Anti-Lock brake light on. Replace pump motor relay RO#68370 49,322 miles
- 7-21-94 ABS light on code 67, Pin point test E1-E5 Remove wiring harness for circuit 465/604-No open-no short-no damage to circuit. Replace brake pedal travel switch. 2C309 RO#68521 49,412 miles
- 7-28-94 Anti-lock brake diagnoses replace pump motor assembly, open circuit. RO#68973 49,631
- 2-22-99 Won't come out of park, Red brake light/choke brake fluid
Replace brake light switch, replace brake pressure switch
RO#85970 156,688 mile.

The repairing technician stated the brake lamp fuse #12 was blown, he replaced the fuse and walked away from the vehicle. When he returned to the vehicle he noticed smoke coming from the brake pressure switch and wiring, he yanked the wires from the switch and the problem stopped. The technician replaced the brake pressure switch, the brake light switch and repaired the wiring to correct the problem. All replaced parts were returned to Ford Motor Co. for inspection.

No parts were removed during this inspection minimal pictures were taken because there was no damage and repairs were completed at a prior date.

David J. McElroy

Vehicle/Owner Information/Incident Info

Model Year: Mid Lincoln VIN: 1LD4M91N6Y - Mileage (if important): 73400
157404
 Inspection Date/Location: 3-18-99 Skilling Lincoln Memphis TN
 Incident Date: 2-22-99 Approximate mileage at incident: 156,688
 Inspector Name: DEVILLE MULLINS

Approximate mileage at incident: 156,688

Inspector Name: DEVILLE MULLINS

Damage Info

Area of fire origination (engine compartment, hood, rear, etc.)

Left Side of Engine
 Identify if any underhood leaks show evidence of internal overheat

NO
 Identify if any leaks or hose leaks were observed or show evidence of other damage

Blows on 2-22-99 - Replaced
 Determine if the current leak for the stop lamp switch in the fuse box

YES
 Identify if there was any damage to wiring in the area where the fire was started (in chafing, wiring insulation)

NO EXCEPT DAMAGE - REPAIRS COMPLETED 2-22-99
 Assess whether the air suspension pump shows evidence of internal overheating

NO
 Identify if there were any aftermarket modifications to the vehicle? (specifically car stereo, trailer tow, or remote start)

NONE
 If possible, identify if the vehicle was involved in a recent collision/accident that required significant vehicle claim up? If so, where was damage performed?

NOT EVIDENT
 If possible, identify vehicle repair history

ATTACHED
 Any other info that may be pertinent to the incident...

ATTACHED

Parts that we would like from vehicle if possible to analyze

Brake pressure switch (preferably with wire plug/connector attached and still attached to pump valve)

Evaluated by Dealership

Sample of brake fluid at pump valve (if sealed glass container)

NOT TAKEN, Fluid Added at Time of Repairs

Relay pack located on LH fender apron (with as much wiring as possible)

ECM & module located on LH fender

Speed control module located on LH fender

Air suspension compressor located under air filter

Air suspension relay

Photograph of driver's VIN sticker

Other suspect parts

Vehicle still
in Service

22/88 MON 14:28 FAX 2488424888

EA ASSOCIATES

Vehicle/Customer Information/Incident Info

Model Year: 92 Make: LINCOLN

VIN#: 1L6LM8165N4

Mileage (at inspection):

78925

Inspection Date/Location: JANUARY, FL 34116

Vehicle Owner:

Incident date: 12/23/78

Approximate mileage at incident:

78925

Inspector Name:

DAVID BOGERT EA
861-575-4174

Parts that we would like from vehicle if possible to acquire

Brake pressure switch (preferably with wire pigtail/connector attached and still attached to prop valve)

SWITCH WAS REPLACED 12/23/78 SEE ATTACHED WORK ORDER
Sample of brake fluid at prop valve (in sealed glass container) NO PARTS SAVED

SAMPLE FROM TOP FLUID IN MASTER CYLINDER
Relay pack located on LH fender apron (with as much wiring as possible)

EDIS 8 module located on LH fender

Speed control module located on LH fender

Air suspension compressor located under air filter

Air suspension relay

Photograph of door jam VIN sticker

Other suspect parts

PRIOR TO FIRE THIS GLASS BOTTLES WERE LOST, LONGER,
SEPTO 10 OPERATIVE. ONE WORK PRIOR TO FIRE - NEVER
REPAIRS - ALL WORK WORK - TEST SAYS HE DID NOT REPLACE
ANY PARTS.

SEE ATTACHED OTHER INFO

REV 2.0 - 3/

Page 1 of 2

10/22/80 MON 14:28 FAX 2486424558

EA ASSOCIATES

Vehicle/Customer Information/Accident Info

Model Year: 92 Make: LINCOLN

VIN: 1LNLM81W5N4
706941

Mileage (at inspection):

75405 Fire 73925

Inspection Date/Location: NAPLES, FL 34116

3084 50th LANE S.W.

Vehicle Owner:

Incident date: 12/23/98

Approximate mileage at incident: 73925

Inspector Name: DAVID BERNETT SAH

561 575 4174

Inspected Info

Area of fire origination (engine compartment, quadrant, component, etc)

BRAKE PRESSURE SWITCH AREA - BEHIND BRAKE BOOSTER CYLINDER

Identify if any underhood relays show evidence of internal overheat

NO EVIDENCE OF OVER HEATED RELAYS

Identify if any fuses or fuse links were blown or show evidence of other damage

SEE ATTACHED FUSE DRAWING & AMPERS - NO BLOWN FUSE LINKS

Determine if the correct fuse for the stop lamp switch in the fuse box

SEE ATTACHED FUSE DRAWING

Identify if there was any damage to wiring in the area where the fire was started (ie chafing, missing insulation)

NO AFTER MARKET EQUIPMENT NOTICED - NO HITCH

Assess whether the air suspension pump shows evidence of internal overheating

LOOKS NORMAL

Identify if there were any aftermarket modifications to the vehicle? (specifically our alarm, trailer tow, or remote start)

NO AFTER MARKET EQUIPMENT NOTICED - NO TRAILER HITCH

If possible, identify if the vehicle was involved in a natural disaster/accident that required significant vehicle clean up? If so where was cleanup performed?

VEHICLE PURCHASED USED IN 93 - LOOK GOOD FOR 92

If possible, identify vehicle repair history

Any other info that may be pertinent to the incident...

SHE SAID SOMEONE IN WASHINGTON CALLED ABOUT FIRE AND
TALKED 45 MIN.

WALGREENS DRUG STORE PERSONNEL CAME OUT OF STORE AND
QUICKLY PUT OUT FIRE - UNDER BRAKE BOOSTER AREA

IN CASE FIRE COVER HAD WALGREENS OUT INSIDE COVER?

Page 2 of 2

3713 4363

92 LINCOLN

3-24-99

GA.

OTHER INFO

1. NO PARTS WERE REMOVED BEFORE CAR WAS REPAIRED AND IS BEING USED BY OWNER [REDACTED]
2. ARRANGEMENTS CAN BE MADE TO REPLACE ANY OF THE LISTED PARTS IF FORD WANTS SOME OF THE COMPONENTS - JUST CALL ME AND ADVISE YOUR WISHES, DAVID BREWSTER - 561 575 4179 - I WILL WORK OUT DETAILS.
3. [REDACTED] IS MORE THAN WILLING TO BE TRADED OUT OF HER '72 INTO A BUICKS USED MARK VIII
4. POSSIBLE PAYBACK MIGHT HELP FORD INVESTIGATION BEFORE THE VEHICLE HAD MORE MAJOR FIRE DAMAGE.
5. THE ONLY PART REPLACED WAS BRAKE PRESSURE SWITCH AND ITS PIG TAIL - BUT SOME MINOR HEAT DAMAGE TO A BELL WIRE - WHICH WAS REPAIRED.
6. GERMAN FORD - MECHANIC THAT WORKED ON VEHICLE IN DEC 98 - REMEMBERS THE REPAIR AS A USUALLY SLIGHT - BRAKE FLUID BLEW IN AREA AND AUTO MANIFOLD, OR GOT HOT SOME OTHERWAY - CAR PARKED 5 MINUTES - TIME TO START FIRE. OLD PART WAS NOT CHANGED.
7. GERMAN MECHANIC, 3199 JIM BAGLEY, SAYS IN RECENT TIMES HE ESTIMATES HE HAS REPLACED ABOUT 10 SWITCHES - ALL LEAKING - USUALLY A CAUSE PROBLEM - ONLY ONE FIRE CLAIM
8. SUGGESTION: FORD SHOULD CONSIDER LEARNING A SERVICE PARTS SAYS FOR THIS SWITCH PIN & POSSIBLY CONSIDER A NATIONAL RETURN OF DEFECTIVE SWITCHES FOR REVIEW.

3713 4384

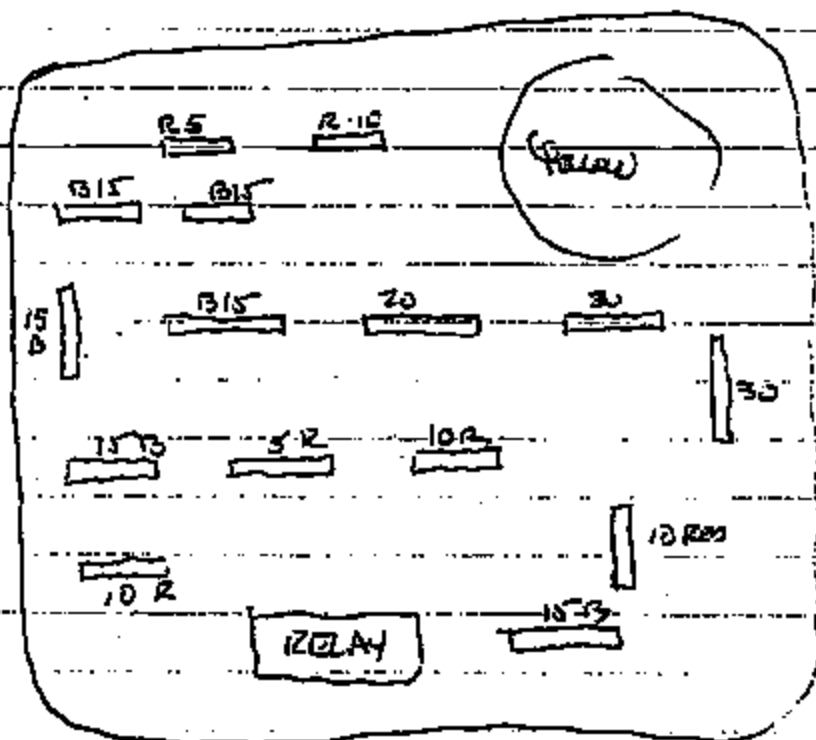


DAVID BOENETT Ed.
58 575 4174

NAPLES, FL [REDACTED]

LINCOLN TOWN 92
12/11/81 10:54 [REDACTED]

UPSIDE DOWN



ALMA -

GERMAIN
LINCOLN TOWN



MARK Van BUREN
Service Manager



13329 N. Tamiami Trail • Naples, Florida 34110
(941) 597-6011 x 224 • Ft. Myers 334-4255 (toll-free)
Fax: 352-397-1111

GERMAIN

LINCOLN MERCURY

13329 N. Tamiami Trail
Naples, Florida 34110

Five 12-20 10

We go that
**extra
mile**
for you.

Motorcraft 

MAPLES
(941) 887-8011

PT. MYERS
(941) 584-8536

STATE OF FLORIDA
REGISTRATION: MV - 21228

ALL PARTS ARE NEW UNLESS OTHERWISE INDICATED.

P & A CODE: 11234-0			CHECK ALL APPLICABLE BOXES		REPLACED PARTS REQUESTED BY CUSTOMER YES ☐ NO ☐	
1. MAKE	2. MODEL	3. YEAR	4. ENGINE	5. TRANSMISSION	6. BODY	7. COLOR
Additional Remarks and Notes			SEE BACK FOR INFORMATION REGARDING WARRANTY			

CUSTOMER INFORMATION		INVOICE NUMBER	
NAME		DATE	
ADDRESS		CITY	
STATE		ZIP	
PHONE		FAX	

SUMMARY OF CHARGES FOR INVOICE 044997		PAYMENT DISTRIBUTION FOR INVOICE 044997	
PARTS	24.33	TOTAL CHARGE	272.30
PARTS DISCOUNT	2.44	CASH DUE	272.30
SMILEY REPAIRS	32.50		
LAB-BODY SHOP	202.50		
8-TOTAL	236.89		
SALES TAX	15.41		
TOTAL CHARGE	252.30		

IF YOU HAVE ANY QUESTIONS...



PAGE 2

OFFICE COPY

3713 4367

AUTO

primary claim rep: Delago, Jack		primary unit: BT		owning office: Naples	
phone: 941-843-8615		st & agt: 59-1934		phone: 941-261-5623	
reporting agent: GRAY					
insured	name: [REDACTED]	street: [REDACTED]	city: NAPLES	state/prov: FL	zip/postal: [REDACTED]
phone: [REDACTED]	home: [REDACTED]	contacts: [REDACTED]			
insured vehicle	year: 1992	make: LINCOLN	model: TOWN CAR	body style: 4DR	
vehicle identification number: 1LN1M81W5N	license number: [REDACTED]	prior damage: N	drivable: N		
principle damage: ELECTRICAL FIRE UNDER HOOD					
vehicle location: SANTA BARBARA & RADIO RD, WALGREENS PARKING LOT					
POLICY INFORMATION					
vehicle: 1992 LINCOLN	TOWN CAR	4DR			
vehicle identification number: 1LN1M81W5N		prior damage: N			
coverage in force	policy source: PMR				
A 100/300/50, P14 10,000, C 5,000, D, G50, H, R1, U3 100/300					
lienholder or leasing company: BARNETT BANK OF NAPLES INSURANCE DEPT					
claim history	claim number	date	type	claim number	date
	[REDACTED]	11-25-98	2	[REDACTED]	01-05-96
	[REDACTED]	11-19-93	5	[REDACTED]	01-04-93
	[REDACTED]	11-15-90	4	[REDACTED]	11-09-90
	[REDACTED]	04-09-87	1		
FACTS					
JES-INSO PARKED VEH 1 IN LOT, WENT INTO STORE, CAME OUT OF STORE 5 MINUTES LATER & SAW CAR SMOKING FROM UNDER HOOD					
date and time of loss: [REDACTED]					
location of loss: SANTA BARBARA & RADIO RD, WALGREENS PARKING LOT					
city: NAPLES state/prov: FL zip/postal: [REDACTED]					

Turn 3750 73925
L96 cop