

EA02-025

FORD 10/27/03

APPENDIX N

BOOK 23 OF 61

PART 3 OF 5

57-079402

Narrative:**PRELIMINARY INFORMATION**

I was notified of this incident via telephone by the alarm office. At the time I was the on-call Investigator. Making a request for an Investigator was A.L. Costing of Engine Company 32. While responding to the incident the weather was clear with a breeze from the south at approximately 10 MPH. Post investigation ultimately eliminated the weather as a cause to this fire. Upon arrival I made contact with fire crews who advised that the fire was extinguished with out incident or injury. At that time the scene was turned over to me for investigation purposes.

ACTIONS AND OBSERVATIONS BY INVESTIGATOR

Prior to examining the vehicle I took 35mm photographs. Additional photographs were taken during the course of my investigation. After photographing the scene I did an area search for any suspicious container or incendiary devices. I found nothing of evidential value during this search. The following observations were noted:

- the vehicle appeared to be in good condition consistent with its year
- a large burn hole was noted on the engine compartment hood
- the burn thorough was above the area where the master cylinder was located
- the most damaged area of the engine compartment was in the area of the master cylinder
- inspection of the under side of the hood noted burn damage from a slow burning fire, damage was consistent with a fire starting near the fire well around the brake system. No signs of spraying fuel or fuel under pressure was noted on the under side of the hood
- no electrical fault could be found that would have caused this fire. Any damage to wiring was as a result of the fire and not a fault
- no major collision damage was noted to the vehicle
- the owners told me that the vehicle was serviced for a brake problem the exact problem was not known.

CONCLUSION

Based upon investigation at the scene along with information provided this fire was determined to be accidental in nature, being started by a brake fluid leak in the area of the master cylinder. The brake fluid was most likely started by the heat of the exhaust manifold.

INCIDENT NO. Mo.Dy.Yr. Day Alarm T. Arrival T. Bush? % of Sht
12-26-97 6 21:29 21:38 4 "To" C

Incident Found PPL Ignition Position Mobile Pt. Injuries Deaths
13 962 51 11 0 0

Street No. Street Name: _____ Zip: _____

Property Value:	Property Loss:	Contents Value:	Contents Loss:	Ext. Loss:
20,000	10,000	0	0	10000

Investigator: Street, call time: Invest. Computer: Date Out: Investigator SI
David PPR 23:47 22:48 12-26-97

Lead Agency: Other Agency Deputy Name: Other Agency Rpt. No.

PBCFR PBSO

Juvenile Offender:	Arrest:	Photos Taken:	Sample(s) Collected:	Status:
None		Y/N	0	Custodial
Owner Address:			Occupant Address:	

Property Description:

The property involved in this fire is a 1992 Lincoln Town Car. The vehicle identification number is 1LWLM5WWDY1234567. The Florida registered tag to the vehicle was HRW-768. The vehicle was parked in the driveway at the listed address facing east. The vehicle was gray in color.

Area of Fire Origin: Engine Compartment

Synopsis:

Based upon my investigation at the scene, along with information provided by fire in the census, the fire was determined to be accidental in nature. It started from a broken fuel tank in the area of the engine cylinder.

May 29, 1998

ATTN:

RE: Company Claim No.:
Insured:
Location:
City:
Phone:
Address Investigation:
City:
Phone:
Loss Date: May 22, 1998
Our File No.:

54

PRIVILEGED AND CONFIDENTIAL
SUBMITTED WITHOUT PREJUDICE

Dear Mr. Lasko:

Our investigation into the above captioned loss has been completed. The following will report our findings.

CONCLUSIONS:

From the physical evidence found during our investigation of this loss, we determined this loss to be electrical in nature with subrogation potential. This risk appears to be another in a series of Lincoln Town Cars that are of the same identity starting on the drivers side fender well area.

2-148

10-21-98 12:27AM P002/92T

3713 6203

ENCLOSURES:

1. [REDACTED]
2. [REDACTED] 3 1/2 min colored photographs of risk, damage and investigative findings.
3. Automobile Inspection Report
4. Evidence Disposition Form

IDA, INC.

CONSENT TO INVESTIGATION:

The consent to search was sent to the owner, [REDACTED], and will be forwarded to your office for review as soon as we receive it.

INTERVIEW STATEMENT

Discussion with Mr. [REDACTED] He states he and his neighbor (7797) were sitting in front of his screened garage enclosure when they heard popping noises and then seen smoke. [REDACTED] got the garden hose while I tried to get the hood open and back the car out of the garage. This happened around 11:00 a.m. He states he had no work done since the brakes were put on last December. I do my own work and the car never even leaked a drop of oil.

OFFICIAL REPORTER:

Z-545

10-21-88 10:27AM F002 #17

3713 5204

ENGINEERING REPORTS

MECHANICAL:

This was inspected by Certified Fire Investigator. This risk has an intact V-8 engine with all added on components such as the alternator, emission pump and air conditioner compressor still operational after the loss.

All fluid levels are full and clean with the exception of the master brake cylinder where the plastic reservoir for the fluid burned away during the ensuing fire. We found no mechanical reason this loss should have occurred especially after the owner stated it had sat approximately 12 hours prior to noticing the ensuing fire.

ELECTRICAL:

This was inspected by , Associate Electronic Engineer. This risk has a 12 volt direct current storage system and we found 12.39 volts at the initial time of our inspection. The cables were cut after the ensuing fire by the fire suppression company. This loss is determined to be electrical in nature and will be researched to the fullest at a future time.

RISK:

The risk is a 1992 Lincoln Town Car with a V-8 engine and automatic transmission. This risk reveals no prior body damage other than the ensuing fire.

This risk has a matching set tires, rims and hubcaps. This risk is worth approximately \$10,000.00 according to N.A.D.

INVESTIGATION:

We found this risk at [redacted] city in [redacted], Florida. We secured all loose parts and secured the electrical cables as best we could air transport.

Due to the excellent condition this risk is in we are notifying the National Highway Safety Transportation Board, Ford Motor Company, the testing company our firm uses and Allstate officials and other insurance companies with a vested interest to obtain the best research team available for the inspection of this as a co-sponsored team to determine where this loss occurred in this specific vehicle and hopefully in the other 20 or 25 or more vehicles that are found within the state of Florida and other states causing extensive property damage.

The best inspection team will be assembled for visible and microscopic testing of this specific vehicle to determine the exact origin of this cause of which myself and others feel this is going to be a 98% positive chance to determine where and how all of the rest of these Lincoln Town Cars are burning and causing not only property damage but bodily injury.

Due to the Nalley Supreme Court decision it is imperative that Ford Motor Company be allowed to inspect or be present and photograph at the same time our destructive testing is done. If this is not done properly, subrogation will not be allowed to use our findings in any court in this land.

The set of keys were given to the wrecker driver who in turn passed them over to our personnel when it arrived at our office and is secured. This risk will be kept under secured conditions and will not be touched until June 23, 1998 at 10:00 a.m.

It is for this reason I feel that we only have one shot at this because of the minor damage this specific risk has suffered. We feel we can identify the exact component failure to be able to tie all the rest of these in.

EVIDENCE:

1992 Lincoln Town Car

PHOTOGRAPHS:

Photographs document our findings. These photographs are placed in sequence and will assist your review, not necessarily in the order taken.

OTHER:**REMARKS:**

Our file activity is complete. We are now retiring our file and submitting our invoice for services rendered. Should further information become available after the completion of this file that may become pertinent to this case, please forward it to our office for consideration.

Thank you for allowing us to serve you in this matter. I trust we may assist you in the future. Please contact our office should you have further questions regarding this file.

Very truly yours,

V. Certified Fire Investigator

 U.S. Department of Transportation National Highway Traffic Safety Administration <hr/> Vehicle Owner's Questionnaire NATIONWIDE 1-800-424-0393 DC METRO AREA (202) 364-0123 www.safercar.gov		FOR AGENCY USE ONLY 141 <hr/> Case Received _____ Date 6 Jan 1998 <hr/> Reference No 820316 <hr/> Number _____ <hr/> 94 Home Number _____ <hr/> <p>Do you authorize NHTSA to provide a copy of this report to the manufacturer of your vehicle? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No In the absence of an authorization, NHTSA WILL NOT provide your name and address to the vehicle manufacturer.</p> <p>Signature of Owner _____ Date _____</p>				
VEHICLE INFORMATION						
Vehicle Manufacturer No. (VIN) Located at bottom or inside front driver side door 1L6L891WGN1799463		Vehicle Make LINCOLN	Vehicle Model TOWN CAR			
Purchased Date	Dealer's Name _____ City _____ State _____ Zip Code _____		Engine Size CC/CCV _____ <input type="checkbox"/> 1000cc <input type="checkbox"/> 1000cc+ <input type="checkbox"/> 2000cc <input type="checkbox"/> 2000cc+ <input type="checkbox"/> 3000cc <input type="checkbox"/> 3000cc+ <input type="checkbox"/> 4000cc <input type="checkbox"/> 4000cc+			
<input type="checkbox"/> New <input checked="" type="checkbox"/> Used			No Cylinders _____ <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> 8 <input type="checkbox"/> 10			
Transmission Type	Antilock Brakes	Restraint System	Cruise Control	Drive Train	Vehicle Type	Body Style
<input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Onboard Analog <input type="checkbox"/> Passenger Airbag <input type="checkbox"/> 3-Point Belt <input type="checkbox"/> 4-Point Seat	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4-Wheel	<input type="checkbox"/> Car <input type="checkbox"/> Van <input type="checkbox"/> Minivan <input type="checkbox"/> SUV <input type="checkbox"/> Other	<input type="checkbox"/> 2-door <input type="checkbox"/> 4-door <input type="checkbox"/> Stationwagon <input type="checkbox"/> Compact <input type="checkbox"/> Full-size Sedan
FAILED COMPONENT(S)/PART(S) INFORMATION						
Component 96500008	Part Number(s) ELECTRICAL SYSTEM IGNITION			Location <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Front <input type="checkbox"/> Rear	Failure Pattern <input type="checkbox"/> Original <input checked="" type="checkbox"/> Replacement	Failure Pattern Available? <input type="checkbox"/> Yes <input type="checkbox"/> No NHTSA Previously Contacted? <input type="checkbox"/> Yes <input type="checkbox"/> No
No. of Failures	Date(s) of Failure(s) 20-0000-00 Mileage at "Failure(s)" 50000 Vehicle Speed at Failure(s) _____					
APPLICABLE INCIDENT INFORMATION						
Please describe in detail the incident(s),傷害(s), Crash(es), and Intention(s) on the back of this form.						
Crash <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	FIRE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Persons Injured	Number of Fatalities	Estimated Property Damage	Reported to Police <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
NARRATIVE DESCRIPTION OF FAILURE(S)/INCIDENT(S)/INJURY(IES)						
ELECTRICAL: DROVE CAR 8 HOURS FROM ATLANTA, PARKED CAR IN GARAGE. TWO HOURS LATER, SMELLED SMOKE, AND THE CAR WAS ENGULFED IN FLAMES AND GARAGE WAS ON FIRE. CAR WAS TOTALED. THE CAUSE OF THE FIRE HAS NOT BEEN DETERMINED. "AK"						
CONTINUE ON BACK OF FORM						
<small>The Privacy Act of 1974/Public Law 93-502 This information is volunteered 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 by NHTSA to determine 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.</small>						

The Privacy Act of 1974/Public Law 93-502 This information is volunteered 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 by NHTSA to determine 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.

FIRE INVESTIGATION REPORT

"CONFIDENTIAL"

DATE OF FIRE: 12-30-97

CASE NUMBER: 97-140

RUN NUMBER: 1890

TIME OF FIRE: 1517 hrs

INVESTIGATION DATE: 12-30-97

INVESTIGATION TIME: 1926 hrs

FIRE CAUSE: Accidental

DAY OF WEEK: Tuesday

LOCATION:

DESCRIPTION: 1992 Lincoln Town Car / Single Family Dwelling

VIN: 1LNLMA1W3NY760463

TAG:

DOLLAR VALUE: Vehicle \$20,000.00/Total Structure \$120,000.00/\$45,000.00

DOLLAR LOSS: See Above

INSURANCE COMPANY: State Farm

POLICY NUMBER: 881-5189-99

PROPERTY INSURED VALUE: Vehicle Structure \$113,470.00

CONTENTS INSURED VALUE: \$83,100.00

MORTGAGE COMPANY: None

ACCOUNT NUMBER: N/A

OWNER NAME:

RACE [REDACTED]

SEX: [REDACTED]

DOB: [REDACTED]

POB: [REDACTED]

ADDRESS: : [REDACTED]

ADDITIONAL OWNERS SEE NARRATIVE:

OCCUPANT NAME:

RACE [REDACTED]

SEX: [REDACTED]

DOB: [REDACTED]

POB: [REDACTED]

ADDRESS: : [REDACTED]

ADDITIONAL OCCUPANTS SEE NOTES:

FATALITY NAME:

RACE:

SEX:

DOB:

POB:

ADDRESS:

ADDITIONAL FATALITIES SEE NARRATIVE:

ARRESTED NAME:

RACE:

SEX:

DOB:

POB:

ADDRESS:

ADDITIONAL ARRESTS SEE NARRATIVE:

NARRATIVE:

Tuesday December 30, 1997 of the : re District requested I respond to the above address for the purpose of determining origin and cause of this fire incident.

Upon arrival I met with Captain Pool, he advised me of the events which occurred to this point. Fire suppression personnel were still on scene performing overhaul operations. I requested Captain Roy _____ from the S _____ County Fire District to respond to this location to assist in this investigation, he did.

The owners of this property (_____), were across the street at a neighbors house. I went across the street to interview them. They advised me they had just returned home from a trip to Georgia around 4:30 pm. They parked _____ in the garage, removed their suitcases, and went inside the house. After unpacking _____ set down to relax in the front room. Mrs. _____ was on the telephone and Mr. _____ was reading a paper. It was approximately two hours after arriving home that the _____ heard a sound in the garage. Mr. _____ went to the passage way door that _____ to the garage, opened it, and saw flames and heavy black smoke inside the garage. Mr. _____ closed the door, his wife called 9-1-1, and then they exited the structure through the front door. Mr. _____ denies any problems with his car, nor has he had any work performed on the car recently.

I observed and photographed the exterior of the structure and surrounding area beginning at the front and progressing in a clockwise fashion. This is a single story single family dwelling constructed of concrete block. The roof is conventionally framed and is covered with plywood and fiberglass shingles. The structure lies in a east west plane, the front faces south. Heavy fire damage was observed on the south side around the garage area. The remainder of the structure received minor to moderate smoke damage to the soffit areas. Various windows had been broken out by fire suppression for ventilation purposes.

I gained entrance to the interior of this structure through the front door located on the south side of the building. I observed and photographed the interior beginning in the living room and progressing in a clockwise fashion. Minor heat and smoke damage was noted throughout the interior. The damage increased in severity as I proceeded towards the kitchen area. This is the area where the passage door leading to the garage is located.

I now focused my attention to the garage area. This area received heavy fire damage from the ceiling to the floor. This fire damage was fairly uniform throughout the garage area with the exception of the area directly over the car. A 1992 Lincoln Town Car was observed inside the garage, the front facing the north wall. Deep charring was noted above the car on the bottom of the roof trusses. This charring directed my attention to the car itself. A closer inspection of the car reviled the engine compartment hood was partially consumed, more on the left side than the right. The remainder of the exterior of the car was burned uniformly and consistent with fuel

loads in and around the car. The interior of the car received heavy fire damage throughout. The dashboard was consumed and the seats were consumed on the tops of the seat backs. The lower portions of the interior were damaged by the fire but were still intact. Window glass in the car had heavy carbon buildup and cracking. Interior fire damage was most severe towards the front of the passenger compartment.

The car was pulled from the garage by Kauff's Towing. I continued my inspection of the car outside of the garage. I performed layering of the engine compartment area. The rubber products within the engine compartment including the rubber portions of the fuel lines had turned to charcoal or was completely consumed, with the exception of the radiator hoses. Heat and fire damage was more severe on the left side of the engine compartment. The wheelwell on the left side was consumed as well as all of the components that were located in that area (fuse box, electrical circuits, etc.). The body to frame rubber mount on the left side was also burned away.

In conclusion, due to the facts and evidence noted at the fire scene, this fire will be classified as an accidental fire. The area of origin of this fire is the 1992 Lincoln engine compartment on the left side. The exact ignition source for this fire was not identified, although, due to the information and evidence I feel this fire would be consistent with an electrical malfunction within the engine compartment itself.

This case will be considered closed unless further information is obtained that would warrant its re-opening, at which time a supplement report will be added to this file.

0 1

Mar 26, 93

TO:

RE:

REPORT

VEHICLE EXAMINED:

The vehicle was a 1992 Lincoln Town Car with the VIN
1LHLM81W3HY [REDACTED]

LOCATION:

The vehicle was located at the residence of the owner. This was the same location at which the vehicle was examined.

PURPOSE OF EXAMINATION:

The purpose of this examination was to determine the cause and origin of the fire the vehicle suffered.

PRELIMINARY:

The vehicle was identified by its VIN, year, make and model.

I was informed that this vehicle had suffered the same type of damage to the same location as a number of others in this area. Fire Marshal Anderson supplied the VINS on the affected vehicles and these vehicles were all within a relatively narrow range in the number sequence.

There are also two other vehicles of like make, model and similar circumstances of the fire occurred in the fl. area. One on the west coast in the Naples area and the other in the Jacksonville area. I also had a 1992 Lincoln Town Car that had similar damage and circumstances in the Boston Ma. area.

The circumstances of this fire was that the vehicle was parked in the garage two hours before the fire. The owner had passed by the front driver's side of the vehicle a number of times after the vehicle was parked. He stated he was unloading their baggage during this time.

Both the owner and his wife were sitting in the living room when they noticed smoke at the ceiling area of the house. When the owner went to the garage door and opened it he saw heavy smoke condition in the garage. He also stated he saw flames in the driver's side front wheel well area at this time.

Neither of the owners did not notice any problem with the vehicle prior to the fire. No unusual odors or noises or static on the radio. The vehicle had been driven for a distance on the day of the fire.

EXTERIOR EXAMINATION:

Examining the exterior, I found that the tires on the vehicle were all affected by direct fire exposure damage. The tires and the rest of the exterior was damaged as a result of both the vehicle fire and exposure to the drop fire from the burning garage it was located in.

The heaviest fire damage was to the engine compartment area on the driver's side front. The hood was melted in a manner that pointed to the driver's side front as the area from which the fire spread.

The driver's side front had no ignitable or melting materials left on the fender and bumper. On the passenger side however there was found signs of these ignitable materials being left , damaged , but still in place.

INTERIOR EXAMINATION:

Examining the interior, I found the majority of the damage being in the form of heat and smoke damage. There was direct fire damage to the ceiling and to the area immediately around the fire wall.

All of the indicators pointed to the fire entering the passenger compartment by way of the engine compartment. The avenue of entry was on the passenger side of the fire wall near the heat and vent fan housing.

The electrical wiring and components inside the vehicle were examined. None of these components or wiring were found to have had signs of electrical over heating or shorting. This included the wiring inside the dashboard area of the vehicle. The damage that was found to have occurred to the passenger compartment wiring was in the form of heat and smoke damaging.

ENGINE COMPARTMENT EXAMINATION:

The engine compartment was found to have suffered the most intense fire damage to the driver's side lower front. There was found almost complete consumption of the ordinary combustibles in this area. The other area of the compartment were found to have damaged combustibles but they were in place and recognizable.

The hood damage , mentioned in the section labeled "EXTERIOR EXAMINATION" also pointed to the lower driver's side of the engine compartment. The area just to the right of this driver's side front area was damaged to a much lesser degree and can be seen in photo number 18.

The electrical wiring and components in the engine compartment vehicle were examined. None of these components or wiring were found to have had signs of electrical over heating or shorting. This included the wiring and cables near the battery. The battery was found not to have been distended or show other signs of over pressurizing.

There was one area that was the exception to the statement made above. The driver's side front lower area was this exception. The wiring in the area and harness that lead to the head light and across the front of the radiator area was the affected wiring. There was a section of the harness that was between the "RELAY CENTER" and the area behind the head light unit that was missing. The wiring that was left was found to have bending on it. This bending is consistent with electrical over heating and/or shorting.

CONCLUSION:

ORIGIN OF THE FIRE:

The fire was found to have started in the driver's side lower front section of the engine compartment. The area of origin was in the space between the "RELAY CENTER" and the rear of the head light unit.

CAUSE OF THE FIRE:

The fire was determined, to a high degree of scientific certainty, to have been caused by electrical shorting or over heating in the wiring harness that was located in the area of origin. This harness was found to have been a factory type harness on the ends that were found to have been left.

NOTE:

The exact circuit and wiring that was over heated or shorted could not be determined based on the evidence left. Once there is evidence found that will aide in pinning pointing the circuit and wiring involved this information will be forwarded to your office.

Should further information become available after the completion of this examination that may be pertinent to this file, please forward it to my office for review and possible further action.

Should you have any further questions in reference to this file, please do not hesitate to contact my office at your earliest convenience.

Signed by:

Reviewed by:

CFSI, CPI, AFPS, FL
Senior Forensic Analyst
Member, American Board of Forensic Examiners
North East Association of Forensic Scientists
Society of Automotive Forensic Examiners

From:
To:
Date:
Subject: Auto <NHT...

VEHICLE OWNER'S QUESTIONNAIRE

Submission Time: February 28, 1998 04:44:33PM

OWNER INFORMATION

NAME:
ADDRESS:
Apartment

TELEPHONE:
EMAIL:

Have NHTSA send signature card for authorization: Yes

VEHICLE INFORMATION

VIN: 1LNLMB1WBN████████
MAKE: Lincoln
MODEL: Town Car
YEAR: 1992

ODOMETER: unk
PURCHASE DATE: 06/12/92
NEW OR USED: New

DEALER NAME:
ADDRESS:

ENGINE SIZE:
CYLINDERS: 08

FUEL INJECTION: on

TURBO:

FUEL TYPE: Gas

ANTILOCK BRAKES: Yes

CRUISE CONTROL: Yes

DRIVETRAIN: Rear

DRIVER AIRBAG:

PASSENGER AIRBAG:

3-POINT BELT: on

MOTOR BELT:

2-POINT BELT:

BODY STYLE: 4-Door

FAILED COMPONENT(S)/PART(S) INFORMATION

COMPONENT: fuel monitor

PART NAME(S): Electronic component on drivers side fender well of engine compartment

LOCATION: Left Front

NUMBER OF FAILURES: I am personally aware of 3 such vehicles

DATE(S) OF FAILURE(S): 02/11/98

MILEAGE AT FAILURE(S):

SPEED AT FAILURE(S) parked for at least 5 hours

MANUFACTURER CONTACTED: No

NHTSA CONTACTED: No

APPLICABLE ACCIDENT INFORMATION

ACCIDENT: No

FIRE: Yes

DRIVER SIDE AIRBAG DEPLOYED: NA

PASSENGER SIDE AIRBAG DEPLOYED: NA

NUMBER OF PERSONS INJURED: none

NUMBER OF FATALITIES: none

ESTIMATED PROPERTY DAMAGE: 11,000

REPORTED TO POLICE: No

INFORMATION ON TIRE FAILURE(S) (IF APPLICABLE)

DOT NUMBER:

TIRE MANUFACTURER:

TIRE NAME:

TIRE SIZE:

ADDITIONAL COMMENTS

This is the third vehicle I have investigated with similar type loss. We have nothing left of any electrical or electronic components in this area to identify the exact part that is creating these fires. Thank you.

February 28, 1998

ATTN:

RE: Company Claim No.:
Insured:
Location:
City:
Phone:
Address Investigation:
City:
Phone:
Loss Date:
Our File No.:

PRIVILEGED AND CONFIDENTIAL
SUBMITTED WITHOUT PREJUDICE

Dear Mr.

Our investigation into the above captioned loss has been completed. The following will report our findings.

CONCLUSIONS:

From the physical evidence found during our investigation of this loss, we determined this loss to be an accidental electrical fire and within a category of 1450 other vehicles we are aware of.

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

Auto Safety Helpline
Vehicle Owner's Questionnaire
NATIONWIDE 1-800-424-8233
DC METRO AREA (202) 364-0123
INTERNET: http://www.nhtsa.dot.gov

FOR AGENCY USE ONLY	
Date Received	Day or Date Month Year
Reference No.	
536206	

COPIED

OWNER INFORMATION (Type or Print)		
Name [REDACTED]	[REDACTED]	
Street No. [REDACTED]	[REDACTED]	
City <u>Cape Girardeau</u>	State <u>MS.</u>	Zip Code [REDACTED]

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 and address to the vehicle manufacturer.

Signature of Owner [REDACTED]

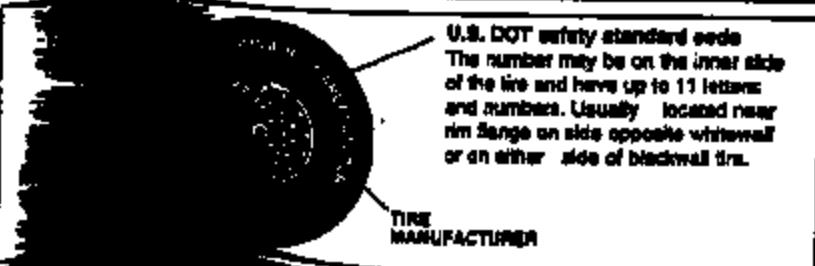
Date 5/28/98

VEHICLE INFORMATION							
Vehicle Ident. No. (VIN) (located at bottom of vinplate on driver's side) <u>1LNLM83W9NW</u>		Vehicle Make <u>LINCOLN</u>	Vehicle Model <u>Town Car</u>	Vehicle Year <u>1992</u>	Current Odometer Reading <u>67000</u>		
Purchase Date <u>5-14-97</u>	Dealer's Name <u>Tom Wimberley Auto World</u>	City <u>JACKSON</u> State <u>MS.</u> Zip Code <u>39216</u>		Engine Size (GROSS) <u>4.6L</u>	<input type="checkbox"/> Turbo <input type="checkbox"/> Diesel <input type="checkbox"/> Gas	<input type="checkbox"/> Gasoline <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> CNG <input type="checkbox"/> Other	
<input type="checkbox"/> New <input checked="" type="checkbox"/> Used				No. Cylinders <u>8</u>	<input type="checkbox"/> Fuel Injection		
Transmission Type <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic	Antilock Brakes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Restraint System <input checked="" type="checkbox"/> Deployable Airbag <input checked="" type="checkbox"/> Passenger-side Airbag <input checked="" type="checkbox"/> 3-Point Belt	Cruise Control <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Drivetrain <input checked="" type="checkbox"/> Front <input checked="" type="checkbox"/> Rear <input type="checkbox"/> 4-Wheel	Vehicle Type <input checked="" type="checkbox"/> Car <input type="checkbox"/> Van <input type="checkbox"/> Motorhome <input type="checkbox"/> Other	Body Style <input type="checkbox"/> 2-Door <input type="checkbox"/> 4-Door <input type="checkbox"/> Stationwagon <input type="checkbox"/> Pick Up Truck <input type="checkbox"/> Other	

FAILED COMPONENT(S)/PART(S) INFORMATION							
Component <u>SWC, R.C.</u>	Part Name(s) <u>Short circuit in wiring harness</u>	Location <input checked="" type="checkbox"/> Left <input checked="" type="checkbox"/> Right <input checked="" type="checkbox"/> Front <input type="checkbox"/> Rear		Failed Part(s) <input checked="" type="checkbox"/> Digital <input type="checkbox"/> Mechanical			
No. of Failure(s)	Date(s) of Failure(s) <u>4-30-98</u>			Failed Part(s) Available? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Mileage at Failure(s) <u>67,000</u>	Vehicle Speed at Failure(s) <u>0</u>			NHTSA Previously Contacted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

APPLICABLE INCIDENT INFORMATION (Please describe in detail the incident(s), failure(s), crash(es), and injury(es) on the back of this form.)							
Crash <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fire <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number Persons Injured <u>0</u>	Number of Fatalities <u>0</u>	Estimated Property Damage <u>\$16,039.84</u>	Reported to Police <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

INFORMATION ON TIRE FAILURE(S) (IF APPLICABLE)							
To reduce defective or failed tires, provide the following DOT Number, Tire Manufacturer, Tire Name, Tire Size (Include all numbers and letters). This information not required for normal operation tires.							
DOT <u>DOT</u>	Manufacturer <u>Michelin</u>	Tire Name <u>Michelin X-1</u>	Complete Tire Size <u>205/60R15</u>				

 <p>The diagram shows a tire with a callout pointing to the side wall near the rim. The text "U.S. DOT safety standard code" is above the callout, and "TIRE MANUFACTURER" is below it.</p> <p>U.S. DOT safety standard code The number may be on the inner side of the tire and have up to 11 letters and numbers. Usually located near rim flange on side opposite whitewall or on either side of blackwall tire.</p>							
<p>The Privacy Act of 1974 provides a limited right to review information about you that is held by federal agencies. Under the Privacy Act, you have the right to inspect and copy information about yourself held by the agency, and to request correction of any information that you believe is inaccurate. Information about you that is held by federal agencies includes your name, address, Social Security number, and other personal information. It also includes information about your employment, education, health, and financial status.</p> <p>This form is released pursuant to authority vested in the National Highway Traffic Safety Act and the Privacy Act of 1974. Your responses may be used to assist the NHTSA in determining whether a recall of the NHTSA product will affective enforcement or regulation against a manufacturer; your responses may be used to assist the attorney's office.</p>							

Narrative Description of Incident(s), Failure(s), Crash(es), and Injury(ies)

ON 1-20-85 I LEFT MY HOME AROUND 4:35 AM TO GO TO DODGE
GROCERY STORE WHICH IS 5 BLOCKS FROM MY HOME. I PARKED ON
THE SIDE. GOT OUT OF CAR, CLOSED DOOR.
I WENT TO SIDE TO PAY PHONE BILL AND PICK SOMETHING UP FOR
BREAKFAST. I WAS IN STORE APPROXIMATELY 10 TO 15 MINUTES.
WHEN AN ANNOUNCEMENT CAME OVER THE PUBLIC ADDRESS SYSTEM. THE
MAN'S CAR WAS ON FIRE.
I RAN OUTSIDE AND WAS TOLD THE FIRE DEPT. WAS IN ROUTE. I NOTICE
SMOKE COMING FROM THE LEFT FRONT ENGINE COMPARTMENT.
THE STORE MANAGER AND AN EMPLOYEE WERE ON THE LEFT SIDE TRYING TO USE AN
EXTINGUISHER. I THEN NOTICE FIRE WAS DRIPPING ON
THE LEFT FRONT TIRE. I UNLOCKED THE DOORS AND PULLED INSIDE.
HOOD LATCH, SO THEY COULD GET THE EXTINGUISHERS UNDER THE
HOOD. I RAN TO THE HORN OF MY CAR TO RELEASE OUTSIDE LATCH,
BUT THE FIRE WAS TOO HOT TO OPEN.
THE STORE MANAGER PULLED ME BACK AND TOLD ME I WAS
IN DANGER. BEFORE THE FIRE DEPARTMENT ARRIVED ON
SCENE THE ENTIRE ENGINE COMPARTMENT WAS DESTROYED.
I HAVE NOT HAD ANY MECHANICAL PROBLEMS WITH THIS
VEHICLE IN THE 11 MONTHS I OWNED IT. I FEEL THIS IS A DEFECTIVE
FORD MOTOR COMPANY PRODUCT AND I SHOULD BE REIMBURSED
FOR MY LOSS. THIS SHOULD BE INVESTIGATED, AND THIS PRODUCT
SHOULD BE RECALLED AND CORRECTED IMMEDIATELY.
BEFORE LOSS OF LIFE OCCURS.

SEE ENCLOSED PHOTOS & DOCUMENTS

Greenwood No. [REDACTED]

Paid to Other Person Address on stamp applied Person will keep and mail

U.S. Department
of Transportation
National Highway
Traffic Safety
Administration
400 Seventh St., S.W.
Washington, D.C. 20590
Official Business
Penalty for Private Use \$250



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO 73172 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY RATE, HWY. TRAFFIC SAFETY ADMIN

U.S. Department of Transportation
National Highway Traffic Safety Administration
Auto Safety Hotline, NSA-101
400 7th Street, SW
Washington, DC 20590

FIRE INVESTIGATION REPORT

GREENWOOD FIRE MARSHAL'S OFFICE
GREENWOOD, MISSISSIPPI

- Commercial
 Residential
 Other Auto

Date of Report 5-4 1998 Time _____

Weather Conditions During Fire _____

Officer in Charge of Fire: _____

Name of Owner: _____

Address: _____

Name of Occupant: _____

Address: _____

Address of Fire: 410 W. Park Ave.Date of Fire 4-30-98 19 Time 1710Point of Origin: Under hood on driver's side

Cause of Fire: Suspect short circuit in

wiring harnesses

Construction: Wood, Stone, Brick, Other: N/ASmoke Detector or Other Alarm Device: N/AEstimated Value of Building: N/AContents: N/AVehicle (If Involved): Linenla 92

make _____ model _____ TAG NO. _____ OWNER _____ EST. VALUE _____

Estimated Damage to Property: 60%Insurance Information: Agency: Farm BureauAmount: Building: N/ACompany: N/ADeaths (Names): NoneInjuries: NoneDisposition: Accidental Undetermined Incendiary

Attenu:

Date Investigation Closed: 5-4-98Investigating Officer: Melvin Morris

Melvin Morris, Deputy Fire Marshal

Approved: Melvin Morris, Fire Marshal

(Witnesses and Statements on Reverse Side)

GREENWOOD FIRE DEPARTMENT

May 14, 1982

RUN REPORT

DISPATCHER

TIME RECEIVED

TIME ALARM RECEIVED

1157

ALARM RECEIVED BY

Sgt.

STREET & NUMBER

OUTSIDE CITY LIMITS

WORKING TIME 58 mins

ENGINES ANSWERING

 NO. 1 NO. 2 NO. 3 NO. 4 NO. 5 NO. 6 NO. 10 NO. 11 NO. 12 NO. 13 NO. 14 NO. 15 NO. 16 NO. 17

FIRE IN BUILDING OR DWELLING

PUMP TIME

NO. 10

NO. 11

OWNER

NO. 12

NO. 13

NO. 14

ADDRESS

No. 15

No. 16

No. 17

OCCUPANTS

WATER USED 75 gals FEET OF LADDER USED 0

FEET OF HOSE LINE USED

NOZZLE	SIZE	FEET
1"	Booster	25 ft
1-1/2"	Lines	
2-1/2"	Lines	
3"	Lines	

CONSTRUCTION USED AS

OTHER EQUIPMENT USED Hux Box,

CAUSE

battery clippers

VEHICLE FIRES

ON DUTY

OWNER

STA. 1

STA. 2

STA. 4

ADDRESS

Chief Panel

Lead Panel

MAKE 993 Lincoln TOWN CAR

TAG N

CAUSE And C Investigation

VIN 1L1ALM83W4NY

OTHER FIRES OUTDOORS

GRASS OTHERGARBAGE BOX

CAUSE

IN EXTINGUISHED ~~Battery Box - 75 gals~~

STA. 3

ALARM WHERE THERE WAS NO FIRE - EXPLAIN

COMMENTS

3713 5222

INCIDENT REPORT

EX-5000

APPROVED ACCIDENT		GREENSBORO INCIDENT SECONDARY		GREENSBORO INCIDENT PRIMARY	
LAST NAME OF BUSINESS NAME		FIRST NAME		S	
STREET ADDRESS, STREET NAME, APARTMENT NO., STREET DIRECTION		STREET ADDRESS, STREET NAME, APARTMENT NO., STREET DIRECTION		STREET ADDRESS, STREET NAME, APARTMENT NO., STREET DIRECTION	
GREENWOOD N.C.		STATE: NC CITY: 25		DATE YY, MM, DAY: 98, 04, 30	
WITNESS HOME ADDRESS IF DIFFERENT FROM ABOVE		CITY		STATE / ZIP CODE	
WITNESS HOME PHONE (4 C'S & NO BUSINESS PHONE)		EMPLOYER AND OCCUPATION OR SCHOOL			
COMPLAINANT'S LAST NAME		FIRST NAME		HOME PHONE	BUSINESS PHONE
KANE LS above					
COMPLAINANT'S STREET ADDRESS		CITY		STATE / WEAPONS INVOLVED (PIPE, PISTOL, ETC)	
NA					
<input checked="" type="checkbox"/> VICTIM — STOLEN <input type="checkbox"/> SUSPECT — WANTED <input type="checkbox"/> RECOVERED <input type="checkbox"/> IMPOUNDED <small>TRANSMITTER PLATE NUMBER AND STATE</small>		VEHICLE TYPE: Pass car <small>DOORS/TAG NO.: 2 4 ABPA89 MS</small> <small>ST. / YR. VEHICLE ID. NO.</small>		MAKE: Lincoln MODEL: Town Car <small>KEYS ACCOUNTED FOR?</small>	
				COLOR: TOP BODY: Blue ON BODY: Blue	
VEHICLE <small>TRANSMITTER PLATE NUMBER AND STATE</small>		STREET ADDRESS		CITY	STATE VALUE
FARM Bureau		(X)			DATE: INCR? Y N
<input type="checkbox"/> VICTIM — STOLEN <input type="checkbox"/> SUSPECT — WANTED <input type="checkbox"/> RECOVERED <input type="checkbox"/> IMPOUNDED <small>TRANSMITTER PLATE NUMBER AND STATE</small>		VEHICLE TYPE: Pass car <small>DOORS/TAG NO.: 2 4</small> <small>ST. / YR. VEHICLE ID. NO.</small>		MAKE: Lincoln MODEL: Town Car <small>KEYS ACCOUNTED FOR?</small>	
				COLOR: TOP BODY: ON ON BODY: ON	
VEHICLE <small>TRANSMITTER PLATE NUMBER AND STATE</small>		STREET ADDRESS		CITY	STATE VALUE
<small>DISPOSITION STATUS</small> : Active <small>Uncleared</small> <small>Except Cleared</small> <small>Cleared by Arrest</small>		<small>DISPATCH DATE</small> <small>YR MO DAY</small>	PRIMARY REPORTING OFFICER: Social Service <small>SECONDARY REPORTING OFFICER:</small>		<small>NO</small> DATE: INCR? <small>022 780430</small>
		(X)			
<small>NAME</small> <small>VALUABLES</small> : <small>RECOVERED</small>		<small>SHAKES</small> <small>BOYS</small> <small>GOALS</small>	<small>GRIPS</small> <small>MANO</small> <small>PEDAL</small>	<small>WHEEL</small> <small>SEAT</small>	<small>FRAME NUMBER</small> <small>NUMBER</small>
			COLOR	ACCESSORIES & OTHER DESCRIPTION	
<small>TRANSMITTER PLATE NUMBER AND STATE</small> <small>ITEM CODE</small>		CITY	<small>DISPATCH DATE: INCR? (6-DIGIT NUMBER)</small> <small>VEHICLE FRONT END OF</small> <small>vehicle</small>		<small>VALUED</small> <small>INCR?</small> <small>Y Y</small>
<small>STOLEN</small> — <small>RECOVERED</small> — <small>DAMAGED</small> — <small>LOST</small> — <small>CONFISCATED</small>					<small>Y Y</small> <small>N N</small>
<small>STOLEN</small> — <small>RECOVERED</small> — <small>DAMAGED</small> — <small>LOST</small> — <small>CONFISCATED</small>					<small>Y Y</small> <small>N N</small>
<small>STOLEN</small> — <small>RECOVERED</small> — <small>DAMAGED</small> — <small>LOST</small> — <small>CONFISCATED</small>					<small>Y Y</small> <small>N N</small>
<small>STOLEN</small> — <small>RECOVERED</small> — <small>DAMAGED</small> — <small>LOST</small> — <small>CONFISCATED</small>					<small>Y Y</small> <small>N N</small>
<small>STOLEN</small> — <small>RECOVERED</small> — <small>DAMAGED</small> — <small>LOST</small> — <small>CONFISCATED</small>					<small>Y Y</small> <small>N N</small>
<small>STOLEN</small> — <small>RECOVERED</small> — <small>DAMAGED</small> — <small>LOST</small> — <small>CONFISCATED</small>					<small>Y Y</small> <small>N N</small>
<small>DISPATCH DATE: INCR? (6-DIGIT NUMBER)</small> <small>2:17:45 PM</small> <small>10/10/12 13:15:17</small>					

3713 6223



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

Auto Safety Hotline

Vehicle Owner's Questionnaire

NATIONWIDE 1-800-424-5313
DC METRO AREA (202) 366-0133
INTERNET: <http://www.safercar.dot.gov>

FOR AGENCY USE ONLY 11

Date Received: 2 Dec 1997
Reference No.: 819821

IR Number

Home Number

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 and address to the vehicle manufacturer.

Signature of Owner _____ Date _____

VEHICLE INFORMATION

Vehicle Ident. No. (VIN)	Customer or dealer of wherever purchased	Vehicle Make	Vehicle Model	Vehicle Year	Current Odometer Reading
1LNLM82W3N		LINCOLN	TOWN CAR	1992	

Purchase Date	Dealers Name _____	Engine Size (CID/CYL)	Type <input type="checkbox"/> Truck <input type="checkbox"/> Bus <input type="checkbox"/> Van <input type="checkbox"/> SUV <input type="checkbox"/> Other
<input type="checkbox"/> New <input checked="" type="checkbox"/> Used	City _____ State _____ Zip Code _____	No Cylinders	<input type="checkbox"/> Gas <input type="checkbox"/> Diesel <input type="checkbox"/> On <input type="checkbox"/> Off-Road

Transmission Type	Anti-Lock Brakes	Passenger System	Cruise Control	DriveTrain	Vehicle Type	Body Style
<input type="checkbox"/> Manual <input type="checkbox"/> Automatic	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Overdrive <input type="checkbox"/> Post-decelerate <input type="checkbox"/> 3-Point Belts	<input type="checkbox"/> Available <input type="checkbox"/> Not Available	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Front <input type="checkbox"/> Rear <input type="checkbox"/> 4-Wheel	<input type="checkbox"/> Sedan US <input type="checkbox"/> Van <input type="checkbox"/> Truck <input type="checkbox"/> Minivan <input type="checkbox"/> SUV <input type="checkbox"/> Other

FAILED COMPONENT(S)/PART(S) INFORMATION

Component 66100600	Part Number: ENGINE	Location <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Front <input type="checkbox"/> Rear	Failed Part(s) <input type="checkbox"/> Original <input type="checkbox"/> Replacement
No. of Failures	Details of Failure: 70-102148 Mileage at Failure: 67 Vehicle Speed at Failure:	Failed Part(s) <input type="checkbox"/> Available <input type="checkbox"/> Yes <input type="checkbox"/> No	NHTSA Priority Contacted? <input type="checkbox"/> Yes <input type="checkbox"/> No

APPLICABLE INCIDENT INFORMATION

(Please describe in detail the incident, failure, damage, and injury(s) on the back of this form.)

Crash <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fire <input type="checkbox"/> Yes <input type="checkbox"/> No	Number of Persons Injured	Number of Fatalities	Estimated Property Damage	Reported to Police <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
--	--	---------------------------	----------------------	---------------------------	---

NARRATIVE DESCRIPTION OF FAILURE(S)/INCIDENT(S)/INJURY(IES)

WHILE PARKED THE VEHICLE CAUGHT ON FIRE IN THE ENGINE COMPARTMENT. CAUSE UNKNOWN. PLEASE PROVIDE FURTHER DETAILS. *AK

10/20/98 Parker Freightliner

CONTINUE ON BACK OF FORMS

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 required to fill out 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 detailed summary thereof, may be used in support of the agency's case.

49 CFR 3500.3(b)(1)

Initials: JFH
Comments with the signature - replace the signature
FIRE IN LEFT FRONT OF ENGINE COMPARTMENT JFH

From: _____
To: **to <NHTSA>, ...**
Date: _____
Subject: _____

VEHICLE OWNER'S QUESTIONNAIRE

Submission Time: July 1, 1998 10:20:13AM

OWNER INFORMATION

NAME: J.
ADDRESS: _____
Apartment
Orlando, Fl [REDACTED]

TELEPHONE:
EMAIL:

Have NHTSA send signature card for authorization: No

VEHICLE INFORMATION

VIN: 1ZV6M62W4Ny [REDACTED] Jop
MAKE: LINCOLN
MODEL: TOWN CAR
YEAR: 1992

ODOMETER: 120000
PURCHASE DATE: 2/14/97
NEW OR USED: Used

DEALER NAME:
ADDRESS: .

ENGINE SIZE:
CYLINDERS:

FUEL INJECTION: on
TURBO:
FUEL TYPE: Gas
ANTILOCK BRAKES: Yes
CRUISE CONTROL: Yes
DRIVETRAIN: Rear
DRIVER AIRBAG: on
PASSENGER AIRBAG: on
3-POINT BELT:
MOTOR BELT:
2-POINT BELT:
BODY STYLE: 4-Door

FAILED COMPONENT(S)/PART(S) INFORMATION

COMPONENT: ENGINE

PART NAME(S):

LOCATION:

NUMBER OF FAILURES:

DATE(S) OF FAILURE(S): 8/24/98

MILEAGE AT FAILURE(S):

SPEED AT FAILURE(S) N/A

MANUFACTURER CONTACTED: No

NHTSA CONTACTED: No

APPLICABLE ACCIDENT INFORMATION

ACCIDENT: No

FIRE: Yes

DRIVER SIDE AIRBAG DEPLOYED: NA

PASSENGER SIDE AIRBAG DEPLOYED: NA

NUMBER OF PERSONS INJURED:

NUMBER OF FATALITIES:

ESTIMATED PROPERTY DAMAGE:

REPORTED TO POLICE: No

INFORMATION ON TIRE FAILURE(S) (IF APPLICABLE)

DOT NUMBER:

TIRE MANUFACTURER:

TIRE NAME:

TIRE SIZE:

ADDITIONAL COMMENTS

PARKED CAR IN A PARKING LOT AND SOME 30 MINUTES, THEREAFTER, VEHICLE CAUGHT ON FIRE WHICH ORIGINATED IN THE ENGINE.

fire was at left front wheel area, motor mount off frame

1:00 pm 10/22 Jeff

Auto

Master Travelers Group

Lake Mary, FL 32746-6447

November 10, 1998

U.S. Department of Transportation
National Highway Traffic Safety Administration
Office of Defects Investigation
400 Seventh St SW
Room 5329 NSA-12
Washington, DC 20590

Our Claim Number:
Date of loss: 08/24/98
Insured:

Dear John Abbott:

This letter is in regards to the engine fire involving the 1992 Lincoln Town Car. I am enclosing the fire report from Orlando Fire Department and a copy of our appraisal of the vehicle which indicates it was a total loss.

If you need anything additional please contact me at

Sincerely,

Claim Representative

R-175

11-10-98 03:06ZM FOO: #07

3713 5227

AUTO AND HOME INSURANCE

**** FOR ANY QUESTIONS REGARDING VEHICLE REPAIRS, CONTACT YOUR APPRAISER ****
***** FOR ANY OTHER QUESTIONS, CONTACT YOUR CLAIM REPRESENTATIVE *****

CD LOG NO 0

ESTIMATE

06-25-98 1:09 PM

CLAIM INFORM

CLAIM # D/R 06/24/98 D/A 06/24/98
 COMPANY INSURED
 CLAIMANT FILE HNDLR
 LOSS PAYEE

POLICY #
 CLM REP/AGNT 276 KAM 407-804-60
 LOSS DATE 06-24-98
 LOSS TYPE COMPREHENSIVE
 FILE #
 ACCT # PTL-S00-DN-R00

INSPECTION

TYPE FIELD
 APPRAISER NAME [REDACTED]
 WORK PHONE [REDACTED]
 ADDRESS [REDACTED]
 CITY STATE LAKES MARY, FL
 ZIP [REDACTED]

FAX
 INSP DATE 06-25-98
 LOCATION RADISCO
 CITY STATE

OWNER

ORLANDO FL [REDACTED]

WORK# ()
HOME# ()

REPAIR

ATTN
*****TOTAL LOSS*****SHOP LICH 9999999999
CAR IN

VEHICLE

1992 LINCOLN TOWN CAR SIGNATURE 4 DR SEDAN
8CYL GASOLINE 4.6

OPTIONS

ANTI-LOCK BRAKE SYSTEM
KEYLESS ENTRY SYSTEM

PASSENGER SIDE AIR BAG

BODY COLOR	WHITE
CONDITION	GOOD
LICENSE #	FL
LICENSE STATE	FL

ODOMETER	0
VIN	1LWLM82W4NT[REDACTED]
CODE	Q516
VEH INSP #	[REDACTED]

REMARKS:

THIS VEHICLE IS AN OBVIOUS TOTAL FIRE LOSS. FRONT END COMPLETELY ENGULFED BY FIRE FROM DASH FORWARD. FIRE STARTED IN ENGINE COMPARTMENT. CAUSE UNKNOWN. SALVAGE ESTIMATE \$600.00. CCC REQUESTED. (REQUEST # 22342681). NO OLD DAMAGE. NO DEDUCTIONS. ODOMETER READING UNKNOWN.

PART
MANUAL ENTRIES
3 DAMAGE ENTRIES

GDE OPERATION
RET/ON

PRICE 0.00* LABOR RT
0.0* SM*

-1-

2-135

11-13-98 03:08PM F202.M07

3713 5228

1992 LINCOLN TOWN CAR SIGNATURE 4 DR SEDAN
CLAIM #

06-25-98 1:09 PM

1 ITEMS

FINAL CALCULATIONS & ENTRIES

PARTS

GROSS PARTS

OTHER PARTS

PAINT MATERIAL

ADJUSTMENTS	DISCOUNT	MARKUP
ESTIMATE @ 10%		
PARTS TOTAL		
TAX ON PARTS & MATERIAL @	6.000%	

LABOR	RATE	REPLACE HRS	REPAIR HRS
-------	------	-------------	------------

1-SHEET METAL	\$ 28.00
2-MECH/ELEC	\$ 28.00
3-FRAME	\$ 28.00
4-REFINISH	\$ 28.00
5-PAINT	\$ 15.00

TAX ON LABOR @ 6.000%

TAX ON SUBLET @ 6.000%

SUBLET REPAIRS

TOWING

STORAGE

LESS: DEDUCTIBLE

UNKNOWN-

NET TOTAL

\$ 0.00 TOTAL LOSS

EXN. X/00/00/00/00/00 CDP 00/00/00/00/00 GEOCODE: 32811 ORLANDO
 ADP PENPRO W0335 BE LOG 462 -0 06-25-98 13:15:22 RML 3.35 CD 06/98
 COPYRIGHT, AUTOMATIC DATA PROCESSING, INC. 1998

THIS ESTIMATE HAS BEEN PREPARED BASED ON THE USE OF CRASH PARTS
 SUPPLIED BY A SOURCE OTHER THAN THE MANUFACTURER OF YOUR MOTOR VEHICLE.
 THE AFTERMARKET CRASH PARTS USED IN THE PREPARATION OF THIS ESTIMATE ARE
 WARRANTED BY THE MANUFACTURER OR DISTRIBUTOR OF SUCH PARTS RATHER THAN THE
 MANUFACTURER OF YOUR VEHICLE.

SUPPLEMENTAL REPAIR CHARGES MAY BE REJECTED
 UNLESS APPROVED BY THE INSURER PRIOR TO REPAIRS.
 THIS INSTRUMENT IS NOT AN AUTHORIZATION TO REPAIR.
 REPAIRS MUST BE AUTHORIZED BY OWNER.
 ALL WEAR ITEMS ARE SUBJECT TO BETTERMENT.
 FACTORY APPROVED METHODS SHOULD BE USED ON ALL REPAIRS.

042498
INCIDENT NO.

CITY OF ORLANDO FIRE DEPARTMENT
FIELD INCIDENT REPORT
ALARM CODE: F

FIRE DEPT. I.D.
0701

FD JURISDICTION: 0701 RCP-N0:00 DY OF WK:4 DIST12 SHIFT1A CO. INSP. DIST10

CORRECT ADDRESS:

ZIP CODE:

REPORTED ADDRESS:

AVE

CENSUS TRACT: 14603

OCCUPANTS NAMES:
BUSINESS/BLDG N:

APT#

SART DOB:
TELEPHONE

OWNER'S NAME:
ADDRESS:

SART DOB:
PHONE:

TYPE OF SITUATION FOUND: 13 1130 VEHICLE FIRE

TYPE OF ACTION TAKEN: 11 2100 EXTINGUISHMENT

MUTUAL AID/HOME

NUMBER OF EACH USED AT THE SCENE

PERSONNEL: 0 ENGINES: 0 AERIALS: 0

OTHER VEHICLES: 0

FIRST DUE RESPONDED FROM STA TO
KNOK BOX USED:

METHOD OF EXTINGUISHMENT: 10 METHOD UNDETERMINED

CASUALTIES	KILLED	INJURED	RESCUED	CONSCIOUS	UNCONSCIOUS
FIRE SERVICE	00	00			
CIVILIANS	00	00			

TYPE OF COMPLEX: 42 APARTMENT COMPLEX

FIXED PROPERTY USED:

940 ROAD PARKING PROPERTY

MOBILE PROPERTY USED: 11 PASSENGER ROAD TRANSPORT VEHICLES

YEAR: 1992 MAKE: LINCOLN MODEL: TOWN CAR

LICENSE NO: 4U9P099 SERIAL NO: VINT

INVESTIGATORS SECTION REQUESTED: 10

CASE OPEN: CASE CLOSED: 042498 INVESTIGATOR'S NAME:

INVESTIGATING AGENCY: ID NUMBER:

AREA OF DRIPPING: ENGINE/RUNNING GEAR

LEVEL OF ORIGIN: GRADE/GROUND LEVEL

TERMINATION STAGE: 13 FIRE TERMINATED IN OR AFTER THE FLAME STAGE

EQUIPMENT INVOLVED: 41 FIXED WIRING

YEAR MAKE MODEL SERIAL NO. VOLTAGE

FORM OF HEAT IGNITION: 23 SHORT CIRCUIT, ARC-WORN INSULATION

TYPE OF MATERIAL IGNITED: 40 PLASTIC

FORM OF MATERIAL IGNITED: 41 ELECTRIC WIRE

IGNITION FACTOR: 54 SHORT CIRCUIT, GROUND FAULT

PAGE 1 OF 3

JUL 07 '98 10:38
2-305

4972462512 PAGE 02
11-10-98 03:08PM F034 007

3713 5230

INCIDENT NO.

FIELD INCIDENT REPORT
CONTINUED

STRUCTURE FIRE INFORMATION

CONST. TYPE:
EXTENT OF DAMAGE:
 FLAME:
 SMOKE:

DETECTOR PERFORMANCE:	FACTOR IN ALERTS:	FACTOR IN SAVING LIVES:
SPRINKLER PERFORMANCE:	CONTROLLED FIRE:	EXTINGUISHED FIRE:
CONTROLED FIRE:	EXTINGUISHED FIRE:	NUMBER OF HEADS OPERATED:

EQUIPMENT USED:							
HAND LINES--NOZZLES:	3"	3-5/8"	4"	3"	MASTER STREAM-GROUND:	AERIAL:	
SUPPLY							
PUMPER PUMPS:		GPM TO CONTROL:					
TOT WATER USED: 250							
LADDERS-ATTIC:	AFRM	ROOF:	AERIAL:	241	25-301	331	34-301
PWR SAW-K12:	CHAIN:	OTHER:					
EXTRICATION-AMKUS:	PORTA PUR:	OTHER:					
EJECTOR:	AIR BOTTLES:						

EXTINGUISHING AGENT USED:
 AGENT USED-APPFC GAL. ALCOHOL FOAM: GAL PROTEIN FOAM: GAL OTHER: GAL
 HI-LOOP FOAM: GAL NETTING: GAL DRY CHEM: LBS SPEC POWDER: LBS
 OTHER AGENTS: /

INSURANCE INFORMATION

PROPERTY LOSS OCCURRED: YES	CLAIM FILED:	
BUILDING OR MOBILE HOME/MOBILE		
AGENT: TRAVELERS	PHONE: 8008427363	COMPANY: TRAVELERS
ADDRESS:	CITY:	ST:
POLICY N:	INS. VALUE: 10471	ACTUAL VALUE: 10471
AMOUNT PAID: 10471		
AGENT:	CONTENTS:	COMPANY:
ADDRESS:	PHONE:	ST:
POLICY N:	CITY:	ACTUAL VALUES
AMOUNT PAID:	INS. VALUE:	
UNINSURED PLD&LINES:	UNINSURED LOSS-CONTENTS:	
UNINSURED LOSS-MOBILE:	TOTAL DOLLAR LOSS: 10471	

PAGE 2 OF 2

JUL 07 1981 10:35

4273462812 PAGE 2
10-10-85 03:03PM 2005 EDT

3713 5231

7-26-98
7-26

042498

CITY OF ORLANDO FIRE DEPARTMENT
FIELD INCIDENT REPORT REMARKS
ALARM CODE: F

FIRE DEPT. I.D.
0761

COMMENTS	UNIT	RECV	RISP	ARRV	AVAIL	O.I.C.	STATUS
1ST DUE	E-10	1331	1331	1336	1415	010	

E-10 RESPONDED TO A CAR FIRE AT PINE SHADOWS CONDO'S. ON ARRIVAL, HE FOUND THE ENGINE COMPARTMENT FULLY INVOLVED IN FIRE. E-10 PULLED 150 FEET OF 1 3/4" HOSE LINE AND EXTINGUISHED THE FIRE USING APPX 250 GALLONS OF WATER. FIRE DAMAGE WAS HEAVY TO THE ENGINE COMPARTMENT, WITH EXTENSION TO THE INTERIOR, WHICH ALSO RECEIVED EXTENSIVE WATER DAMAGE. THE OWNER ADVISED THAT HE HAD NOT EXPERIENCED ANY PROBLEMS WITH THE VEHICLE. THE CAR WAS PARKED FOR APPX 30 MINUTES BEFORE THE FIRE IGNITED.-JRC

REPORTED BY

INCIDENT COMMANDER

Entries contained in this report are intended for the sole use of the Fire Dept. Estimates and evaluations made herein represent "most likely" and "most probable" cause and effect. Any representation as to the validity or accuracy of reported conditions outside the Fire Dept. is either Intended or implied.

Reviewed by:
DATE PRINTED/980707

12-27-98 10:39

4072462812 PAGE 64
** TOTAL PAGE 66 **
12-27-98 10:39PM 7076 82*

3713 5232

MFIRE-1

		<input checked="" type="checkbox"/> DELETE	<input type="checkbox"/> CHANGE				
SD NO	MO	DAY	YR	DAY OF WEEK	ALARM TIME	ARRIVAL TIME	IN SERVICE
60	06	13	78	Saturday	7 00:12:00	00:22:00	91:27:00
						MUTUAL AID	
						111 Fire 11 Chgs	
B TYPE OF SITUATION FOUND		TYPE OF ACTION TAKEN					
Residential Fire		Extinguish/Fire					
C PRIMARY PROPERTY USE		IGNITION FACTOR					
1-family Dwelling-Yard		411 Unknown				98	
D CORRECT ADDRESS		COL	TWN	ZIP CODE	CENSUS TRACT		
					063A07		
E OCCUPANCY STATUS				TELEPHONE	ACCOUNT NO		
F METHOD OF ALARM FROM PUBLIC		AC	5	1			
Telephone Tie Line		7	EMERGENCY	8	DISTRICT	EMERG STATION	NO. ALARMS
G NO. USED		PERSONNEL RESPONDED	VEHICLES RESPONDED	APPARATUS	OTHER VEHICLES		
912		984	881	881	880		

1	NUMBER OF FIREFIGHTERS	OTHER 000	NUMBER OF FIREFIGHTERS	OTHER 000

J COMPLEX	41	NON-MATERIAL PROPERTY TYPE	11
Duplexes/Condos		Animals	
K AREA OF FIRE ORIGIN	89	EQUIPMENT INVOLVED IN IGNITION	98
Single Area, Remaining Over		Vehicle	
L POINT OF EXIT OF IGNITION	98	TYPE OF MATERIAL IGNITED	98
Undetermined		Gasoline	
M METHOD OF EXTINGUISHMENT	8	FORM OF MATERIAL IGNITED	98
Pumpdown w/Tank Water		Fluid	
N LEVEL OF FIRE ORIGIN	1	ESTIMATED LOSS	ESTIMATED VALUE
Grade is +8'		22,000	28,000

N NUMBER OF STOREYS	2	CONSTRUCTION TYPE	
Two Stories		Protected Wood Frame	
O EXTENT OF FLAME DAMAGE	3	EXTENT OF SMOKE DAMAGE	
Room of Origin		Flame of Origin	
P CONSTRUCTION PERFORMANCE	1	STRUCTURAL PERFORMANCE	
Defenders Present & Operated		Uninhabited	
Q IF SMOKE SPREAD	23	AVENUE OF SMOKE TRAVEL	
Review Room of Origin		Opening in Construction	
R FORM OF MATERIAL GENERATING MOST SMOKE	23		
Smoke			
S FORM OF MATERIAL GENERATING MOST SMOKE	1		
Flame			

DATE:	18	LL:	044		
S MOBILE PROPERTY	YEAR	MAKE	MODEL	REG. STATE	REG. NO.
1972	LINCOLN	TOWN CAR	1984	FLA	744 LSP
IF EQUIPMENT INVOLVED IN IGNITION	YEAR	MAKE	MODEL	SERIAL NO.	
	1984	MAZDA			

(2) INDEX OF DOCUMENTS

U OFFICER IN CHARGE NAME, POSITION, APPROVAL	DATE
661371000	
RECORD NUMBER OF OFFICER IN CHARGE	DATE
661371000	

INCIDENT REPORT
DeKalb County Fire Rescue

A

HR	MIN	DAY	MT	DAY OF WEEK	ADVISORY TIME
08	04	13	08	Saturday	081200

NARRATIVE

E18 ARRIVED O/S TOWNSHIP 10:04, TO A TWO STORY DWELLING W/ LIGHT SMOKE SHOWING FROM THE GARAGE AREA. UPON INVESTIGATION IT WAS BELIEVED THAT THE ORIGIN OF SMOKE & FIRE WAS COMING FROM THE GARAGE. E14 CREW ADVANCED ONE (1) 1 3/4" LINE INTO THE HOUSE IN AN ATTEMPT TO BLOCK OFF AND EXTINGUISH THE FIRE. UPON PRETHER ADVANCEMENT OF HOSE LINE, THE ORIGIN WAS FOUND TO BE COMING FROM THE 82 LINCOLN TOWN CAR PARKED INSIDE THE GARAGE. THE FIRE TO THE CAR WAS EXTINGUISHED AND LIGHT TO MODERATE SMOKE DAMAGE WAS SUSTAINED TO FIRST FLOOR STRUCTURE. E18 USED 100' OF 1 3/4" HOSE LINE AND ONE SMOKE EXTRACTOR AT THE SCENE. NO OTHER STRUCTURES WERE INVOLVED IN FIRE. INVESTIGATOR 601 ARRIVED O/S AND DETERMINED THAT ORIGIN OF FIRE WAS FROM THE AUTOMOBILE. E16 CREW CHECKED FOR FURTHER EXTENSION THROUGHOUT THE STRUCTURE AND FOUND NO OTHER DAMAGE. E17'S CREW RESTORED POWER TO THE STRUCTURE AND THEN E18 WENT AVAILABLE.

April 27, 1998

ATTN: Dan Panipinto

RE: Company Claim No.:
Insured:
Location:
City:
Phone:
Address Investigation:
City:
Phone:
Loss Date:
Our File No.:

PRIVILEGED AND CONFIDENTIAL
SUBMITTED WITHOUT PREJUDICE

Our investigation into the above captioned loss has been completed. The following will report our findings.

CONCLUSIONS:

From the physical evidence found during our investigation of this loss, we determined this loss to be an accidental fire originating within the same area of wiring and electronics we have with other like vehicles.

ENCLOSURES:

1.

INC.

2.

and investigative findings.

- 3. Automobile Inspection Report
- 4. Evidence Disposition Form.
- 5. Drawing of Risk.

CONSENT TO INVESTIGATION:

The consent to search was sent to the owner,
your office for review as soon as we receive it.

, and will be forwarded to

INTERVIEW STATEMENT:

Phone call to _____; He states that he got to an appointment early and went in to a coffee shop about 15 minutes later and was having a cup of coffee. Someone came in to the coffee shop and said someone's car was on fire. He did not get up to see who's car it was for he is not that kind of person who likes to see someone else's bad luck. A few minutes later he got up to go to his appointment and noticed that it was his car that was on fire. _____ states there has been no work done on his car, except for oil and filter change.

OFFICIAL REPORTS:

A copy of the fire report has been requested from _____
will be forwarded to your office as soon as we receive it.

Department and

RISK:

This is a 1993 four door white Lincoln Town Car. The risk has a V-8 engine with an automatic transmission, rear wheel drive with keyless entry. The risk appears to be free of prior body damage. We could not access the trunk to verify contents, if any. This risk is worth \$12,500.00 according to N.A.D.A. with approx. 60,000 on the odometer we were told. This risk had matching tires and rims and were fairly new.

ENGINEERING REPORTSMECHANICAL:

This was inspected by [redacted] Certified Fire Investigator. We found no indications this loss involved any engine component. All add on components such as the alternator, A/C compressor, power steering, A.B.S. brake pump and others were found to be victims to the cause of this loss. We found no mechanical cause that would contribute to or cause this loss. The alternator would not turn as the case melted as shown in photos nine and ten. This same photo combination reveals the top radiator burned but still intact.

ELECTRICAL:

This was inspected by [redacted], A.E.S. This is a 12 volt direct current storage system with both battery terminals connected prior to the loss. We could not measure any stored voltage as the battery was severely damaged by the ensuing fire shown in photo 20. This loss unless confirmed by the lab with new evidence, this loss is like others that completely burn away a two foot section wiring along with electronic modules over the drivers side front wheel well within the engine compartment.

INVESTIGATION:

This was accomplished on April 23, 1998 by

We started with an exterior walk around, as shown in photos one thru five. We found no evidence of prior body damage and there were no scratches or minor dents visible. As shown in photos nine and ten, this loss originated within the engine compartment and burned outward from there. As shown in photos 21 and 22 this loss breached the engine wall and entered the passenger compartment. Photo 24 reveals the ignition key lock is in the "off" position with no keys within, to indicate this risk was not moving or running at the time of this loss. Photos nine thru nineteen indicate this loss originated in an area on the drivers side front engine compartment fender well. We have some evidence of components to relays, primary fuse panel and unaffected wiring on top of the engine. This evidence indicates the engine did not overheat to cause this loss.

We did find some electrical wiring in this area having electrical current going thru it at the time of this loss to help support this as an electrical origin fire. We again could find no evidence of the electronic fuel sensing module or approximately two feet of the wiring harness or relays in this area, as shown in photos 13 and 16. We still have a tire on the passenger front but portions of the rim on the drivers side have melted, shown in photos 13 and 16. This indicates a hot localized fire from this area. The amount of debris found in the passenger compartment front seat area was done by the towing company during recovery.

It is from the physical evidence found and lack of physical evidence that we determined this loss to be centered in and around the fuel sensor and relay units mounted in this area to be our area and point of origin with it's associated wiring to cause this loss.

EVIDENCE:

Wiring harness that will be checked to see if we have additional data not previously found in others.

PHOTOGRAPHS:

27 Photographs document our findings. These photographs are placed in sequence and will assist your review, not necessarily in the order taken.

NATIONAL HIGHWAY TRANSPORTATION SAFETY ADMINISTRATION:

No recalls found during our search. An investigation of this has been initiated by Steve Bereyky.

OTHER:

This loss adds to a list of others this investigator is aware of with like conditions. This loss is similar to the Ford ignition switch problem as it will take a stroke of luck to find a very minimal burn to identify the component failure. A history will force Ford to look at this and try and determine what is causing the losses. Pressure from all insurance companies must be asserted before someone's life is lost.

REMARKS:

Our file activity is complete. We are now retiring our file and submitting our invoice for services rendered. Should further information become available after the completion of this file that may become pertinent to this case, please forward it to our office for consideration.

Thank you for allowing us to serve you in this matter. I trust we may assist you in the future. Please contact our office should you have further questions regarding this file.

Very truly yours,



**Auto Safety Hotline
Vehicle Owner's Questionnaire**
NATIONWIDE 1-800-424-8383
DC METRO AREA (202) 364-0123
INTERNET: <http://www.safercar.dot.gov>

FOR AGENCY USE ONLY		151
Date Received	04_01 E_01 D_01 H_01	
19 May 1998		
Reference No.	823482	
Work Number		
Home Number		

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 and address to the vehicle manufacturer.

Signature of Owner _____ Date _____

/LNLM81W5P/		VEHICLE INFORMATION				
Vehicle Ident. No. (VIN)	Lincoln Town Car Manufactured after January 1, 1982	Vehicle Make	Vehicle Model	Vehicle Year	Current Odometer Reading	
Purchase Date	Dealer's Name _____				Engine Size	Turbo
<input type="checkbox"/> New <input checked="" type="checkbox"/> Used	City _____	State _____	Zip Code _____	1G1MCCJL	3.8L	3.8L
Transmission Type	Antilock Brakes	Restraint System	Cruise Control	DriveTrain	Vehicle Type	Body Style
<input type="checkbox"/> Manual	<input type="checkbox"/> Yes	<input type="checkbox"/> Driver-Airbag <input type="checkbox"/> Passenger-Airbag	<input type="checkbox"/> Yes	<input type="checkbox"/> Front	<input type="checkbox"/> Car	2-Door
<input type="checkbox"/> Automatic	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Passenger-Airbag <input type="checkbox"/> 2-Point Bel	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Rear	<input type="checkbox"/> Van	4-Door
		<input type="checkbox"/> 3-Point Bel		<input type="checkbox"/> 4-Wheel	<input type="checkbox"/> Truck	Stationwagon
					<input type="checkbox"/> Minivan	Motorcycle
					<input type="checkbox"/> Other	Bus
						Flatbed
						Open Cab
						Other

FAILED COMPONENT(S)/PART(S) INFORMATION							
Report ID 06310008	Part Number ELECTRICAL SYSTEM: WIRING: HARNESS: FRONT: UNDERHOOD	Location <input type="checkbox"/> Left <input type="checkbox"/> Right <input type="checkbox"/> Front <input type="checkbox"/> Rear	Failed Part(s) <input type="checkbox"/> Available? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Failed Part(s) <input type="checkbox"/> Original <input type="checkbox"/> Replacement			
No of Failures	Date of Failure May 98	Mileage at Failure 43,582	NHTSA Previously Contacted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
	Vehicle Speed at Failure						

APPLICABLE INCIDENT INFORMATION					
(Please describe in detail the incident(s), failure(s), crash(es), and injury(es) on the back of this form.)					
Crew <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fire <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Number of Persons Injured	Number of Fatalities	Estimated Property Damage	Reported to Police <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

NARRATIVE DESCRIPTION OF FAILURE(S), INCIDENT(S)/INJURY(IES)					
VEHICLE CAUGHT ON FIRE WHILE PARKED IN DRIVEWAY. THE FIRE STARTED UNDER THE HOOD IN THE ENGINE. FIRE DEPARTMENT SAID IT WAS A SHORT IN THE WIRING UNDER THE HOOD. *AK					
CONTINUE ON BACK IF NEEDED					

Privacy Act of 1974 (Public Law 93-579). The 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 response may be used to assist the NHTSA in determining whether a manufacturer should take appropriate action to correct a safety defect. If the NHTSA disagrees with administrative enforcement or inspection against a manufacturer, your response, or a statistical summary thereof, may be used at account of the agency's action.

5/24/98 Rev. 1/97

L/M 12/6

S.P.

3713 8240

F.F.I.R.S

Investigation Narrative

DATE - 05/10/98

Fire was located in the carport area in front of [REDACTED]. The structure is a two story condominium building with six units and a carport structure attached to the front. Fire originated in a 1993 Lincoln Town Car (vehicle 1) Florida license number [REDACTED] belonging to [REDACTED] unit [REDACTED]. Fire spread to carport and front of units [REDACTED] (exposure 1) and a 1990 Lincoln Town Car (vehicle 2) (exposure 2) belonging to [REDACTED] and [REDACTED] of unit [REDACTED] which was parked in front of unit [REDACTED]. All units except [REDACTED] were occupied at the time of the fire.

The fire was discovered by [REDACTED] (casualty 3) of [REDACTED]. [REDACTED] advises he was awake and heard a noise just after 0500 hrs. He investigated and noticed the fire. He called 911 and attempted to notify the occupants of the structure by activating the local fire alarm and pounding on the front doors. He suffered smoke inhalation and was transported by private vehicle to the Cape Canaveral Hospital. Mr. [REDACTED] states that he observed fire in the front of vehicle #1 and then it "crowned" into the top of the carport.

Police Officer Ed Silva (casualty 4) was in the area of the Roosevelt School about one block away when the call was dispatched. He arrived on scene and began searching the unoccupied units. He located [REDACTED] (casualty 1), [REDACTED] (casualty 2), and [REDACTED] trapped in unit [REDACTED] by smoke and heat. He led the trapped occupants to the rear of the unit and radioed for assistance. FF/Paramedics Holzman and Willey removed all four via ground ladder. [REDACTED] was transported via ambulance to Cape Canaveral Hospital. [REDACTED] was transported by private vehicle to the same hospital. Officer [REDACTED] was transported by police vehicle.

Investigator II Ellie Sorel of the State Fire Marshal Office investigated the fire and ruled it accidental. The specific cause of the fire was not determined, but it was



F.F.I.R. /

Investigation Narrative

DATE - 05/10/98

believed to have started in the front of vehicle 1. A propane cylinder stored in a grill with the main valve in the open position contributed to the fire intensity when the main line failed and the relief plug opened allowing burning propane to discharge into the front of Vehicle 1 and against the front wall of unit 101.

Signature



A good conscience is a continual feast.
—Robert Burton

10

Thursday
24th Day 21 Left
Week 48

December 1998
Daily Record of Events

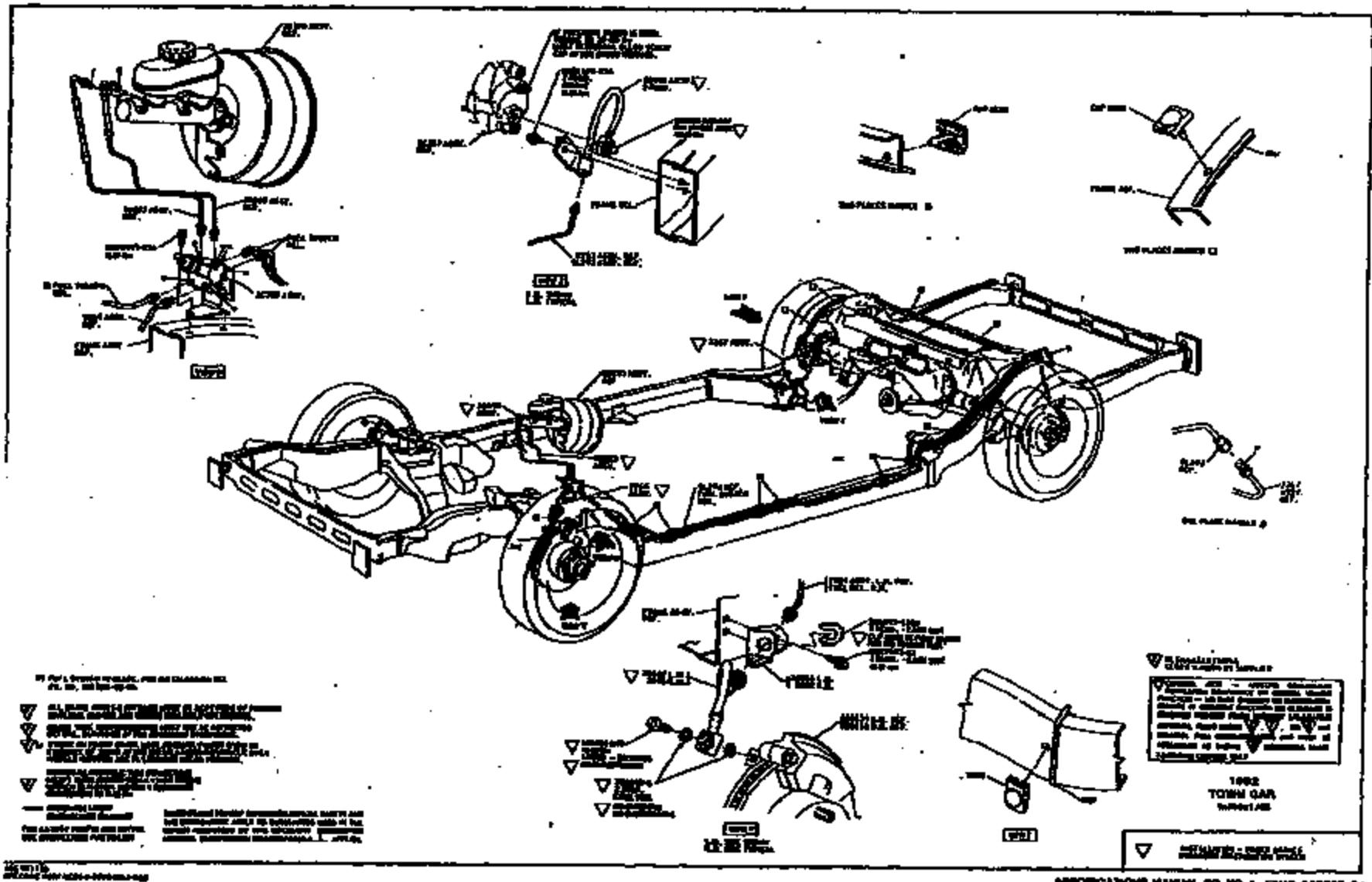
92 Town Car Mta - side bumper bent

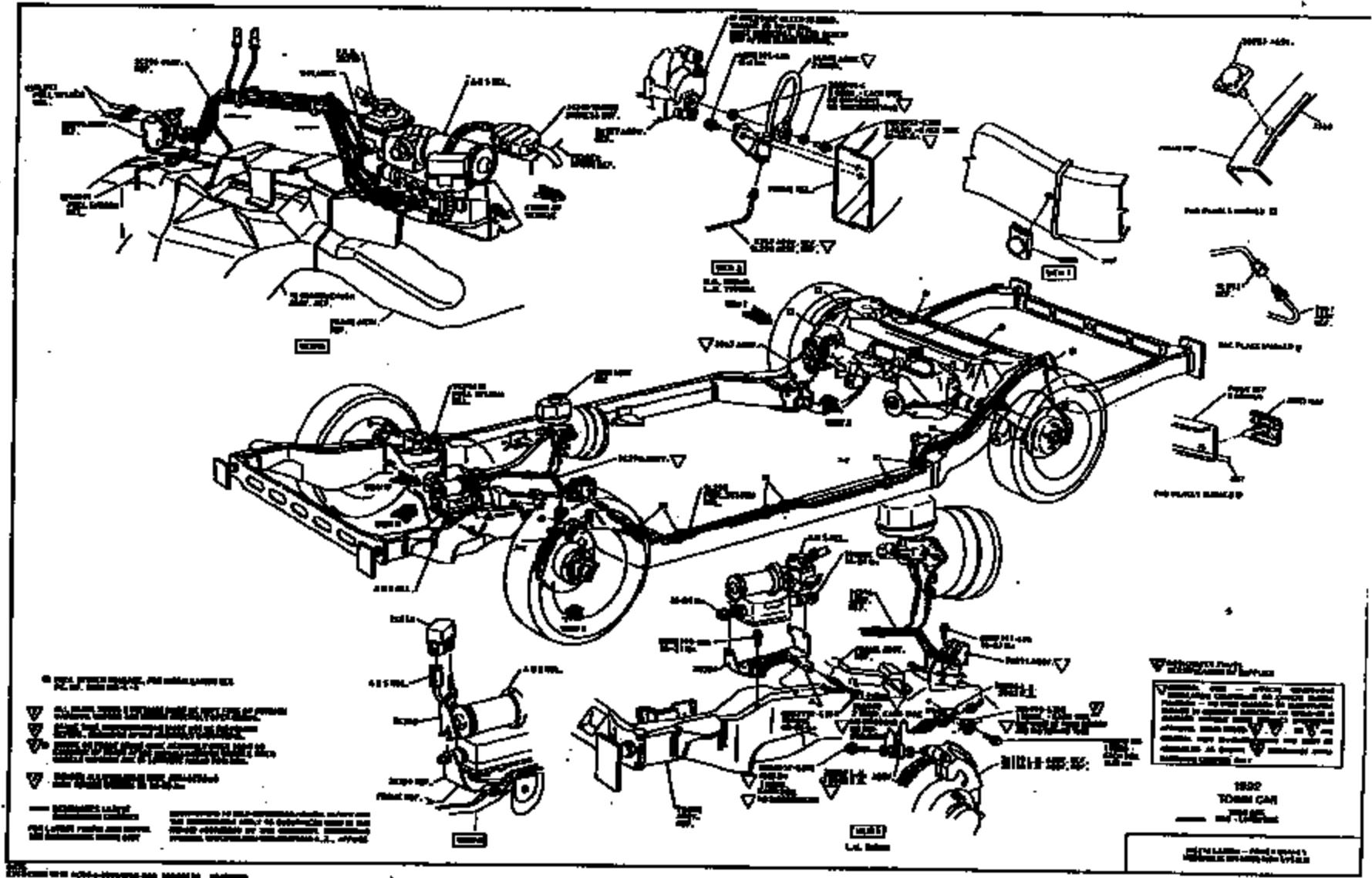
[REDACTED]

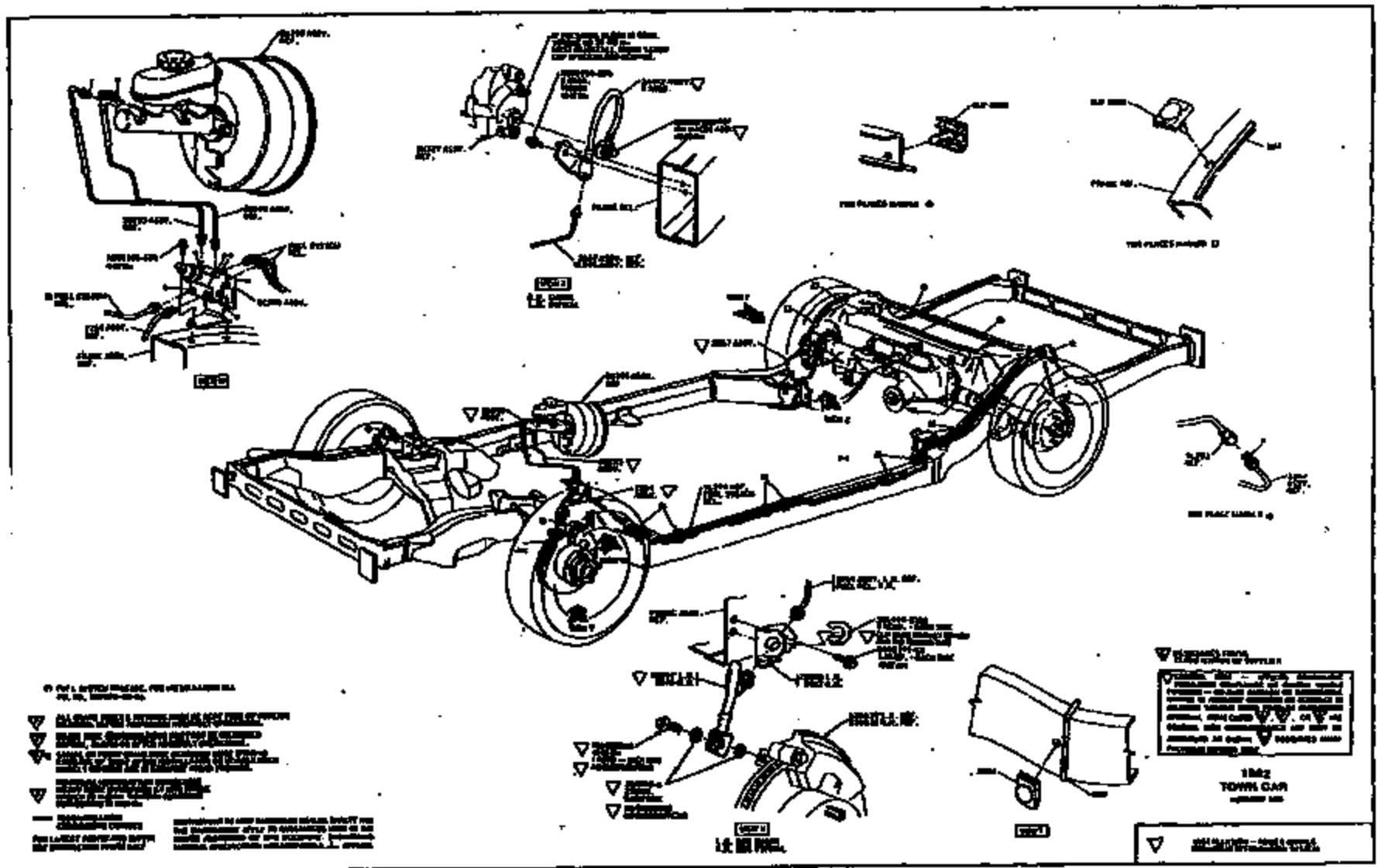
BEAGEN
→ Prepared an initial proposal for GM
GM's earning during initial goal Good control restructure bent
goals in PEA to prop value
Supplier = Supplier

QUESTIONS

- Is brake fluid flammable
- Will brake fluid ignite if cooler hot at all times, good control restructure,
- Is Good control STD on Town car
- How similar is Town car to GM per switch GM, packaging, etc
- How Town car VHS with refrigerant leak previous repair repair.
- Need single point contact for chassis GM switch
- Why at this price \$2.00

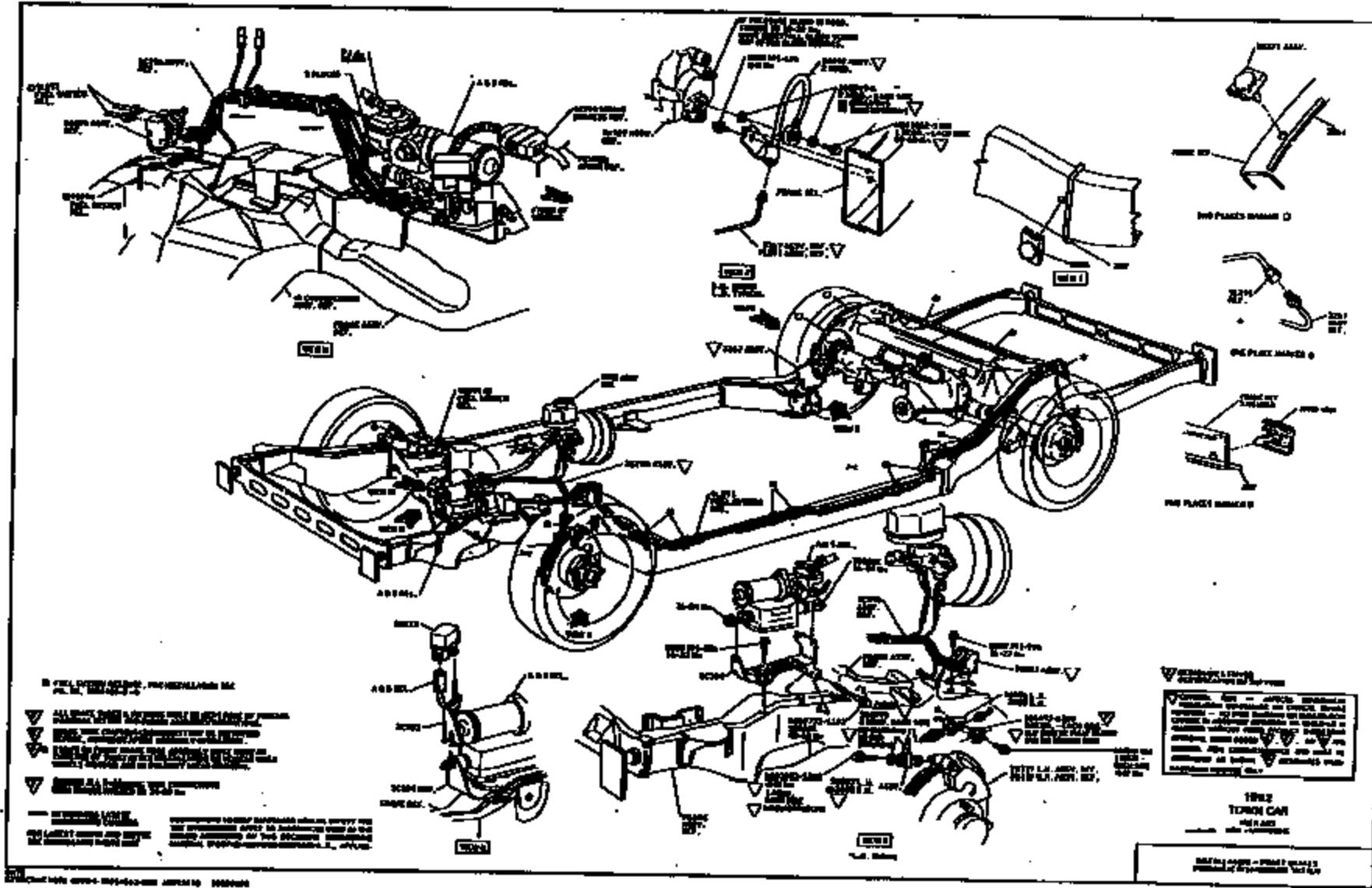




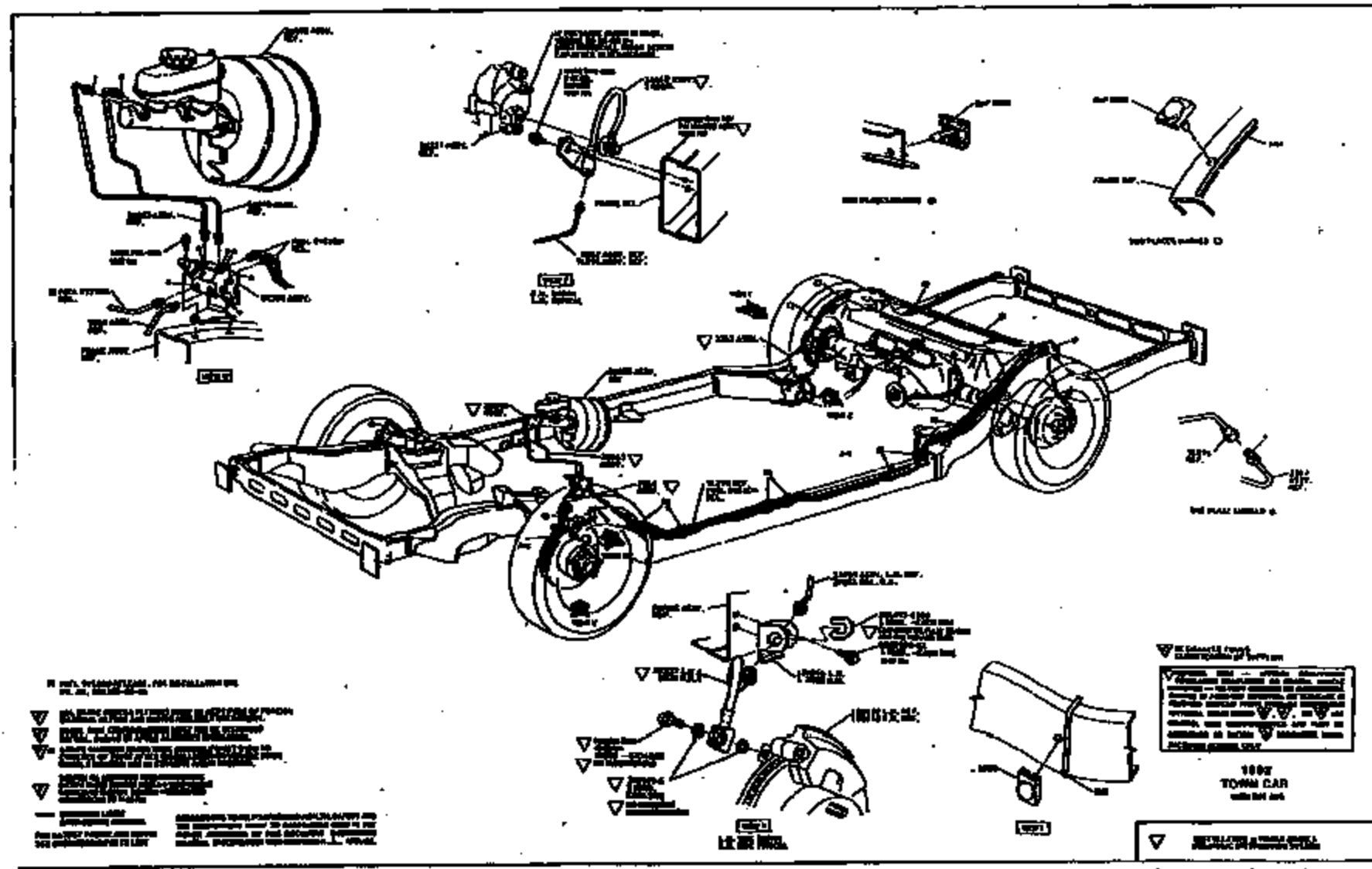


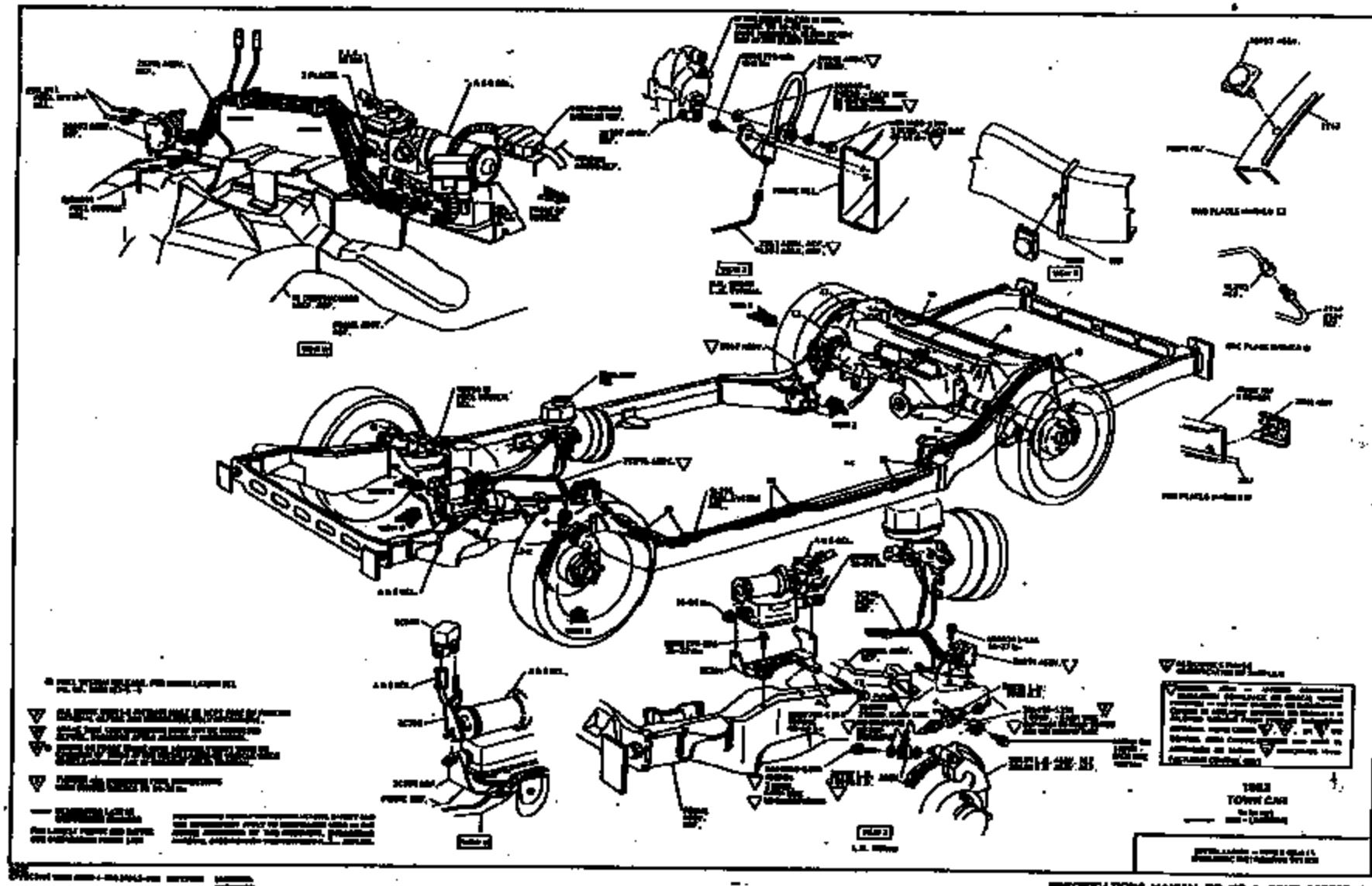
3713 8529

SPECIFICATIONS MANUAL PL. NO. L-PVOC-0000007-1

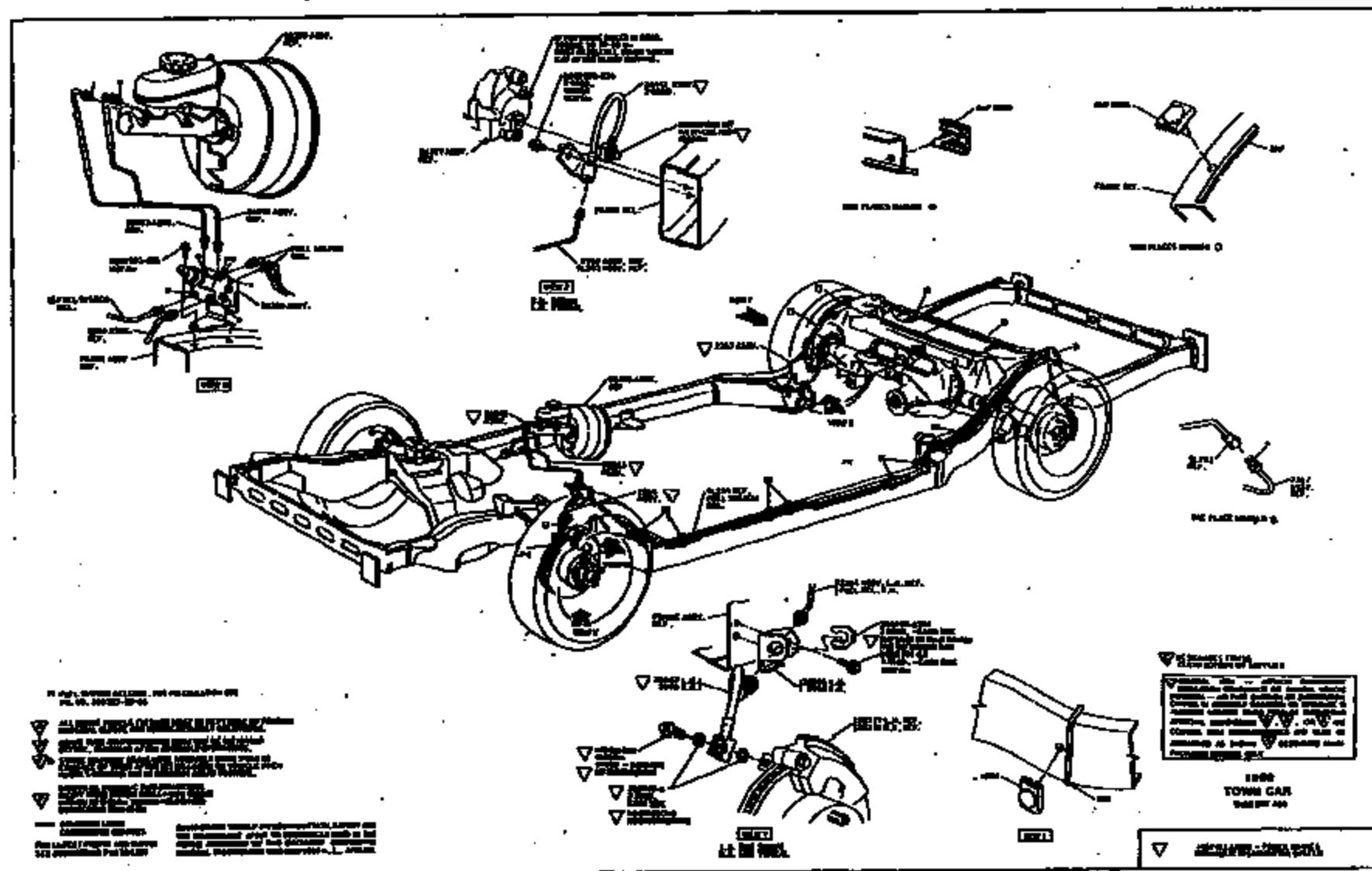


SPECIFICATIONS MANUAL PG. NO. E-F2VC-066600-DC

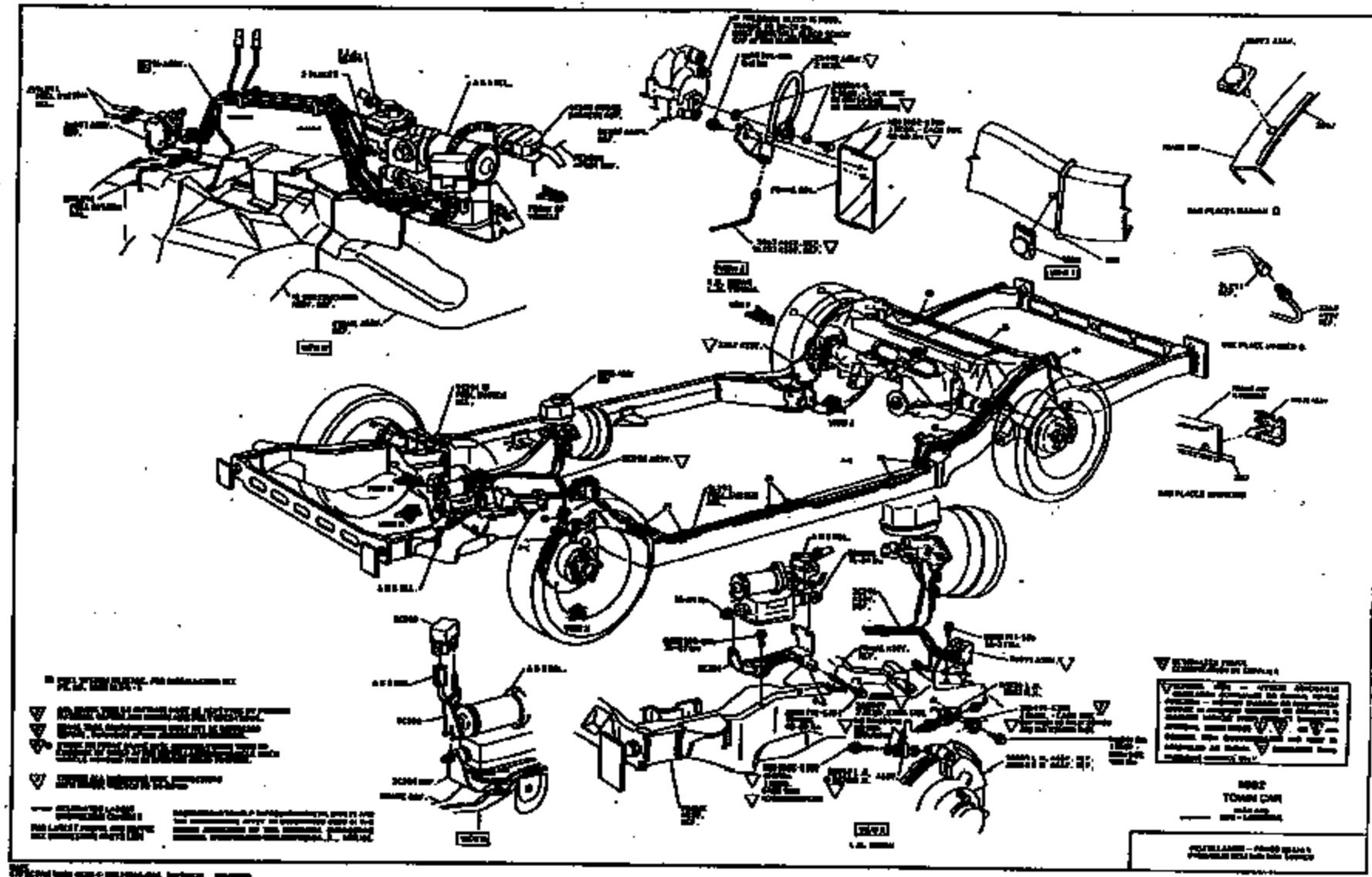




SPECIFICATIONS MANUAL PG. NO. I-F2VC-980908-U



3713 8250



* Note printed by FPORTER on 26 May 1999 at 16:49:49 *

From: SLAROUCH--FORDMAIL Date and time 04/16/99 17:14:42
To: FPORTER --FORDMAIL Porter, Fred (F.J.)
cc: NLAPOINT--FORDMAIL LaPointe, Norman (FNLAARS --FORDMAIL Klaas, Pete (P.F.)
SLAROUCH--FORDMAIL LaRouche, Steve (S)

From: LaRouche, Steve (S.)
Subject: Brake Switches

Fred: I had a meeting this afternoon with two gentlemen (one was Roc Carter) from Scientific Research Laboratories to discuss brake switches. I showed them the results I have so far, and they felt that our testing was pretty comprehensive and that there was really not any more that they could contribute in terms of testing. We tried to come up with possible scenarios that would tie our findings to a cause of fire, but couldn't come up with anything. Here is a quick summary of our findings at Central Lab:

There appear to be two modes of failure occurring: One involving leakage of brake fluid through the Kapton seal and an apparent cell being set up between the contacts and steel cup; The other involving ingressation of water into the switch cavity, with no brake fluid leakage, and no evidence of a cell:

The Memphis switch and all of the leakers analyzed so far show a leak path through the Kapton seals. The cup faces show transfer of the brass contact material to them which suggests that a cell has occurred between the hot contacts and the grounded cup. In addition to brake fluid, the Memphis switch shows evidence (desulfurization of the brass contact) that some moisture may have also been present. We found no evidence that road salt had entered the switches.

The completely burned switches also show probable transfer of contact material to the cups, indicating a possible cell. No evidence of road salt detected. Could not determine if brake fluid leakage occurred.

Three of the junk yard switches (including the one analyzed by SRL) showed corrosion of the cups suggesting ingressation of water into the switch cavities. This appears to be a different mode of failure in that there was no evidence of a cell occurring between the contacts and cup. Again, there was no evidence of road salt in the switch cavities. Although there is some damage to the Kapton seals, there appears to have been no leak path or leakage of brake fluid.

I have received two switches from the OASIS which were both leakers. Testing is pretty much complete on these switches and so far we have found nothing different from the other leakers we analyzed.

I have also received three switches from EAA which were completely burned. These switches are in various stages of analysis, but so far do not appear to be different from the completely burned switches we analyzed previously.

The brake fluids in the Memphis switch and all the leakers (including those from the OASIS) contain oxalates. The brake fluid from the car you have out at MPG does not. The guys from SRL suggested that we analyze brake fluids from old vehicles for oxalates and other contaminants, as well as measure conductivity. So far, we have received no brake fluid samples for this.

This is what we have so far: We have found several conditions which may have contributed to a fire, but have not been able to link any of them to a definite cause. I don't think that additional testing on switches is going to be beneficial. I would like to complete the testing that is in progress and wrap this up. Let me know how you want us to proceed.

Steve LaRouche (SLAROUCHE)
Metallurgy Section, Central Laboratory, Room N410
(313) 845-4976 (313) 322-1614 FAX

* Note printed by FPORTER on 26 May 1999 at 16:55:18 *

From: JNEMM --DRBN005
To: FPORTER --DRBN007

Date and time 04/20/99 13:08:30

FROM: Joseph S. Name USAMT(UTC -04:00)
SUBJECT: TC Underhood Fires - NHTSA Item
Attached is the note between the two chief's... I am curious, what do
the brake switch records show as to when it went into production? We are
looking for AODE transmission incorporation...

Joseph S. Name
LVC - Safety
Phone: 39-08133, Fax:62-18147, E-Mail:jname@ford.com
Location: MD1255/Cube 2M37, Building #2 Textpage:313-795-7003
*** Forwarding note from CTE5KE --DRBN005 04/20/99 08:19 ***
To: JNEMM --DRBN005

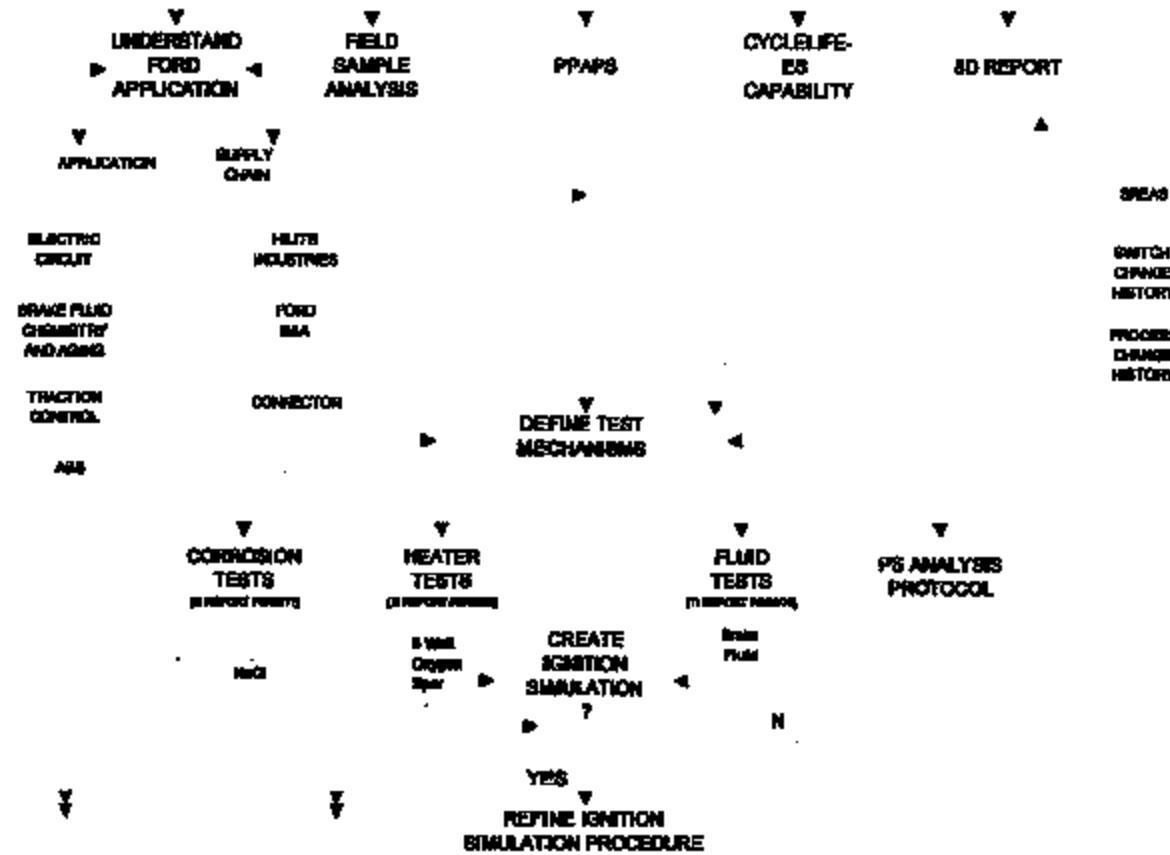
FROM: Chuck Taska USAMT(UTC -04:00)
Subject: TC Underhood Fires - NHTSA Item
Fyi

Regards,
Chuck Taska
Chief Program Engineer - Large & Luxury Car, OED
Bldg 2, Cube 24G26 MD 1229, Phone 84-57257 Fax 62-16971
*** Forwarding note from CTE5KE --DRBN005 04/20/99 08:19 ***
To: BKOCHB --DRBN006 Koche, Bill
cc: CTE5KE --DRBN005

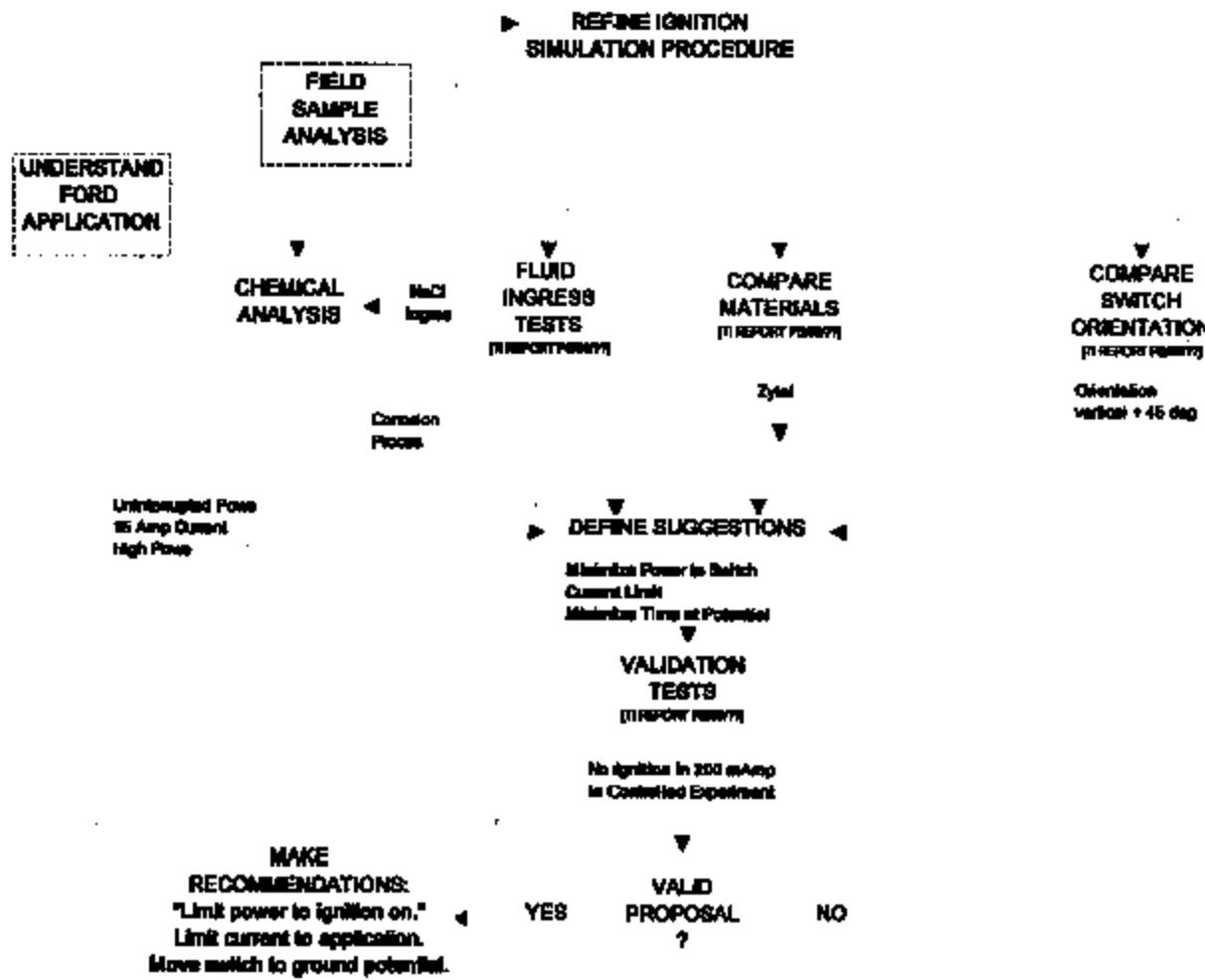
FROM: Chuck Taska USAMT(UTC -04:00)
Subject: TC Underhood Fires - NHTSA Item
Bill, at the Tech Review Yesterday on the subject issue, two questions
came up that maybe you can answer or know who could.
When was the AODE launched on the 92 CV/GM (TC came on late in Nov 91 as
92 MY) and did we make any changes to calibration/emission hardware that
would impact the underhood temp in the area of the Brake Prop valve (under
brake master cyl) in 92/93/94. We seem to have the biggest issue with the 92
TC - 93 is much less, and 94 isn't an issue. As I recall, our cat package and
exhaust were all the same and so was fan/underhood package for both TC and
CV/GM, although CV/GM was at a lower BTW than TC. Appreciate your comments
and I'll try to keep you out of this issue.

Regards,
Chuck Taska
Chief Program Engineer - Large & Luxury Car, OED
Bldg 2, Cube 24G26 MD 1229, Phone 84-57257 Fax 62-16971

TI 77/P3 INVESTIGATION



3719 6266



8713 5256

77PSL2-1: Impulse Data Results 11/91 - 12/92

preliminary draft summary of TI record search findings of May 14-17 1999

summary by Steve Beringhouse & Andy McGuirk May 19th 1999

TI P/N: 77PSL2-1

Ford P/N: F2VC-9P924-AB

Tested at 'room temp' per manufacturing ES requirements

<u>Date</u>	<u>Lot Size</u>	<u>Impulse</u>	<u>Qty</u>
		<u>Tested</u>	<u>Leak</u>
26-Nov-91	4,000	10	-
26-Nov-91	4,000	10	-
5-Dec-91	4,000	10	-
5-Dec-91	4,000	10	-
9-Dec-91	4,000	10	-
9-Dec-91	2,000	5	-
11-Dec-91	4,000	10	-
11-Dec-91	4,000	10	-
13-Dec-91	4,000	10	-
14-Dec-91	4,000	10	-
16-Dec-91	4,000	10	-
16-Dec-91	4,000	10	-
2-Jan-92	4,000	10	-
6-Jan-92	4,000	10	-
7-Jan-92	2,000	5	-
8-Jan-92	4,000	10	-
8-Jan-92	4,000	10	-
14-Jan-92	4,000	10	-
14-Jan-92	4,000	10	-
15-Jan-92	4,000	10	-
28-Jan-92	2,000	5	-
31-Jan-92	4,000	10	-
2-Feb-92	1,650	5	-
4-Feb-92	4,000	10	-
5-Feb-92	4,000	10	-
6-Feb-92	4,000	10	-
10-Feb-92	4,000	10	-
11-Feb-92	4,000	10	-
12-Feb-92	4,000	10	-
12-Feb-92	4,000	10	-
14-Feb-92	4,000	10	-
14-Feb-92	4,000	10	-
15-Feb-92	4,000	10	-
24-Feb-92	4,000	10	-
26-Feb-92	4,000	10	-
26-Feb-92	4,000	10	-
28-Feb-92	4,000	10	-
28-Feb-92	4,000	10	-
28-Feb-92	4,000	10	-
6-Mar-92	4,000	10	-

77PSL2-1: Impulse Data Results 11/91 - 12/92

10-Mar-92	4,000	10	-
11-Mar-92	4,000	10	-
12-Mar-92	4,000	10	-
18-Mar-92	4,000	10	-
23-Apr-92	2,000	5	-
2-May-92	2,000	5	-
5-May-92	2,000	5	-
6-May-92	2,000	5	-
14-Sep-92	2,000	5	-
22-Sep-92	4,000	10	-
30-Sep-92	4,000	10	-
7-Oct-92	4,000	10	-
7-Oct-92	4,000	10	-
16-Oct-92	4,000	10	-
21-Oct-92	2,000	5	-
20-Oct-92	4,000	10	-
29-Oct-92	4,000	10	-
29-Oct-92	4,000	10	-
30-Oct-92	4,000	10	-
4-Nov-92	4,000	10	-
10-Nov-92	4,000	10	-
10-Nov-92	4,000	10	-
11-Nov-92	4,000	10	-
17-Nov-92	2,000	5	-
20-Nov-92	4,000	10	-
4-Dec-92	2,000	5	-
9-Dec-92	2,000	5	-
14-Dec-92	2,000	5	-
16-Dec-92	4,000	10	-
16-Dec-92	4,000	10	-
21-Dec-92	2,000	5	-
21-Dec-92	4,000	10	-

Totals results	265,630	665	-
----------------	---------	-----	---

Proprietary Information

77PS Overview
2/10/99

TI's 77PS switch family has been specifically designed to operate in an automotive braking system. The pressure cavity of the switch has been designed to seal brake fluid pressure and transmit pressure and movement to the sensing portion of the switch over the life as defined in Ford BS -F2VC-9F924-AA.

Background:

The pressure cavity is composed of the hexport, gasket, and three Kapton™ diaphragms (called out as "seal" on attachment 1.). The purpose of the gasket is to provide a fluid tight seal between the hexport and the diaphragms. The purpose of the Kapton™ diaphragms is to provide a flexible fluid tight seal between the pressure cavity and the internal components of the switch. Furthermore, the diaphragms are intended to transfer pressure to the converter, and follow the movement of the converter as pressure in the pressure cavity (brake line pressure) is varied.

Two known ways that brake fluid may enter the contact cavity of TI's brake switches from the pressure cavity are i. brake fluid could leak past an impaired gasket seal, or ii. brake fluid could leak through a damaged or 'worn out' Kapton™ diaphragm.

The Gasket:

In order to create a fluid tight elastomeric seal, there must be proper compression of the elastomer, sufficient backing of the elastomer to prevent movement when pressure is applied, and finally the elastomer must be compatible with the working fluid.

Fluid compatibility is typically established by the use of published tables. These tables list fluid groups and general material types. Lab testing is always done with the specific fluid that the customer has specified for the application along with the specific compound formulated by the selected gasket supplier. Ethylene Propylene is used in the 77PS and is standard throughout the industry for seal gasket materials. TI has been using this material in brake applications since 1988.

The gasket compression target was obtained from published industry standards (see Parker O-ring Handbook). In this particular design a nominal gasket compression of 24% was selected. The depth of the hexport gland shown on attachment #2 controls this attribute. This gland dimension is cut into the hexport at the time of manufacturing. As a result, this dimension in combination with the gasket dimensions determines the final gasket compression when the assembly is crimped together.

Lastly, the movement/position of the gasket when pressure is applied must be controlled and restrained. This design accomplishes this by selecting the outer diameter of the gasket to be slightly smaller than the inner diameter of the gasket gland of the steel plated hexport. Therefore, the hexport gland prevents the gasket from moving outwards when high pressure is applied to the switch.

The DFMEA outlines the types of tests that were selected and run to confirm that all of these parameters are selected correctly. The resulting design was exposed to test conditions that were intended to duplicate actual application conditions, and in some cases go beyond the intended limits to failure. See the DFMEA Document number 503794 and customer specification BS-F2VC-9F924-AA. Specifically, burst testing, impulse testing, and thermal cycle tests were performed to confirm that the gasket performed as intended. The specific details of these tests and the results can be seen in the PV test report numbers listed below: (copies can be provided on request).

Test Report #	TI Switch Part number	Year Tested
1. PS/91/45	77PSL2-3	1991
2. PS/91/49	77PSL2-1	1991
3. PS/92/49	77PSL3-1	1992
4. PS/92/80	77PSL5-2	1992
5. PS/92/82	77PSL3-1	1992
6. PS/93/11	77PSL6-1	1993
7. PS/93/44	77PSL4-1	1993

Gasket-manufacturing anomalies can be produced from out of spec gaskets, contamination of the gasket or sealing surfaces, and as a result, may cause leaks early in life. In order to protect TI's customer supply chain from gasket-manufacturing issues there are several preventative actions in place. These actions include: hair nets, protective smocks, and cleaning procedures for the equipment. In addition, TI's automated assembly equipment has sensors to detect presence and orientation of the gasket and the 3 Kapton™ layers. TI's customer return rates indicated by past return and analysis records are less than 1 ppm (one leaky return in 3 years from master cylinder leak testing).

Kapton™ Diaphragms:

A pressure switch diaphragm must seal the pressure cavity, transmit pressure forces to the converter, and follow the converter motion without significantly affecting the switch calibration points. In addition, the diaphragm material must be resistant to chemical attack by the brake fluid.

Basically, a single piece of Kapton™ in this design consists of a 0.003-inch thick polyimide film laminated on both sides with a 0.001-inch thick FEP Teflon film. The polyimide film has the ability to stretch without breaking (strains on the order of 70% before rupture), and the Teflon film is compatible with a wide range of chemicals. As a result of this layered construction, Kapton™ was selected for its mechanical and chemical properties. Moreover, TI has been using this material in pressure switch applications since 1981. In this application three stacked Kapton™ layers were used as the diaphragm seal.

To confirm the correct material was selected for this application we refer to the DFMEA. Specifically, this document identifies burst testing, impulse testing, and thermal cycle testing. These tests confirmed the Kapton's™ ability to meet the specified requirements (PV reports listed above). Since temperature, chemical exposure, and stress levels all affect the life expectancy of the Kapton™ diaphragms, additional testing is commonly done. A typical impulse test would include pressure cycles to 1430 psi, constant temperature of 135 C, and a cycle rate of 120 cycles/minute. Depending on the factors listed above, the life expectancy of a TI brake pressure switch can vary, but typically is around 1 million cycles which is well above the 500,000 cycles specified in the Ford specification (RS-F2VC-9P924-AA). (See Life Testing to Failure (PS/9B/14)).

In addition, continued conformance testing has been ongoing for many years at TI. The purpose of this testing is to confirm that the components, materials, and processes have remained stable over time and that the design intent is consistently being achieved. See attached IP reports which confirm 100% successful passing of all tests defined in the specification.

Manufacturing & PV anomalies such as pinched Kapton™ can affect the Kapton™ diaphragm seal performance (see PFMEA Document # 503791). Material/chemical compatibility and stress/stain concentrations can also cause the Kapton™ diaphragms to fatigue. See DFMEA Document number 503796. In order to verify the correct design parameters were selected, the switch was subjected to a number of tests designed to simulate accelerated life testing of the application. See PS reports called out above. Life testing per the customer specification (RS-F2VC-9P924-AA) has shown acceptable performance.

Typically, Kapton™ fatigue occurs well over 0.5 million full-scale pressure cycles in our history of simulated and accelerated life testing. When Kapton™ fatigue does occur, there are visual signs of delamination, cracking, and embrittlement. The Kapton™ diaphragms break down first in the areas of highest stress and/or strain. Typically, the first region to show break down is the circumferential area surrounding the converter button. See Endurance Test (report # PS/98/53). Again, diaphragm life depends on stress levels (pressure magnitude applied), temperature, and chemical exposure. The above mentioned tests were conducted in TI's Life Test lab with relatively controlled conditions.

Water has been shown to accelerate the aging of the base polyimide. Water can be introduced in two known ways:

- 1) By entering the contact cavity via the electrical connector
- 2) By being in solution in the brake fluid and entering the switch via the pressure port.

When water enters the connector it will "age" the Kapton™ diaphragms and make them appear as though they have reached the end of life. This condition leaves visual clues. Classic signs of chemical attack of the Kapton™ include de-lamination of the Teflon from the base polyimide base, embrittlement, and cracking of the base polymer. See Endurance Test (report PS/98/53).

Authored by Bryan Dague. Call Andy McGivern or Bryan Dague with questions.

77PS Overview Appendix

- 1. Pressure Switch Cross Section**
- 2. Hexport Print (TI # 36900)**
- 3. Gasket Print (TIM 74353)**
- 4. DFMEA for Gasket and Kapton Seal**
- 5. Life Test to Failure Test Report (Weibull Analysis)**
- 6. Customer Specification (ES-F2VC-9F924_AA)**
- 7. PFMEA**
- 8. IP Test Reports**
- 9. Endurance Test Report**

Entry No.	SIRK/ALERT No.	DATE SUBMITTING SIRK/ALERT NUMBER	DETAILS OF CHANGES	PORD P.N.	TPN N.
1	408988	27-Feb-95	Use of alternate pressure tester for capacity improvement. Scribe mark indicating "test pass" to be on O-ring ring rather than on the plastic connector base.	F2AC-8F924-AA F2VC-8F924-AB F3DC-8F924-AA F6AA-8F924-AA F3TA-8F924-CA	77PBL3-1 77PBL3-1 77PBL3-2 77PBL3-2 77PBL3-3
2	408989	27-Feb-95	Use of 10L07 steel from cold headed supplier in lieu of 10L10 steel due to temporary material supply interruption. 10L07 steel made with same process.	F2AC-8F924-AA F2VC-8F924-AB F3DC-8F924-AA F6AA-8F924-AA F3TA-8F924-CA	77PBL3-1 77PBL3-1 77PBL3-2 77PBL3-2 77PBL3-3
3	408937	8-Sep-94	Change p.n. from p.n. 940A-8F924AA to p.n. 940A-8F924AB	940A-8F924AB	77PBL4-1
4	408911	17-Mar-94	Use of color pigments in plating base containing aluminum material in lieu of heavy metal per governmental regulations	F3TA-8F924-CA	77PBL3-3
5	282442	22-Jan-93	Use of past submission of prior level "BA". Converting from snap to quiet disc switch. Change is to silent disc only.	F3TA-8F924-CA	77PBL3-3
6	147893	2-Dec-92	Reduce internal cap dimension by .004" from .091" to .087" nominal. Address potential open circuit condition under vacuum, traced to disc envelope under stack- up conditions	F2VC-8F924-AB F2AC-8F924-AA F3DC-8F924-AA	77PBL3-1 77PBL3-1 77PBL3-2
7	147873	21-Nov-91	Change thread peening specification from 3A go to 3A go ring gage. Use of ASME BH.1 Industry Standard for plated thread allowance.	F3TA-8F924-CA	77PBL3-3
8	147871	9-Nov-91	Use blue colored environmental seal in lieu of reddish color with black stripe to help differentiate seal; to reduce potential assembly errors.	F2VC-8F924-AB	77PBL3-1
9	148898	3-Apr-91	Change terminal position dimension from 0.50±0.20mm to 0.50±0.25mm	F3TA-8C924-AA	77PBL3-2
10	147855	3-Apr-91	Change terminal position dimension from 0.50±0.20mm to 0.50±0.25mm	F3TA-8F924-CA	77PBL3-3
11	Alert No. A10186193	11-Oct-91	Use of manually loaded sensor arm machine vs auto in-line loaded clipper. Use of 240V/1000VA 60 Hz.	F2VC-8F924-AB	77PBL3-1

BREA No. DATE SUBMITTED

IMPROVEMENT

FORD P.N. T.I.P. N.

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

TEAM:

AVT E&SE Chassis Electronics:	Fred Porter	x84-53722	fporter
AVT Chassis Engineering:	Joe Evans	x32-23832	jevans8
	Barry Egen	x32-39512	begen
AVT E&SE E&S:	Bob English	x33-73225	renglial
AVT Design Analysis:	Norm LaPointe	x59-42686	nlaipoint
AVT E&SE O&E:	Jim Gregoire	x33-79962	jgregoir
E&SE Prod. Veh. Safety:	William Abramczyk	x32-23284	wabramcz
	Ray Nevi	x59-47688	rnevi
Large Luxury VC Safety:	John McInerney	x32-20276	jmcinern
	Joe Neme	x39-08133	jneme
AVT Materials Engineering:	Greg Stevens	x32-36686	gsteven1
	Ken Gribble	x32-36518	kgribble
	Clark Thomas	x59-41313	cthomas5
Central Lab Services:	Steve LaRoucha	x84-54876	slarouch

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 AWS on the
F2VY-9F924-A for 1992 and 1993 Town Cars.

Two CQIS reports (WJIAA135 & VDUAA322) mention underhood fire
in connection with the brake pressure switch.
WJIAA135 occurred at 51,500 miles.
VDUAA322 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)543-6520 [HILITE 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 LaRoucha, Norm LaPointe & Clark Thomas on
12/17/1998. Original photographs and part are in Steve LaRoucha'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 Haga, 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 CQIS 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	
Econoline	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	
Club Wagon	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	
F-Series		xxxx	xxxx	xxxx	xxxx	xxxx	
Bronco		xxxx	xxxx	xxxx	xxxx		
Taurus SES		xxxx	xxxx	----			
Capri			xxxx	xxxx	----		
Windstar			xxxx	xxxx	xxxx	xxxx	
Falcon				xxxx	xxxx	xxxx	
Explorer					----	xxxx	
Ranger					----	xxxx	
Expedition						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?

0700_0906							
120	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	8 30	14.20	14.45	1.1 REPLACE BRAKE PEDAL. REPAIR BRAKE.	CHANGE TIRE AND BRAKE
121	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 20405	7.04	13.4	1.2	CHANGE BRAKE CLOTH TO CLOTH CLOTH, PLASTIC, VINYL, NYLON, FIBERGLASS, COTTON AND CLOTH MATERIALS WHICH ARE NOT CLOTH.
122	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 10277	7.23	14.50	1.3	CHANGE BRAKE CLOTH TO CLOTH CLOTH, PLASTIC, VINYL, NYLON, FIBERGLASS, COTTON AND CLOTH MATERIALS WHICH ARE NOT CLOTH.
123	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 20203	7.71	14.13	1.4 BRAKE PEDAL. REPAIR BRAKE PEDAL. BRAKE PEDAL.	CHANGE BRAKE
124	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 42254	7.03	14.54	1.5 IT IS TIME TO REPLACE PEDAL. 1.6 TIRE CHANGE. REPAIR. REPAIR REACTIVATION BRAKE AND BRAKE PEDAL.	CHANGE BRAKE, TIRE CHANGE. REPAIR. REPAIR
125	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 30374	8.34	14.31	1.7 BRAKE PEDAL. 2.4. REPAIR BRAKE PEDAL. 3.4. TIRE CHANGE. 4.4. BRAKE BRAKE. 5.4. BRAKE PEDAL. 6.4. BRAKE BRAKE. 7.4. BRAKE BRAKE.	REPAIR BRAKE TIRE CHANGE
126	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 40008	7.27	14.43	1.8 BRAKE PEDAL. 2.4. REPAIR BRAKE PEDAL. 3.4. TIRE CHANGE. 4.4. BRAKE BRAKE. 5.4. BRAKE PEDAL. 6.4. BRAKE BRAKE. 7.4. BRAKE BRAKE.	REPAIR BRAKE TIRE CHANGE
127	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 12004	8	14.40	1.9	1.9 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.
128	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 12004	7.75	14.71	1.1 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE
129	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 40702	8.14	14.49	1.2 1.3 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE. 5.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE REPAIR BRAKE BRAKE
130	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 41124	8.44	14.44	1.5 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	AIR
131	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 41414	14.64	14.31	1.6 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE
132	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 30012	7.23	14.48	1.7 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE
133	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 30700	7.76	14.31	1.8 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE
134	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 10434	11.23	14.32	1.9 1.5 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE
135	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 40326	7.04	14.14	1.6 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE REPAIR BRAKE BRAKE
136	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 20897	7.04	14.24	1.7 REPLACE BRAKE PEDAL. REPLACE BRAKE PEDAL.	BRAKE BRAKE
137	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 12001	7.04	14.34	1.8 REPLACE BRAKE BRAKE. PEDAL OF BRAKE BRAKE.	REPAIR BRAKE
138	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 11197	11.43	14.31	1.9 1.0 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL. 3.4. BRAKE BRAKE. 4.4. BRAKE BRAKE.	REPAIR BRAKE BRAKE
139	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 20702	7.71	14.14	1.5 TIRE BRAKE BRAKE. BRAKE BRAKE TIRE BRAKE BRAKE. BRAKE BRAKE REACTIVATION BRAKE BRAKE BRAKE BRAKE BRAKE.	REPAIR BRAKE BRAKE
140	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 20702	8	14.40	1.6	
141	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 12003	12.01	14.49	1.7 REPLACE BRAKE BRAKE. 1.8	REPAIR BRAKE BRAKE
142	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 12003	8.25	14.45	1.9	
143	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 20701	8.73	14.22	1.2 TIRE 4. REPLACE BRAKE BRAKE. 5. BRAKE BRAKE. 6. BRAKE BRAKE. 7. BRAKE BRAKE.	REPAIR BRAKE BRAKE
144	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 20701	8.26	14.44	1.3 BRAKE BRAKE BRAKE. 1.4 BRAKE BRAKE BRAKE. 1.5 BRAKE BRAKE BRAKE. 1.6 BRAKE BRAKE BRAKE.	REPAIR BRAKE BRAKE
145	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	13 10171	8.19	14.04	1.7 BRAKE BRAKE BRAKE. 1.8 BRAKE BRAKE BRAKE.	REPAIR BRAKE BRAKE
146	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 20004	8.19	14.25	1.1 BRAKE BRAKE. 2.4. BRAKE BRAKE PEDAL.	REPAIR BRAKE BRAKE
147	11/12/98 QUALITY LUMINATOR WIRE A 400 40	10/12/98	21 20003	7.73	14.13	1.2 BRAKE BRAKE.	REPAIR BRAKE BRAKE

		SPCM_Warranty					
1280	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 4	9/11/94	22 28000	130.00	964.40
							4.1 ROAD TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST
							10. REPLACE SPUR BALL-BEARINGS - CERAMIC CONICAL TYPE CENTER, SPUR, PERCENT ACCURACY 100% AND 100% TEST, INCHES/INCHES SPECIFIED, 100% TEST.
1281	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 30	12/13/93	22 27000	7.31	98.43
							4.1 ROAD TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST, 100% MAXCHARGE TEST
							4.2 REMOVE SPUR CONICAL TYPE SPUR GEAR, INCHES/INCHES TEST, INCHES/INCHES SPEED CONTROL, SPLINE AND SPLINE SPUR GEAR, SPLINE SPUR GEAR 100% TEST
1282	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 30	4/10/94	18 23000	6.26	74.13
							4.1 REMOVE SPUR CONICAL TYPE SPUR GEAR, INCHES/INCHES TEST, INCHES/INCHES SPEED CONTROL, SPLINE AND SPLINE SPUR GEAR, SPLINE SPUR GEAR 100% TEST
1283	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 40	4/10/94	18 23000	7.16	82.36
							4.2 REMOVE SPUR CONICAL TYPE SPUR GEAR, INCHES/INCHES TEST, INCHES/INCHES SPEED CONTROL, SPLINE AND SPLINE SPUR GEAR, SPLINE SPUR GEAR 100% TEST
1284	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 30	3/26/94	21 27000	7.40	78.06
							4.1 REMOVE SPUR CONICAL TYPE SPUR GEAR, INCHES/INCHES TEST, INCHES/INCHES SPEED CONTROL, SPLINE AND SPLINE SPUR GEAR, SPLINE SPUR GEAR 100% TEST
1285	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 30	3/26/94	21 27000	0	0
							4.2 REMOVE SPUR CONICAL TYPE SPUR GEAR, INCHES/INCHES TEST, INCHES/INCHES SPEED CONTROL, SPLINE AND SPLINE SPUR GEAR, SPLINE SPUR GEAR 100% TEST
1286	[REDACTED]	12/13/93	MAX CHARGE 100% 1000 A 100 30	3/26/94	21 27000	9.5	81.47
							4.3 REMOVE SPUR CONICAL TYPE SPUR GEAR, INCHES/INCHES TEST, INCHES/INCHES SPEED CONTROL, SPLINE AND SPLINE SPUR GEAR, SPLINE SPUR GEAR 100% TEST

Report Inf Status = D Error = No Request N Descriptio Run Date Run Time Cut Off Da Load Data
 Data Sel Model Yea Cost Cate Region So Country S Vehicle LI Part Num Base (reported) [typed]
 Report Sel Report Na Model Yea Order By Maximum Logic = Co Tis Claims Claims Wk Requested
 MDL_YR VIN_CD LBR_COS VEH_LINE MKT_DER BOD_CAB VER_SER DRIVE_C ENG_CD
 1992 [REDACTED] 31.28 C/VB C/M C/PC C/B/S C/B C/VN
 1992 [REDACTED] 148.5 C/VB C/M C/PC C/B/S C/B C/VN
 1992 [REDACTED] 15.64 C/VB C/M C/PC C/B/S C/B C/VN
 1992 [REDACTED] 48.58 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 58.43 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 67.28 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 51.64 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 578.89 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 18.38 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 385.4 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 63.6 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 43.43 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 10.83 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 57.33 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 148.5 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 44.4 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 99.83 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 32.09 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 60.74 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 61.5 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 20 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 28.64 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 48.4 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 182.22 C/VB C/M C/PC C/B/R C/B C/VN
 1992 [REDACTED] 81.8 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 81.36 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 58 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 45.5 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 78.62 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 160.9 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 215.42 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 91.75 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 191.7 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 39.2 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 66.4 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 45.88 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 43.49 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 30.4 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 38.6 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 51.17 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 85.92 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 0 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 102 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 126 C/VB C/M C/PC C/A/B C/B C/VN
 1992 [REDACTED] 24.35 C/VB C/M C/PC C/A/B C/B C/VN

1992	88.52 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	202.65 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	54.11 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	27.08 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	24 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	43.2 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	45.32 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	50.4 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	338.8 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	68 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	78.45 C/VB	C/M	C/PC	C/AB	C/B	CVN
1992	0 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	25.2 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	42.4 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	55.21 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	57.87 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	45.55 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	140.67 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	63.14 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	59.81 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	107.1 C/VB	C/M	C/PC	C/BS	C/B	CVN
1993	115.45 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	106.45 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	88 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	154.57 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	53.08 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	61.17 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	57.03 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	158.29 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	53.81 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	55.22 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	85.33 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	71.25 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	138.93 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	66.22 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	81.55 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	73.44 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	85.24 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	55.77 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	0 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	48.28 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	67.77 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	96.82 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	280 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	38 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	123.5 C/VB	C/M	C/PC	C/BR	C/B	CVN
1993	38.88 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	97.11 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	61.26 C/VB	C/M	C/PC	C/AB	C/B	CVN

CLML0036

1993	51.54 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	220.12 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	63.4 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	133.57 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	61.73 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	49.31 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	112.82 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	155.4 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	634.4 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	255.22 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	0 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	57.98 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	73.82 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	70.28 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	45.87 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	28.29 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	50.6 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	121.35 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	74.98 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	146.37 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	66.3 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	65.18 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	187.2 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	40.64 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	51.27 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	65.88 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	12.66 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	73.14 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	65.49 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	30.14 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	0 C/VB	C/M	C/PC	C/AB	C/B	CVN
1993	42.17 C/VB	C/M	C/PC	C/AB	C/B	CVN

Currency Csv Name Generated By = WABRAMCZ

[9F024,*]

Reported Requested Reported Descriptions = Yes

TRANS_C	PLANT_C	PRODN_	WRTY_ST	NAME	DOC_NU	PH_NUM	WCC_CD	PART_NU
C/DK	BA	4/23/92	5/26/92	HOOPER	868161	4855647	7Q01	P2VY
C/DK	BA	2/7/92	3/3/92	BOBBY J	7247751	7388000	7Q01	F4VY
C/DK	BA	3/18/92	4/16/92	SOUTH HI 088870B	5832200	7Q01	F2VY	
C/DK	BA	6/24/92	8/12/92	GRAND T	20052	9222022	7Q01	F2VY
C/DK	BA	4/9/92	4/28/92	MARGAT	130115C	9787900	7Q01	F2VY
C/DK	BA	7/21/92	9/19/92	HINDERS	5801001	8381100	7Q01	F2VY
C/DK	BA	4/9/92	5/22/92	FORT MY	7828251	4832300	7Q01	F2VY
C/DK	BA	12/2/91	1/22/92	CAPITOL	78778	9850320	7Q01	F2VY
C/DK	BA	5/28/92	7/4/92	ALL STAR 085080B	8472121	7Q01	F2VY	
C/DK	BA	4/21/92	7/30/92	LAWREN	2841	2661D83	7Q01	*
C/DK	BA	2/25/92	10/6/92	CROSS R	483148	5240770	7Q01	F2VY
C/DK	BA	12/9/91	4/3/92	ZIEMG FO	88015	3267378	7Q01	F2VY
C/DK	BA	7/17/92	11/17/92	TORNAD	77880	8722188	7Q01	F2VY
C/DK	BA	5/13/92	10/20/92	TEXAS CI	116061	8481647	7Q01	F2VY
C/DK	BA	4/8/92	9/14/92	COSTA M	3387901	5405630	7Q01	F1VY
C/DK	BA	4/15/92	8/22/92	VAN SYC	44272	9474889	7Q01	F2VY
C/DK	BA	11/20/91	12/20/91	HOLLYW	2530601	*	7Q01	F2VY
C/DK	BA	5/7/92	10/7/92	LONG MC	22154	8232242	7Q01	F2VY
C/DK	BA	7/30/92	10/23/92	VAN BUR	3448302	5622838	7Q01	F2VY
C/DK	BA	2/5/92	5/8/92	PIONEER	79801	7942611	7Q01	*
C/DK	BA	6/1/92	8/31/92	CLOVERL	20418	3803071	7Q01	F2VY
C/DK	BA	8/4/92	8/29/92	RICH MO 078881D	7884000	7Q01	F2VY	
C/DK	BA	3/25/92	5/18/92	HALL MAR	657893002	5637684	7Q01	F2VY
C/DK	BA	11/20/91	11/17/92	SOUTHW	1074611	9813688	7Q01	F1VY
C/DK	BA	5/28/92	8/11/92	PULLEN F	102198	8737193	7Q01	F2VY
C/DK	BA	2/19/92	3/7/92	CARLISLE	387911	4434545	7Q01	F2VY
C/DK	BA	2/17/92	3/4/92	COLLIER	23888	5878444	7Q01	F2VY
C/DK	BA	4/8/92	4/21/92	DENTON	10772	8678181	7Q01	F2VY
C/DK	BA	3/2/92	5/11/92	STU EVA	61533	2868800	7Q01	F2VY
C/DK	BA	3/9/92	5/30/92	NORTH P	208459	3418841	7Q01	F2VY
C/DK	BA	5/8/92	5/28/92	METROP	2134551	9842000	7Q01	F2VY
C/DK	BA	2/14/92	3/3/92	MOTOR T	10250301	2884501	5R14	F1VY
C/DK	BA	7/18/92	8/13/92	WADE FO 014328A	9824060	7Q01	F4VY	
C/DK	BA	7/14/92	11/6/92	CHEREK	33893	2811234	7Q01	F2VY
C/DK	BA	7/22/92	9/22/92	SMITH TO	153425	2882888	7Q01	F4VY
C/DK	BA	3/26/92	4/9/92	QUALITY	15023	3273000	7Q01	F2VY
C/DK	BA	5/5/92	12/9/92	MARSHAL 078881A	5881680	7Q01	F2VY	
C/DK	BA	5/8/92	5/21/92	STEEPLE	3301	3830621	7Q01	F2VY
C/DK	BA	4/19/92	4/28/92	HI-WAY F	6269102	5202126	7Q01	F2VY
C/DK	BA	8/8/92	8/18/92	HARR L-M	888881	8325511	7Q01	F2VY
C/DK	BA	2/31/92	8/8/92	MARGAT	1412328	9787900	7Q01	F2VY
C/DK	BA	3/30/92	7/31/92	RAY FLA	71288	8897000	7Q01	*
C/DK	BA	3/30/92	7/31/92	RAY FLA	71288	8907000	7Q01	F2VY
C/DK	BA	1/15/92	1/22/92	DICK ED	28147	7794004	5R14	F1VY
C/DK	BA	12/19/91	1/31/92	ANNISTO	20278	2867838	7Q01	F2VY

C/DK	BA	12/3/91	3/17/92 NORTHE	423436	6372879	TQ01	F2VY
C/DK	BA	7/22/92	10/22/92 MARTY S	185516	8843400	TQ01	F2VY
C/DK	BA	7/16/92	1/13/93 SHETLER	9388501	4781720	TQ01	F2VY
C/DK	BA	4/2/92	7/12/92 MULLINA	027216A	*	TQ01	F2VY
C/DK	BA	3/27/92	5/31/92 SUNLAND	60041	8388301	TQ01	F2VY
C/DK	BA	2/21/92	3/8/92 JENKINS	20878	8838237	TQ01	F2VY
C/DK	BA	2/13/92	3/2/92 RAY PEA	2842	5387461	TQ01	*
C/DK	BA	7/28/92	11/8/92 GATEWA	47953	3225876	TQ01	F2VY
C/DK	BA	2/19/92	3/8/92 CHAMPIO	119879	8330012	TJ05	E45Y
C/DK	BA	12/17/91	1/6/92 JEFF O'N	94287	5308799	TQ01	F2VY
C/DK	BA	4/9/92	4/25/92 HERITAG	33804	8722277	TQ01	F2VY
C/DK	BA	4/9/92	4/25/92 HERITAG	33712	8722277	TQ01	*
C/DK	BA	8/23/92	10/12/92 PHELAN	48801	8584730	TQ01	F2AZ
C/DK	BA	4/8/93	6/18/93 DICK DO	185270	*	TQ01	F2VY
C/DK	BA	2/3/93	6/4/93 QUALITY	204071	8812204	TQ01	F2VY
C/DK	BA	1/25/93	2/17/93 FORD OF	651553	9488555	TQ01	F4VY
C/DK	BA	8/13/92	9/8/92 SCHILLIN	48878	*	TQ01	*
C/DK	BA	12/23/92	1/18/93 BRADLEY	53859	3892886	TQ01	F2VY
C/DK	BA	11/11/92	12/1/92 GARY YE	108434	2838771	TQ01	F4VY
C/DK	BA	9/11/92	10/2/92 SCHILLIN	458834	*	TQ01	F2VY
C/DK	BA	11/18/92	12/8/92 MARINO	40788	7584242	TQ01	F2VY
C/DK	BA	9/17/92	11/27/92 PUGMIRE	8980752	9522261	SR14	F3AZ
C/DK	BA	10/23/92	10/20/93 LAWREN	1395851	8822900	TQ01	F2VY
C/DK	BA	2/12/93	2/28/93 NICK NIC	68233	7261231	TQ01	F2VY
C/DK	BA	2/10/93	7/27/93 BARANC	404041	4978850	TJ05	*
C/DK	BA	4/2/93	DICK ED	121001A	7784004	TQ01	F4VZ
C/DK	BA	2/1/93	2/24/93 HARR L-M	980891	8525511	TQ01	F2VY
C/DK	BA	3/4/93	3/24/93 BEAL PA	112089	8823118	TQ01	F2VY
C/DK	BA	10/7/92	10/21/92 MARTY S	184889	8843400	TQ01	F2VY
C/DK	BA	9/5/92	3/14/94 LEE AND	2812331	2854886	TQ01	F2VY
C/DK	BA	4/30/93	11/15/93 CARTER	1873801	*	TQ01	F2VY
C/DK	BA	12/14/92	4/1/93 CULLIGA	3821001	8324100	TQ01	F2VY
C/DK	BA	11/30/92	12/10/92 DAVE KN	0844360	2858187	TQ01	F2VY
C/DK	BA	8/14/92	2/28/93 JIM CLICK	78281	8707327	TQ01	F3VY
C/DK	BA	5/14/93	6/29/93 SUNNYVA	16350301	7927000	TQ01	*
C/DK	BA	4/14/93	4/29/93 AIRPORT	208151A	*	TQ01	F3VY
C/DK	BA	4/15/93	4/30/93 BLUFFS L	2122301	8882444	TQ01	F2VY
C/DK	BA	4/15/93	4/30/93 BLUFFS L	22805001	8882444	TQ01	F2VY
C/DK	BA	3/19/93	8/8/93 ADVANTA	31801	*	TQ01	F2VY
C/DK	BA	3/19/93	8/8/93 ADVANTA	31807	*	TQ01	*
C/DK	BA	11/8/92	12/2/92 JIMMY MI	58801	8788001	TQ01	*
C/DK	BA	8/25/92	8/30/93 COURTE	002880A	2373820	TQ01	F5PZ
C/DK	BA	8/28/92	8/30/93 COURTE	004817A	2373820	TQ01	*
C/DK	BA	1/25/93	4/21/93 HAAG FO	201321	5373000	TQ01	F2VY
C/DK	BA	8/20/92	8/20/92 LOWE LIN	157888	4429090	T804	*
C/DK	BA	8/3/92	10/8/92 BARNEY	402701	7469485	TQ01	F4VY
C/DK	BA	4/18/93	8/4/93 HANNAF	283785	8432760	TQ01	F2VY
C/DK	BA	3/28/93	4/13/93 ZIMMERM	9758481	5841899	TQ01	F8PZ
C/DK	BA	8/24/92	12/9/92 APPLE LI	59183	*	TQ01	F2VY

CLML0035

C/OK	BA	5/19/92	10/8/92 GERMAIN	6349551	5878011 7Q01	F4VY
C/OK	BA	3/10/93	5/19/93 DEMPEW	4203851	5279588 7Q01	F2VY
C/OK	BA	2/10/93	2/26/93 VIC OSM	62530	7251100 7Q01	*
C/OK	BA	2/8/93	2/24/93 HERTZ R	214127*	7Q01	F2VY
C/OK	BA	4/7/93	4/22/93 MARKSVI	58262	2538911 7Q01	F2VY
C/OK	BA	4/7/93	4/22/93 MARKSVI	6222101	2538911 7Q01	F2VY
C/OK	BA	3/3/93	4/12/93 L & B LIN	383325	6802801 7Q01	F4VY
C/OK	BA	1/8/93	8/31/93 WHITTEN	050100B	7041800 7Q01	F2VY
C/OK	BA	9/16/92	10/2/92 AUFFENB	041133B	2936550 3A08	F2VY
C/OK	BA	9/15/92	9/30/92 DAVE MA	123105*	7Q01	F2VY
C/OK	BA	2/11/93	2/27/93 MARTY S	175043	8843400 7Q01	*
C/OK	BA	2/11/93	2/27/93 MARTY S	175043	8843400 7Q01	F2VY
C/OK	BA	2/11/93	3/2/93 PAUL HA	17682	2988814 7Q01	F2VY
C/OK	BA	8/7/92	2/13/94 LINCOLN-	782001	6463368 7Q01	F2VY
C/OK	BA	7/22/93	8/24/93 HENDRY	144250	9838188 7Q01	F4VY
C/OK	BA	8/21/93	8/28/93 BOB MAT	234195	6626543 7Q01	F2VY
C/OK	BA	4/10/93	5/4/93 LITTLE RI	660701	8868131 7Q01	F2VY
C/OK	BA	1/26/93	2/23/93 LELAND L	3887083*	7Q01	F2VY
C/OK	BA	8/25/92	8/25/92 PELL CIT	6822501	9389489 7Q01	F4VY
C/OK	BA	2/3/93	2/23/93 HANNAF	460050	8432780 7J06	E4VY
C/OK	BA	7/22/93	7/29/93 HALIFAX	1402481	4289094 7Q01	F4VY
C/OK	BA	3/15/93	4/3/93 HARTER	10771	8813561 7Q01	F2VY
C/OK	BA	11/17/92	12/4/92 DICK LEO	112643	8820820 7Q01	F2VY
C/OK	BA	4/20/93	5/8/93 DON DAVI	111806A	2680101 7Q01	F2VY
C/OK	BA	3/8/93	3/24/93 JOE MAH	37129	6424711 7Q01	F4VY
C/OK	BA	8/15/93	7/1/93 NOLLER L	21971	2672800 7Q01	F2VY
C/OK	BA	4/23/93	5/8/93 STEEPLE	307331	3830821 7Q01	F2VY
C/OK	BA	4/14/93	4/30/93 LITTLE RI	732121	8868131 7Q01	F5PZ
C/OK	BA	10/21/92	11/30/92 PETERSO	1721501	8844511 7Q01	F2VY
C/OK	BA	8/28/92	10/3/92 FREEWA	2680	8888514 7Q01	*
C/OK	BA	8/28/92	10/3/92 FREEWA	80037	8888514 7Q01	*
C/OK	BA	8/20/92	8/20/92 HERITAG	112484	4362773 7Q01	F2VY

PART_NU	PART_NU	CUST_CO	COND_C	RPR_DT	TIS_WSD	CLM_KEY	MILGE	MTRL_CO
9P924	A	A28		8	8/1/93	40 31636978	47976	7.31
9C735	A	A25	X1		2/27/93	49 32584719	48733	123.48
9F924	A	L25		28	6/5/93	38 31383413	46847	7.03
9F924	A	A28	X1		3/21/93	20 12554803	27897	7.04
9F924	A	A28		28	5/18/93	38 31228321	42743	7.03
9F924	A	A25		42	8/3/93	35 31516562	40998	8.04
9F924	A	A99		28	4/12/93	36 30895781	19349	7.03
9F924	A	A25	X1		10/15/93	22 12035564	28577	246.83
9F924	A	L83		31	12/1/93	42 32180084	48753	7.31
9F924	*	A25		42	8/19/93	1 12422567	3882	13
9F924	A	A99		48	1/27/94	18 12268836	14480	7.04
9F924	A	A25		28	1/20/94	22 12048786	38693	151.83
9F924	A	H05		42	2/25/94	18 12587878	25706	7.04
9F924	A	A28	X1		9/18/93	48 33372807	40852	7.75
9C868	B	A28	X1		9/5/93	49 33341727	27469	37.00
9F924	A	A28		42	9/21/93	4 12418174	6301	13
9C868	A	A25		42	5/16/93	42 31225174	48804	34.79
9F924	A	A28		42	7/28/93	10 12433850	16206	7.71
9F924	A	A25		42	6/5/93	45 32868037	49538	7.31
9F924	*	A27		42	1/21/93	9 12182036	8606	9.75
9F924	A	A25		42	10/8/93	14 12800142	20880	7.71
9F924	A	A25		42	9/26/93	40 31885416	48132	7.31
9F924	A	A25		42	3/30/93	35 30940847	30521	7.03
9C868	B	C05	X1		2/19/93	40 32612230	49844	91.15
9F924	A	A25		42	12/23/92	7 12491486	16314	9.75
9F924	A	A27		8	10/25/94	33 29389446	38868	8.14
9F924	A	A25		42	9/28/92	7 12216870	10666	13
9F924	A	A28		26	9/23/93	15 12384249	28924	7.71
9F924	A	A99		28	5/9/94	25 12279066	26138	21.82
9F924	A	A25		28	5/31/94	25 12278520	48288	7.04
9C868	F	A28		42	8/1/93	39 31678866	45792	174.84
14A864	D	A25		42	6/22/95	41 31398790	37064	58.85
9C735	A	A25		49	7/31/93	49 33230845	44050	123.92
9F924	A	A25	X1		10/13/92	0 12571686	20	16.26
9C735	A	A25		28	6/28/95	38 31741177	24752	123.48
9F924	A	A28		28	4/4/94	25 12323284	28448	7.04
9F924	A	A85		40	3/22/93	40 32870784	14437	7.31
9F924	A	A25		42	4/28/93	12 12454054	26391	7.71
9F924	A	A25		42	4/25/93	37 30996276	42254	7.03
9F924	A	A28		42	11/18/94	30 29729118	86674	9.14
9F924	A	A28		28	11/2/95	39 32029521	48814	7.31
9F924	*	A99	PP		8/13/93	19 12362461	13834	0
9F924	A	A25		28	8/13/93	19 12352460	12934	7.71
14A864	D	A85	X4		3/24/93	15 12130160	26214	103.56
9F924	A	A99		8	4/3/95	39 30873261	42751	9.14

CLML0035

9F924	A	A25		48	10/19/94	32	29363672	41524	9.14
9F924	A	A26		42	10/22/93	13	12586823	15446	168.56
9F924	A	A25	X1		3/20/96	40	32712068	38912	7.31
9F924	A	H19	D1		7/2/96	49	33099062	27188	7.75
9F924	A	L63	D1		2/28/94	22	12344632	16436	11.22
9F924	A	A25		28	9/27/94	32	29064286	42860	7.94
9F924	*	A27		42	5/19/94	27	12217898	31867	7.94
9F924	A	A25		46	2/26/94	18	12514017	12801	7.94
9E731	A	A25		8	7/25/94	29	28263729	48603	88.88
9F924	B	A25		42	12/31/92	13	12082053	18757	11.82
9F924	A	A26		42	10/1/93	18	12398089	26752	7.71
9F924	*	A99	PP		10/5/93	18	12398070	26752	0
9F924	A	A25		42	11/3/92	1	7863309	1743	12.45
9F924	A	H19		42	2/15/94	10	8247088	10985	8.25
9F924	A	A26		28	7/29/93	2	8185750	2734	8.01
9C735	A	A85		42	6/23/95	26	18091082	36845	137.47
9F924	*	A25		28	8/6/94	24	10448545	37024	8.25
9C735	A	A26	X1		7/5/94	18	9840475	17848	170.75
9C735	A	A85		42	1/10/95	26	13362378	45846	188.32
9F924	A	S25		28	3/21/94	18	7841038	14077	8.25
9F924	A	A25		42	11/30/94	25	13363487	22704	9.49
14A554	A	A25	X1		8/4/96	43	20292811	29420	92.08
9F924	A	A26		42	5/15/97	44	22025680	38252	7.75
9F924	A	A25		8	12/21/93	10	8186584	7580	8.25
9E731	*	A25		42	1/23/95	19	13912436	29344	9.49
9C735	AD	A27		42	11/3/97	-1	22503337	8253	148.73
9F924	A	A26		42	8/29/94	19	11753478	22389	8.25
9C735	A	A25		41	8/18/94	18	9848832	8421	157.48
9C735	A	A25		8	8/26/93	12	7893507	17502	157.22
9F924	A	A25		42	8/23/97	40	22225255	48662	7.75
9F924	A	H19	D1		2/27/95	16	14683486	5686	7.05
9F924	A	A25		28	3/26/97	49	21798115	36835	8.12
9F924	A	A25		28	10/31/95	38	18089388	47878	7.31
9C888	B	A25		28	5/10/95	27	15634109	27232	20.82
9F924	*	A25		42	5/1/97	48	22080150	33337	7.75
9C888	B	A25		42	9/16/98	42	21006709	44431	22.01
9F924	A	A25		42	11/22/93	44	21367622	49849	7.75
9F924	A	A26		28	5/9/96	37	20007897	41847	123.48
9F924	A	A25		42	9/1/93	3	8233600	7893	8.01
9F924	*	A99	PP		9/1/93	3	8233602	7593	0
9F924	*	A25		28	8/27/93	9	7878328	8945	9.09
9C735	HA	A85		8	2/18/97	43	21866532	42528	215.17
9F924	*	A25		28	5/12/97	48	21848415	46446	7.75
9F924	A	A85		42	8/18/96	39	20838883	34938	185.24
9A840	*	A25	X1		8/3/93	9	7783401	6815	14.25
9C735	A	A85		28	11/24/95	39	18089708	49860	123.48
9F924	A	A26		48	8/24/94	14	9852165	22568	8.25
9C735	HA	A25		8	2/7/97	47	21643067	49170	185.24
9F924	A	A85		42	4/28/98	42	19838029	41785	7.31

CLML0035

9C735	A	A25		42	10/17/95	37	17881579	38030	123.48
9F924	A	A25	D8		8/17/95	38	20700525	34845	170.02
9C888	*	A25		42	2/8/94	12	8180733	18613	35.33
9F924	A	H19	D1		7/24/93	6	8174736	7432	7.12
9F924	A	A25		28	11/12/93	7	8252043	18633	8.25
9F924	A	A25		42	7/28/95	28	18404522	48842	9.84
9C735	A	A85		40	11/29/95	33	18212510	48809	123.48
9F924	A	A26		42	8/28/95	26	18288836	29191	152.82
7802 ARM		P87		30	4/17/95	31	15228489	31840	315.51
9C735	A	A26		28	12/28/93	16	7843300	20209	171.56
9F924	*	A98	PP		8/22/94	20	11755552	21625	0
9F924	A	A99	X1		8/22/94	20	11755551	21625	5.25
9F924	A	A25		42	8/28/93	4	8161198	9791	8.01
9F924	A	A85		42	1/16/95	48	22720401	31500	8.74
9C735	A	A25		28	12/28/94	17	18380908	28928	166.32
9F924	A	C05		42	8/24/94	16	11143845	8884	8.25
9C888	B	A26		42	8/29/95	30	17674709	48844	38.84
9F924	A	A85		42	1/2/95	35	18814805	40088	41.17
9C735	A	A25		42	11/28/95	40	18378616	48152	152.82
9E781	A	A26		48	1/28/94	12	81538911	21844	22.34
9C735	A	A25		8	5/21/95	35	20168210	25630	123.49
9F924	A	A25		42	8/3/94	15	8231214	22311	8.25
9F924	A	A25		8	9/21/94	22	12277001	28281	183.29
9F924	A	A25		28	11/2/95	31	17594357	37728	7.31
9C735	A	A28		42	8/25/94	18	11758508	25295	166.06
9F924	A	A25		28	4/11/94	10	8325889	21897	8.25
9F924	A	A25		42	8/23/95	38	20198401	35574	7.31
9C735	HA	A26		42	8/19/95	41	20895802	47571	185.24
9F924	A	A25		28	3/9/95	28	14585041	27528	7.03
9C888	*	A26		42	9/13/94	24	11732785	28464	0
9F924	*	A99	PP		8/14/94	24	12287003	28454	0
9F924	A	A25		28	10/31/94	27	12831841	28893	9.5

TOT_COS	LBR_HRS	DLR_CD	DLR_SUB	REGION_	ST_PROV	CPSC_CD	TECH_TX	TECH_TX
116.78	0.7	6327 *	NA	MI	06XXXX	R&R DEACTIVATOR		
307.12	2.0	214 *	NA	AL	100303	SHORTE ABNORM		
24.78	0.3	10680 *	NA	PA	06XXXX	REPLACED BRAKE L		
54.32	1.1	9668 *	NA	MI	06XXXX	FAULTY CRUISE SW		
67.57	1.1	11638 *	NA	FL	06XXXX	42750 9F924 W SPE		
67.71	1.1	10003 *	NA	MD	06XXXX	DIAG REPLACE SPE		
60.78	1	11619 *	NA	FL	06XXXX	DEACTIVATION SW		
828.72	11.4	12311 *	NA	VA	06XXXX	RUN VOL G AND AF		
24.88	0.3	5469 *	NA	LA	06XXXX	48783 4B BRAKE SE		
378.4	8.7	10110 *	NA	TN	100304	INSTALL ORDERED		
71.54	1.2	10601 *	NA	OH	06XXXX			
195.08	1	20341 *	NA	NM	06XXXX	TEST DRI VATING S		
18.77	0.3	2544 *	NA	TX	06XXXX	REPLACE BRAKE P		
67.41	1.1	10044 *	NA	TX	06XXXX	RAN SPEED CONTR		
184.72	2.3	11631 *	NA	WA	110601	PERFORM TEST ON		
57.4	1.2	13104 *	NA	ME	06XXXX	NO LBR OP IN MAN		
145.18	1.8	11683 *	NA	CA	110601	REPLACE BRAKE PR		
39.5	0.8	5254 *	NA	KS	06XXXX	DIAGNOS CRUISE R		
70.24	1.1	10810 *	NA	TX	06XXXX	TESTED CRUISE CO		
71.25	1.5	10683 *	NA	TX	100304	REPLACED BRAKE		
27.71	0.5	12046 *	NA	AL	06XXXX	REPLACED BRAKE		
36.14	0.5	12304 *	NA	ND	06XXXX	TEST AND REPLACE		
58.54	1.3	631 *	NA	NM	06XXXX	VERIFIED COMPLAI		
300.72	3.3	11458 *	NA	TX	110601	SPEED C SWITCH		
91.65	2.1	9094 *	NA	ME	06XXXX	DIAG SYSTEM OPE		
70.5	1.1	11605 *	NA	FL	06XXXX	DIAG AND REPLACE		
69	1.8	408 *	NA	AL	06XXXX	DIAG AND REPLACE		
53.21	0.9	13677 *	NA	TX	06XXXX	REPLACE BRAKE P		
100.14	1.4	10919 *	NA	MI	06XXXX	R R BRAKE PRESSU		
168.84	3.2	11430 *	NA	TX	06XXXX	TIME FOR CRUISE C		
442.71	4	10628 *	NA	KY	110601	X		
166.28	2	1256 *	NA	PA	110603			
352.8	3.7	240 *	NA	GA	100303	44060 BR ITIN FA		
65.48	0.6	12153 *	NA	WI	06XXXX	REPLACE BRAKE P		
228.92	1	676 *	NA	NY	100303	REPLACE CRUISE S		
53.8	0.9	10426 *	NA	NJ	06XXXX			
62.99	0.9	12233 *	NA	LA	06XXXX	TRACE SHORT CIRC		
36.11	0.6	12252 *	NA	AL	06XXXX	DIAG CRUISE, REPL		
47.84	1.1	9242 *	NA	MN	06XXXX	M TIME TO REPLAC		
60.31	1	13178 *	NA	MA	06XXXX	TEST CRUISE CONT		
75.42	1.2	11636 *	NA	FL	06XXXX	48914 9F984. 28. PE		
150	0	11816 *	NA	CA	100304			
109.71	1.7	11618 *	NA	CA	06XXXX	OPEN CIRCUIT IN D		
229.88	2.6	5205 *	NA	KS	110603	R&R STEERING WH		
53.49	0.8	10116 *	NA	AL	06XXXX	R AND R CRUISE O		

CLML0036

95.66	1.5	10484 *	NA	PA	06XXXX	CRUISE WONT SET
388.21	3.6	10484 *	NA	PA	06XXXX	PROPORTIONING V
63.61	1.2	12213 *	NA	LA	06XXXX	REPLACED BRAKE
37.14	0.5	11629 *	NA	FL	06XXXX	M1 FOR VERIFYING
35.22	0.5	11858 *	NA	AZ	06XXXX	LOCATE INSPECT
51.14	0.8	11640 *	NA	FL	06XXXX	VERIFY. BAD SWTC
53.26	1	12045 *	NA	AL	100304	REPLACE BRAKE P
58.34	1.2	10133 *	NA	GA	06XXXX	REPLACED CRUISE
427.88	7.7	10127 *	NA	AL	100301	CALLED ESSURE
79.62	1.7	5124 *	NA	KB	80805	CK CRUISE CONTR.
66.18	1.5	10316 *	NA	GA	06XXXX	TEST SPEED CONT
60	0	10318 *	NA	GA	100304	
37.85	0.9	6013 *	NA	TN	80805	REPLACE DEACTAV
60.66	0.8	12740 *	NA	NV	06XXXX	
63.22	1.2	12321 *	NA	VA	06XXXX	TEST & REPLACE D
273.45	1.5	5856 *	NA	CA	100303	REPLACE SENSOR>
63.8	0.8	12038 *	NA	AR	100304	CRUISE INOP (A26)
311.42	9	10801 *	NA	TX	100303	PERFORM TEST, RE
229.46	1.4	4790 *	NA	IN	100303	TEST CRUISE CIRC.
66.06	1.1	12014 *	NA	TN	06XXXX	M2, ADDITIONAL TIM
116.59	1.7	13414 *	NA	NJ	06XXXX	CHECK AND DIAG. R
240.53	2.1	10186 *	NA	GA	110803	CONTROL FAILURE
118.81	1.8	10425 *	NA	NJ	06XXXX	INOP
96.25	2.2	1200 *	NA	FL	06XXXX	M- REPLACE DE-AC
164.06	2.9	10157 *	NA	GA	100301	TEST AND REPAIR
258.87	1	5205 *	NA	KB	1003XX	8321 CRU CTIVE, R
59.42	1	13176 *	NA	MA	06XXXX	TEST CRUISE CONT
214.49	1.3	11888 *	NA	FL	100303	REPLACED DEACTU
313.51	1	10494 *	NA	PA	100303	SERVO AND DEACC
84.27	1.2	11617 *	NA	GA	06XXXX	ROAD TEST AND VE
84.71	1	10485 *	NA	NJ	06XXXX	REPLACE SWITCH P
97.29	1.6	11299 *	NA	NY	06XXXX	INSTALLED NEW CR
81.12	1.6	2732 *	NA	MI	06XXXX	DIAG CRUISE CONT
106.83	2.5	11860 *	NA	AZ	110801	CRUISE TEST, PIN PO
96.06	1.1	12758 *	NA	CA	31804	DEACTIVATOR CON
91.26	1.1	10216 *	NA	CA	110801	TEST CRUISE SYST
63.9	1.5	12843 *	NA	IA	06XXXX	INOPERATIVE DEAC
251.94	1.8	12843 *	NA	IA	06XXXX	OPEN CIRCUITS IN
83.78	1	11844 *	NA	CA	06XXXX	
90	0	11844 *	NA	CA	100304	
57.37	1.2	5143 *	NA	MO	100304	CRUISE CONTROL D
358.25	1.4	10169 *	NA	LA	100302	PINPOINT TEST CH
107.28	2	10169 *	NA	LA	31804	ROAD TE D ONLY 5
630.07	5.8	2008 *	NA	IN	06XXXX	REPLACE SERVO DI
52.26	1	10178 *	NA	AL	100302	
280.2	2.8	10128 *	NA	GA	100303	REPLACE SERVO A
46.81	1	5880 *	NA	MS	06XXXX	ROAD TEST VEHICL
347.18	1.6	1824 *	NA	IL	100302	CODE 06 SERVO IN
71.15	0.9	11248 *	NA	NY	06XXXX	

218.24	1	11624 *	NA	FL	100303 INOP
463.01	4	5668 *	NA	KY	08XXXX SPEED CONTROL S
88.73	1.1	11642 *	NA	FL	110801 NO CRUISE A4 DE
140.69	3.7	46251 *	NA	FL	08XXXX NOTE: M TIME DUE
89.98	1.0	6406 *	NA	LA	08XXXX A TIME IS FOR REPL
152.59	1.2	6406 *	NA	LA	08XXXX A TIME IS FOR REPL
279.32	1.6	13383 *	NA	NY	100303 REPL SWITCH
361.71	3	12344 *	NA	VA	08XXXX RUN DIAG AND REP
1062.47	10.1	12621 *	NA	IL	70100 ROAD TEST PLUSHED
428.78	5.2	11822 *	NA	IN	100303 ROADTEST 200 300
40	0	10484 *	NA	PA	100304
68.23	1	10484 *	NA	PA	08XXXX M TIME NEEDED TO
81.83	1.5	4635 *	NA	IN	08XXXX CK CRUISE INOP M1
79.38	1.1	10191 *	NA	CA	08XXXX BRAKE PRESS SWIT
211.09	1	4625 *	NA	FL	100303 CHECK SPEED CON
34.64	0.7	9762 *	NA	MI	08XXXX A=REPLACE AC BRA
100.05	1.1	6649 *	NA	KY	110801
178.84	2.2	11440 *	NA	TX	08XXXX
261.27	1.7	478 *	NA	AL	100303 REPLACED SWITCH
188.71	3.0	5960 *	NA	MS	100301 START O CIRCUIT
233	1.3	6028 *	NA	FL	100303 ROAD TEST PERFO
79.43	1.4	10008 *	NA	LA	08XXXX DIAGNOSE CRUISE
360.49	4.4	3057 *	NA	IN	08XXXX ROAD TEST VO,REPL
59.51	0.9	11494 *	NA	TX	08XXXX COMPLAINT SPEED
216.35	1.5	8094 *	NA	TN	100303 2-DIAG REPLACE SE
74.13	1.4	12613 *	NA	KB	08XXXX RAN CRUISE CONT
22.55	0.3	12262 *	NA	AL	08XXXX DIAG CRUISE CONT
323.21	1.5	5649 *	NA	KY	100302 CRUISE INOP SPEE
74.98	1.5	10915 *	NA	MI	08XXXX REPLACE SWITCH
30.14	0.2	11699 *	NA	CA	110801 CRUISE CONTROL I
80	0	11899 *	NA	CA	100304
51.87	0.7	12653 *	NA	IL	08XXXX CRUISE CONTROL I

CUST_TX AREA_CD COUNTR	SLS_DLR	TXN_CD	CNTRY_S TIS_FLAG
CRUISE C	906 USA	342233 E83	USA
CRUISE C	708 USA	314087 E83	USA
CAR HAS	412 USA	325202 E83	USA
CRUISE I	616 USA	345330 E84	USA
A26 SPEE	954 USA	325256 E83	USA
CRUISE C	410 USA	325423 E83	USA
CRUIZE	941 USA	325216 E83	USA
ER REPL	804 USA	328657 E84	USA
BRAKE FL	504 USA	322590 E83	USA
ARTS BE	423 USA	328100	1 USA
	216 USA	318483 E84	USA
CRUISE C	505 USA	355545 E84	USA
BRAKE P	809 USA	367400 E84	USA
CRUISE C	409 USA	367023 E83	USA
CRUISE C	714 USA	354329 E83	USA
RUISE IN	207 USA	312025	1 USA
BSURE	USA	325201 E83	USA
CC OPER	786 USA	363386 E84	USA
CK CRUIS	958 USA	367147 E83	USA
REPLACE	806 USA	367204	1 USA
CRUISE I	205 USA	326378 E84	USA
CRUISE C	410 USA	315303 E83	USA
CRUISE C	804 USA	322655 E83	USA
INSTALL	713 USA	367081 E83	USA
CRUISE I	207 USA	312709 E84	USA
OWNER R	813 USA	325722 E84	USA
CHECK C	334 USA	325707	2 USA
SPEED C	817 USA	342744 E84	USA
CRUISE I	313 USA	345130 E84	USA
CUT STA	210 USA	354700 E84	USA
#104 SGP	502 USA	325707 E83	USA
	717 USA	325707 E84	USA
CC A26. C	770 USA	326111 E83	USA
CRUISE	414 USA	342084	1 USA
STATES	518 USA	314134 E82	USA
	609 USA	325731 E84	USA
CAR WILL	504 USA	322692 E83	USA
CRUISE E	205 USA	345785 E84	USA
CRUISE D	507 USA	328637 E83	USA
CRUISE C	506 USA	312427 E84	USA
A26 CRUI	954 USA	326250 E83	USA
	714 USA	354170 E70	USA
SPEED C	714 USA	354170 E84	USA
CK CRUIS	913 USA	345787 E81	USA
CUSTOM	205 USA	325732 E84	USA

A25	215 USA	314134 E84	USA
LVE FAIL	215 USA	315130 E84	USA
CC IN OP	318 USA	322373 E83	USA
H18 ANTI	USA	325133 E83	USA
BRAKE FL	602 USA	354585 E84	USA
CRUISE C	941 USA	326036 E84	USA
PART HE	205 USA	325707 E84	USA
EGULAT	708 USA	326115 E84	USA
CRUISE I	205 USA	325732 S07	USA
CRUISE I	800 USA	351728 E84	USA
CUSTOM	770 USA	367725 E84	USA
	770 USA	367725 E70	USA
CRUISE C	901 USA	322300	1 USA
	USA	351146	1 USA
CRUISE I	804 USA	328012	1 USA
	909 USA	354225 E83	USA
	USA	322853 E84	USA
CRUISE C	808 USA	367018 E84	USA
CUST RE	904 USA	346124 E84	USA
REPLAC	USA	322310 E84	USA
CRUISE C	908 USA	314321 E84	USA
NEED TO	770 USA	326060 E84	USA
C.S. THE	609 USA	315265 E83	USA
MATOR S	352 USA	325006	2 USA
CUST SA	770 USA	328057 S07	USA
CUSTOM	913 USA	363657 E83	USA
CRUISE C	508 USA	312484 E84	USA
TOR SWI	904 USA	325022 E84	USA
LERATO	215 USA	315901 E84	USA
CUST ST	912 USA	325100 E83	USA
RED BRA	USA	315158 E83	USA
A25 CUST	718 USA	318030 E83	USA
CUSTOM	517 USA	346352 E83	USA
CRUISE C	520 USA	354547 E83	USA
CRUISE C	408 USA	351741 E83	USA
CUSTOM	USA	351741 E83	USA
CRUISE C	712 USA	351741 E89	USA
CRUISE C	712 USA	351741 E83	USA
	USA	364172	1 USA
	USA	354172	1 USA
ES NOT	417 USA	363407	2 USA
CK SPEE	318 USA	322406 E83	USA
CHECK C	318 USA	322406 E89	USA
CRUISE C	612 USA	326065 E83	USA
	205 USA	38433M	2 USA
CRUISE C	912 USA	345133 E83	USA
CRUISE D	601 USA	322683 E84	USA
STATES	708 USA	345789 E83	USA
	USA	354061 E83	USA

CK CRUIS	941 USA	325281 E83	USA	
CRUISE C	502 USA	38461L E83	USA	④
CK CRUIS	407 USA	325729 E70	USA	
O NO LAB	USA	345741	2 USA	
CNG BR	318 USA	345789 E84	USA	
CNG CR	318 USA	345789 E83	USA	
	518 USA	345141 E83	USA	
CRUISE C	804 USA	328012 E83	USA	
CHECK T	818 USA	325729 E84	USA	
HMS REN	USA	348787 E84	USA	
	215 USA	325729 E84	USA	④
EPLACE	215 USA	325729 E84	USA	
TIME TO	317 USA	325729	2 USA	
CRUISE I	806 USA	354308 E83	USA	
A25-SPEE	941 USA	325037 E84	USA	
AC NOT	818 USA	345350 E84	USA	
	502 USA	345741 E83	USA	
CUST. RE	USA	387023 E83	USA	
CRUISE C	205 USA	38474K E83	USA	④
CRUISE	601 USA	322863 S07	USA	
CRUISE C	904 USA	346180 E83	USA	
ONTROL	318 USA	387013 E84	USA	
CUSTOM	812 USA	325752 E84	USA	
A 25 CRU	817 USA	351728 E83	USA	
CK CRUIS	901 USA	328751 E84	USA	
CRUISE	785 USA	351728 E84	USA	
CHECK C	205 USA	387725 E83	USA	
CONTRO	502 USA	348323 E83	USA	
REPAIR C	810 USA	346128 E83	USA	
CRUISE C	908 USA	354205 E83	USA	
	909 USA	354205 E84	USA	④
OP	314 USA	38406N E84	USA	④

WPRC Part Return Proforma

Ford Motor Company
Warranty Parts Return Center

From: Fred Porter
phone: (313) 84-63722
fax: (313) 39-04145

To: Robert Sloop
phone: (313) 32-27663
fax: (313) 39-06286

Add	Request Number	Service Number			(*1) Amt.	Part Description	Car/ Truck (C/T)	Model Year(s)	Request, Expiration Date	Vehicle Line(s)	Ship to Code	Requestor	Phone #
		Req.	Pri.	Base									
Add	1	All		All	100	Brake Pressure Sensor	C/T	1992- 1995	1/14/93	1991-1992 North America			
Add	1	All		All	400	Brake Pressure Sensor	C/T	1992- 1995	4/28/93	All other North America		R. Sloop	(313) 32-27663
Special Instructions: Please ship units as they arrive. Please do not wait for all units before shipping. Thank you.													

* Part quantity requested (per week or total amount)
(e.g. 10000, SHIPPY HOURLY AND CUTOFF DATES)

** If changes are required, fill in the updated fields ONLY

***The shaded areas MUST be Filled in for all Add requests

Ship to location Code

Name: _____
Street: _____
City, State: _____
ZIP: _____
Country: _____
Alt: _____

**Note: for the 77PSL3-3 could not show all shipping locations — numbers for locations no longer on the d

Customer	SHIP TO LOC.	Part Number	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DANA CORP.											
1992		77PSL2-1 / F2VC 9F024 AB	31.88	67.11	63.38	0	0	0	0	0	0
		77PSL3-1 / F2AC 9F024 AA	0	0	0	0	22.84	0	74.73	39.88	0
		77PSL3-2 / F5BA 9F024 AA	0	0	0	0	0	0	0	0	0
ITT CORP		77PSL2-1 / F2VC 9F024 AB	0.85	0	0	0	0	0	0	0	0
1992		77PSL5-2 / F3DZ 9F024 AA	0	0	0	0	0	0	0	0	0
1993		77PSL5-2 / F8DZ 9F024 AA	1.42	3.09	3.33	1.86	2.38	0.71	0	0	0.47
1994		77PSL5-2 / F3DZ 9F024 AA	1.42	0.714	1.0	1.42	1.42	0	0.71	0.71	0.714
1995		77PSL5-2 / F3DZ 9F024 AA	0.238	0.052	0.052	1.19	0	0	0	0	0
PITTS INDUSTRIALITE											
1992		77PSL2-1 / F2VC 9F024 AB	40.93	43.81	0.47	31.88	32.28	3.38	35.22	53.78	21.42
		77PSL5-2 / F3DZ 9F024 AA	0	0	0	0	0	0	0	2.76	0
1993		77PSL2-1 / F2VC 9F024 AB	15.47	16.23	28.88	22.81	14.51	22.81	20.7	30.48	23.88
		77PSL3-1 / F2AC 9F024 AA	0	0	0	0	0	0	0	0	0.05
1994		77PSL2-1 / F2VC 9F024 AB	23.08	12.85	19.75	25.7	23.88	9.28	8.85	3.8	1.18
		77PSL3-1 / F2AC 9F024 AA	0	0	0	0	6.71	18.32	63.25	27.6	33.78
		77PSL2-3 / F8TA 9F024 CA	0	0	0	0	0	0	0	0	0
1995		77PSL3-1 / F2AC 9F024 AA	27.84	30.69	28.32	26.04	15.7	11.18	10.47	7.14	14.04
		77PSL2-3 / F8TA 9F024 CA	0.476	0	0	0	0	2.14	2.86	0.714	0.714
		77PSL2-1 / F2VC 9F024 AB	0	0	0.238	0.714	0.476	0	0	0	0
1996		77PSL3-1 / F2AC 9F024 AA	11.88	4.76	6.8	8.8	0	0	0	0	0
		77PSL2-3 / F8TA 9F024 CA	0	0	0	1.42	0	0	0	0	0
		77PSL2-1 / F2VC 9F024 AB									

FORD MOTOR													
1982		Service (Brown Township)		77PSL2-1 / F2VC 9F924 AB	0	0	0	0	0	0	0	0	0.47
		Laredo, Texas		77PSL2-3 / F3TA 9F924 CA	19.51	15.7	31.41	18.5	23.05	15.7	13.8	19.88	16.18
		Brown Township/Laredo Canada(Oakville) Kansas City											
		Aasy/Louisville Wayne/Loretta											
		Norfolk Brown Township		77PSL3-3 / F3TA 9F924 CA	0	0	0	0	0	2.44	3.33	63.3	67.11
				77PSL5-2 / F3DZ 9F924 AA	0	0	0	0	0	0	0	0	0
1983		Service (Brown Township)		77PSL2-1 / F2VC 9F924 AB	0	0	0	0	0	0	0	0	0
		Laredo, Texas		77PSL2-3 / F3TA 9F924 CA	1.87	0	0	0	0	0	0	0	0
		Oakville/Brown Township		77PSL3-2 / F3BA 9F924 AA	0	0	0	0	0	0	0	0	0.71
		Brown Township/Laredo Canada(Oakville) Kansas City											
		Aasy/Louisville Wayne/Loretta											
		Norfolk Brown Township		77PSL3-3 / F3TA 9F924 CA	35.28	41.85	53.75	44.58	58.31	42.84	23.68	32.45	0.47
				77PSL5-2 / F3DZ 9F924 AA	0	0.71	0	0	0	0	0	0	0
1984		Service (Brown Township)		77PSL2-1 / F2VC 9F924 AB	0.288	0	0	0	0	0	0	0.71	0
		Laredo, Texas		77PSL2-3 / F3TA 9F924 CA	0	0	0	0	0	0	0	0	0
		Oakville/Brown Township		77PSL3-2 / F3BA 9F924 AA	1.42	8.33	11.42	17.61	26.04	18.66	10.94	28.4	24.27
		Brown Township/Laredo/Romulus		77PSL3-3 / F3TA 9F924 CA	3.8	0.811	1.18	1.18	1.8	1.42	0.71	0.04	0.288
		Brown Township		77PSL5-2 / F3DZ 9F924 AA									
1985		Oakville		77PSL3-2 / F3BA 9F924 AA	18.89	18.51	18.88	21.18	29.82	22.37	14.75	20.7	22.37
1986		Oakville/Dearborn/Brown Township		77PSL3-2 / F3BA 9F924 AA	14.04	18.88	21.85	26.41	21.05	18.51	14.82	27.37	18.08
		Service (Brown Township)		77PSL2-1 / F2VC 9F924 AB	0	0	0	0	0.238	0	0	0	0
		Brown Township/Laredo/Romulus		77PSL3-3 / F3TA 9F924 CA	0	0	0	0	0	0	0	0	0
1987		Oakville/Dearborn/Brown Township		77PSL3-2 / F3BA 9F924 AA	21.18	21.42	27.8	24.08	22.84	27.37	4.78	26.41	26.04
		Service (Brown Township)		77PSL2-1 / F2VC 9F924 AB	0	0	0	0	0.714	0	0	0	0
		Brown Township/Laredo/Romulus		77PSL3-3 / F3TA 9F924 CA	0	0	0	0.48	0	0	0.48	1.2	0
1988		Oakville/Dearborn/Brown Township		77PSL3-2 / F3BA 9F924 AA	14.76	29.76	25.46	22.84	23.56	21.89	1.19	11.9	10.47
		Service (Brown Township)		77PSL2-1 / F2VC 9F924 AB	0	0.082	0	0	0	0	0	0.476	0
		Brown Township/Laredo/Romulus		77PSL3-3 / F3TA 9F924 CA	2.4	0.48	0.72	1.8	0.72	1.82	0.86	1.82	2.16
		Riverview-Ford Australia		77PSL4-1 / 94DA 9F924 AA	0	0	11.9	0.238	14.28	0	0	2.86	0.76

69395

KELSEY-HAYES CO.
1983

	77PSL2-1 / F2VC 9F024 AB	4.99	4.04	5.23	2.6	2.6	3.57	0.85	0	0
--	--------------------------	------	------	------	-----	-----	------	------	---	---

ALLIED SIGNAL
1983

	77PSL3-3 / F3TA 9F024 CA	0	0	0.238	0	0	0.238	0	0	0
1984	77PSL3-3 / F3TA 9F024 CA	0.820	0.238	0	0.476	0.9	0	0.962	0.85	0
	77PSL3-1 / F2AC 9F024 AA	0	0	0	0.08	0.08	0	0	0.05	0
1985	77PSL3-1 / F2AC 9F024 AA	2.8	0	0	0	0.852	15.7	15.47	0	8.56
	77PSL3-3 / F3TA 9F024 CA	55.44	76.12	23.78	73.88	68.16	60.48	16.8	49.88	45.12
1986	77PSL3-1 / F2AC 9F024 AA	18.99	22.84	21.42	17.13	18.99	18.56	12.65	8.99	17.13
	77PSL3-3 / F3TA 9F024 CA	57.12	57.12	63.78	36.00	47.04	53.76	30.24	32.6	50.48

TOKICO
1983

	77PSL3-3 / F3TA 9F024 CA	0	0	0	1.6	0	2	30	20	60
1984	77PSL3-3 / F3TA 9F024 CA	20.16	26.6	72.08	72.72	70.08	35.04	86.44	70	45.12
	77PSL3-3 / F3TA 9F024 CA	74.88	65.04	30	54	48.68	54.48	62.68	78.2	85.84
1985	77PSL3-3 / F3TA 9F024 CA	58.88	55.44	62.16	71.78	60.72	38.4	68.4	107.8	81.6
	77PSL3-2 / F58A 9F024 AA									
1986	77PSL3-3 / F3TA 9F024 CA	72	67.84	106.6	73.2	124.5	131.6	87.12	107	90
	77PSL3-2 / F58A 9F024 AA	58.16	111.8	133.8	78.02	55.02	85.9	101.4	68.56	72.96

HAYES-DANA										
1992	77PSL3-1/F2AC 9F924 AA	0	0	0	0	0	0	0	0	0
1993	77PSL3-1/F2AC 9F924 AA	0	0	0	0	0	0	0	5.0	15.23
1994	77PSL3-1/F2AC 9F924 AA	0.0	0.0	0.0	0.0	4.0	4.0	0	0	0
SPECIFIC CRUISE										
1995	77PSL3-2/F58A 9F924 AA	0	0	0	0	0	0.238	0	0	0.714
1997	77PSL3-2/F58A 9F924 AA	0	0	0.238	0	0	0	0.238	0	0.238
1998	77PSL3-2/F58A 9F924 AA	0	0	0	0	0	0	0	0	0.238
HALITE INDUSTRIES										
1995	77PSL3-1/F2AC 9F924 AA 77PSL2-3/F3TA 9F924 CA	0	0	0	0.08	14.5 3.3	6.08	14.2 1.42	12.81 2.3	6.23 2.3
1997	77PSL2-3/F3TA 9F924 CA 77PSL3-1/F2AC 9F924 AA 77PSL2-1/F2VC 9F924 AB	3.09 0 0	0 9.62 0	2.1 8.52 0	2.8 18.8 0	0 5.7 0	0 5.7 0	9.8 8.68 0	3.3 14.75 0	0 7.37 0
1998	77PSL2-3/F3TA 9F924 CA 77PSL3-1/F2AC 9F924 AA 77PSL2-1/F2VC 9F924 AB	0	1.19	2.14	0.238	0	0	0	0	0
BOSCH BRAKING										
1995	77PSL3-1/F2AC 9F924 AA 77PSL3-3/F3TA 9F924 CA	0	0	0	0	0	0	0	0	0
1997	77PSL3-1/F2AC 9F924 AA 77PSL3-3/F3TA 9F924 CA	16.7 50.4	16.8 43.6	16.5 57.12	18.68 53.76	15.7 50.4	21.4 43.68	8.55 28.52	4.28 35.0	4.28 50.4
1998	77PSL3-1/F2AC 9F924 AA 77PSL3-3/F3TA 9F924 CA	50.4	50.4	57.12	63.8	47	57.8	47	50.4	63.84

"Note: for database

<u>Customer</u>	<u>SHIP TO LOC.</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
DANA CORP. 1992		77	0	0
		77	0	0
		77	0	0
ITT CORP 1992		77	0	0
		77	4.28	6.88
				1.04
1993		77	0.714	0
				0.962
1994		77	0.478	0.478
				1.19
1995		77	0	0
PITTS INDUSTRIALITE 1992		77	43.78	44.74
				18.68
		77	0	0
1993		77	16.88	24.75
				20.7
		77	0	0
				3.33
1994		77	8.08	0
				0
		77	34.08	18.8
				18.51
		77	0	0
				0.6
1995		77	8.04	2.85
				6.95
		77	1.19	0.714
				4.04
		77	0	0
				0
1996		77	0	0
				0
		77		

FORD MOTOR					
1982					
	Service (Brown Township)	77	0	0	0
	Laredo, Texas	77	9.52	17.73	15.23
	Brown Township/ Canada(Oakville)	Laredo/ Kansas City			
	Assey/Louisville	Wayne/Lorain			
	Norfolk				
	Brown Township	77	71.87	60.92	44.20
		77	0	0.47	0
1983					
	Service (Brown Township)	77	0.238	0	0
	Laredo, Texas	77	0	0	0
	Oakville/Brown Township	77	0.387	0.476	0.714
	Brown Township/ Canada(Oakville)	Laredo/ Kansas City			
	Assey/Louisville	Wayne/Lorain			
	Norfolk				
	Brown Township	77	0.714	0.838	0.962
		77	0	0	0
1984					
	Service (Brown Township)	77	0	0	0
	Laredo, Texas	77	0	0	0
	Oakville/Brown Township	77	30.7	20.94	10.94
	Brown Township/Laredo/Romulus	77	0	0	0
	Brown Township	77			
1985					
	Oakville	77	25.48	11.18	9.76
1986					
	Oakville/Dearborn/Brown Township	77	19.04	14.51	15.47
	Service (Brown Township)	77	0.476	0	0
	Brown Township/Laredo/Romulus	77	1.2	0	0
1987					
	Oakville/Dearborn/Brown Township	77	24.27	24.76	17.87
	Service (Brown Township)	77	0	0.714	0
	Brown Township/Laredo/Romulus	77	0.48	0.98	0.250
1988					
	Oakville/Dearborn/Brown Township	77	22.84	35.17	16.18
	Service (Brown Township)	77	0.85	0	0
	Brown Township/Laredo/Romulus	77	2.88	2.88	1.2
	Riverview-Ford Australia	77	0	3.38	0.286

KELSEY-HAYES CO.
1963

77 0 0 0

ALLIED SIGNAL
1963

1964	77	0	0.238	
	77	2.81	20.38	33.35
	77	0	0	4.5
1965	77	15.47	17.13	18.99
	77	50.46	43.68	40.32
1966	77	14.28	1.42	
	77	67.2	6.72	

TOKICO
1963

1964	77	00	60	40.16
	77	10.06	15.12	49.92
1965	77	61.2	46.32	47.82
1966	77	80.4	84.8	64.08
	77			0.02
1967	77	46	62.28	93.84
	77			
1968	77	65.04	69.12	44.4
	77			

HAYES-DANA				
1992	77	20.98		
1993	77	4.99	14.99	9.9
1994	77	0	0	0
SPECIFIC CRUISE				
1995	77	0	0	0
1997	77	0	0.478	0.288
1998	77	0.238	0	0
HALITE INDUSTRIES				
1996	77	18.32	2.6	6.4
	77		2.56	
1997	77	1.19	0	0
	77	0	0	
	77	0	0	1.19
1998	77	0	0	0
	77			
	77	0	0.238	
BOSCH BRAKING				
1996	77	0	11.42	22.84
	77	0	43.08	57.1
1997	77	0	0	0
	77	57.1	53.76	50.4
1998	77	80.64	53.7	70.5

77PS-Molded Base

Entry No.	Rev No.	ATE of EC	Own Sys	VALUE IMP Design Eng	PCB P/N	T/P/N	P/N 46515-
1	A	First Issue 9-Nov-90	Aegis	Replaced E Steve Office dated 06/26/90 Cellanex 4300	F2VC-6F92 77PSL-2-1 F6LC-6F92 77PSL2-3	2 (brown, #1) 1 (black, #1)	
2	B	8-Jan-91	Aegis	Cellanex 43 Steve Office CN 155597 Correct/clarify print views	F2VC-6F92 77PSL2-1 F6LC-6F92 77PSL2-3	2(brown,#1) 1(black #1)	
3	C	4-May-92	Aegis	Added (-3) Steve Office GE Noryl GTX 830 CRM 08996	F2AC-6F92 77PSL3-1 840A-6F92 77PSL4-1 F3DC-6F92 77PSL5-2	3 (natural #) 3 (natural #) 3 (natural #)	
4	D	21-May-92	Aegis	Added (-4 t Steve Office CRM 08126 (-4, -7) GE Noryl GTX 8 (-5, -6, -8) Cellanex 43	F2VC-6F92 77PSL2-1 F3DC-6F92 77PSL5-2 F3TA-6F92 77PSL3-3 F37A-3N82 87PSL2-2 F37A-3N82 87PSL2-3 94BP-3N82 87PSL11-2	2 (brown #2) 3 (natural #) 7 (red, #1) 6 (gray #1) 6 (gray #1) 6 (green #1)	
5	E	9-Jul-92	Aegis	Added -10 Steve Office (GE Noryl GTX 830) CRM 08991	F68A-6F92 77PSL3-2	10 (dk gray)	
6	F	26-Dec-93	Aegis	Clarified di ziz Rahman CRM 18918			
7	G	1-May-95	Cadnas	Dim added Iris Wagner CRM 28787			
8	H	20-May-95	Cadnas	Note 4 Iris Wagner Regnd was 50% CRM 29087			
9	J	13-Jan-97	CAD	Adjust 3 not Di Ha Added note CAD drag CRM 32504			
10	K	16-Dec-97	CAD	Change of Di Ha Remove 45-65 degree chamfer, CRM 38285			
11	L	23-Feb-98	CAD	Change .05 Di Ha chamfer to .030/.020 CRM 39167			

12	M	1-Apr-98	CAD	Added -11 GE Noryl GTX 630 CRM 39885	DI Hs	XW43-3NB	87PSL2-6	11 (brown)
13	N	6-May-98	CAD	Added 12 Cellonex 4300 ECN M40538	DI Hs	A60820	87PSL2-6	12 (white)

Material

Cellanex 4300

Cellanex 4300

Cellanex 4800

Cellanex 4300

GE Noryl GTX 830

GE Noryl GTX 830

GE Noryl GTX 830

GE Noryl GTX 830

Cellanex 4500

GE Noryl GTX 830

GE Noryl GTX 830

Cellanex 4300

Cellanex 4300

GE Noryl GTX 830

GE Noryl GTX 830

GE Noryl GTX 630

Cellonex 4900

3713 5299

"Note: for the 77PSL3-3 could not show all shipping locations — numbers for locations no longer on the d

<u>Customer</u>	<u>SHIP TO LOC.</u>	<u>Part Number</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>
DANA CORP. 1992		77PSL2-1 / F2VC 9F924 AB	31.89	67.11	63.38	0	0	0	0	0	0
		77PSL3-1 / P2AC 9F924 AA	0	0	0	0	22.84	0	74.73	39.98	0
		77PSL3-2 / F3DA 9F924 AA	0	0	0	0	0	0	0	0	0
ITT CORP 1992		77PSL2-1 / F2VC 9F924 AB	0.95	0	0	0	0	0	0	0	0
		77PSL5-2 / F3DZ 9F924 AA	0	0	0	0	0	0	0	0	0
1993		77PSL6-2 / F3DZ 9F924 AA	1.42	3.09	3.33	1.86	2.38	0.71	0	0	0.47
1994		77PSL6-2 / F3DZ 9F924 AA	1.42	0.714	1.0	1.42	1.42	0	0.71	0.71	0.714
1995		77PSL5-2 / F3DZ 9F924 AA	0.238	0.952	0.952	1.19	0	0	0	0	0
PITTS INDUSTRIALITE 1993		77PSL2-1 / F2VC 9F924 AB	40.93	43.31	0.47	31.89	32.38	3.33	36.22	53.78	21.42
		77PSL5-2 / F3DZ 9F924 AA	0	0	0	0	0	0	0	2.76	0
1993		77PSL2-1 / F2VC 9F924 AB	15.47	16.23	23.66	22.61	14.61	22.61	20.7	30.46	23.58
		77PSL3-1 / F2AC 9F924 AA	0	0	0	0	0	0	0	0	0.05
1994		77PSL2-1 / F2VC 9F924 AB	23.08	12.86	10.76	26.7	23.98	0.28	6.88	3.8	1.19
		77PSL3-1 / F2AC 9F924 AA	0	0	0	0	5.71	18.92	63.25	27.8	33.79
		77PSL2-3 / F3TA 9F924 CA	0	0	0	0	0	0	0	0	0
1994		77PSL3-1 / F2AC 9F924 AA	27.84	30.89	28.32	26.94	15.7	11.18	10.47	7.14	14.94
		77PSL2-3 / F3TA 9F924 CA	0.476	0	0	0	0	2.14	2.86	0.714	0.714
		77PSL2-1 / F2VC 9F924 AB	0	0	0.238	0.714	0.476	0	0	0	0
1995		77PSL3-1 / F2AC 9F924 AA	11.98	4.76	6.8	6.9	0	0	0	0	0
		77PSL2-3 / F3TA 9F924 CA	0	0	0	1.42	0	0	0	0	0
		77PSL2-1 / F2VC 9F924 AB									

FORD MOTOR												
1992												
	Service (Brown Township)	77P8L2-1 / F2VC 9F924 AB	0	0	0	0	0	0	0	0	0	0.47
	Laredo, Texas	77P8L2-3 / F3TA 9F924 CA	19.51	15.7	31.41	18.5	23.05	15.7	13.8	19.99	16.16	
	Brown Township/ Canada(Oakville)	Laredo/ Kansas City										
	Astey/Louisville	A/Wayne/Lorain										
	/Norfolk											
	Brown Township											
	77P8L3-3 / F3TA 9F924 CA	0	0	0	0	0	2.44	3.33	83.3	67.11		
	77P8L5-2 / F3DZ 9F924 AA	0	0	0	0	0	0	0	0	0	0	0
1993												
	Service (Brown Township)	77P8L2-1 / F2VC 9F924 AB	0	0	0	0	0	0	0	0	0	0
	Laredo, Texas	77P8L2-3 / F3TA 9F924 CA	1.87	0	0	0	0	0	0	0	0	0
	Oakville/Brown Township											
	Brown Township/ Canada(Oakville)	Laredo/ Kansas City										
	Astey/Louisville	A/Wayne/Lorain										
	/Norfolk											
	Brown Township											
	77P8L3-3 / F3TA 9F924 CA	38.28	41.65	53.75	44.58	58.31	42.84	23.56	32.45	0.47		
	77P8L5-2 / F3DZ 9F924 AA	0	0.71	0	0	0	0	0	0	0	0	0
1994												
	Service (Brown Township)	77P8L2-1 / F2VC 9F924 AB	0.238	0	0	0	0	0	0	0.71	0	
	Laredo, Texas	77P8L2-3 / F3TA 9F924 CA	0	0	0	0	0	0	0	0	0	
	Oakville/Brown Township											
	Brown Township/Laredo/Romulus											
	Brown Township											
	77P8L3-2 / F3TA 9F924 AA	1.42	8.38	11.42	17.81	26.94	18.66	10.94	26.4	24.27		
	77P8L3-3 / F3TA 9F924 CA	3.8	0.811	1.18	1.19	1.9	1.42	0.71	0.04	0.238		
	77P8L5-2 / F3DZ 9F924 AA											
1995												
	Oakville	77P8L3-2 / F3TA 9F924 AA	10.89	18.51	18.89	21.18	20.52	22.37	14.75	20.7	22.37	
1996												
	Oakville/Dearborn/Brown Township	77P8L3-2 / F3TA 9F924 AA	14.04	18.09	21.66	26.41	21.85	18.61	14.82	27.37	18.08	
	Service (Brown Township)	77P8L2-1 / F2VC 9F924 AB	0	0	0	0	0.238	0	0	0	0	
	Brown Township/Laredo/Romulus	77P8L3-3 / F3TA 9F924 CA	0	0	0	0	0	0	0	0	0	
1997												
	Oakville/Dearborn/Brown Township	77P8L3-2 / F3TA 9F924 AA	21.18	21.42	27.8	24.03	22.84	27.37	4.76	26.41	25.94	
	Service (Brown Township)	77P8L2-1 / F2VC 9F924 AB	0	0	0	0	0.714	0	0	0	0	
	Brown Township/Laredo/Romulus	77P8L3-3 / F3TA 9F924 CA	0	0	0	0.48	0	0	0.48	1.2	0	
1998												
	Oakville/Dearborn/Brown Township	77P8L3-2 / F3TA 9F924 AA	14.76	20.76	26.48	22.84	20.56	21.89	1.19	11.9	10.47	
	Service (Brown Township)	77P8L2-1 / F2VC 9F924 AB	0	0.882	0	0	0	0	0	0.476	0	
	Brown Township/Laredo/Romulus	77P8L3-3 / F3TA 9F924 CA	2.4	0.48	0.72	1.9	0.72	1.82	0.98	1.92	2.18	
	Riverview-Ford Australia	77P8L4-1 / 94DA 9F924 AA	0	0	11.9	0.238	14.38	0	0	2.85	0.75	

KELSEY-HAYES CO.
1983

	77PSL2-1 / F2VC 9F824 AB	4.99	4.04	5.23	2.6	2.6	3.67	0.95	0	0
--	--------------------------	------	------	------	-----	-----	------	------	---	---

ALLIED SIGNAL
1983

	77PSL3-3 / F3TA 9F824 CA	0	0	0.238	0	0	0.238	0	0	0
--	--------------------------	---	---	-------	---	---	-------	---	---	---

1984

	77PSL3-3 / F3TA 9F824 CA	0.828	0.238	0	0.476	6.9	0	0.952	0.95	0
--	--------------------------	-------	-------	---	-------	-----	---	-------	------	---

	77PSL3-1 / F2AC 9F824 AA	0	0	0	0.06	0.06	0	0	0.05	0
--	--------------------------	---	---	---	------	------	---	---	------	---

1985

	77PSL3-1 / F2AC 9F824 AA	2.6	0	0	0	0.952	15.7	15.47	0	8.56
--	--------------------------	-----	---	---	---	-------	------	-------	---	------

	77PSL3-3 / F3TA 9F824 CA	68.44	75.12	23.76	73.88	68.16	60.48	16.8	43.69	45.12
--	--------------------------	-------	-------	-------	-------	-------	-------	------	-------	-------

1986

	77PSL3-1 / F2AC 9F824 AA	18.00	22.84	21.42	17.13	19.99	18.66	12.85	9.99	17.13
--	--------------------------	-------	-------	-------	-------	-------	-------	-------	------	-------

	77PSL3-3 / F3TA 9F824 CA	57.12	57.12	53.76	38.96	47.04	53.76	30.24	33.5	60.48
--	--------------------------	-------	-------	-------	-------	-------	-------	-------	------	-------

TOKICO

1983

	77PSL3-3 / F3TA 9F824 CA	0	0	0	1.5	0	2	30	20	60
--	--------------------------	---	---	---	-----	---	---	----	----	----

1984

	77PSL3-3 / F3TA 9F824 CA	20.16	25.5	72.86	72.72	70.08	35.04	85.44	70	45.12
--	--------------------------	-------	------	-------	-------	-------	-------	-------	----	-------

1985

	77PSL3-3 / F3TA 9F824 CA	74.86	85.04	30	54	49.68	54.48	92.58	79.2	86.84
--	--------------------------	-------	-------	----	----	-------	-------	-------	------	-------

1986

	77PSL3-3 / F3TA 9F824 CA	66.26	66.44	62.16	71.76	60.72	38.4	68.4	107.8	81.6
--	--------------------------	-------	-------	-------	-------	-------	------	------	-------	------

	77PSL3-2 / F58A 9F824 AA									
--	--------------------------	--	--	--	--	--	--	--	--	--

1987

	77PSL3-3 / F3TA 9F824 CA	72	67.84	105.6	78.2	124.6	131.8	87.12	107	90
--	--------------------------	----	-------	-------	------	-------	-------	-------	-----	----

	77PSL3-2 / F58A 9F824 AA									
--	--------------------------	--	--	--	--	--	--	--	--	--

1988

	77PSL3-3 / F3TA 9F824 CA	68.16	111.8	138.8	79.82	55.92	85.8	101.8	88.95	72.96
--	--------------------------	-------	-------	-------	-------	-------	------	-------	-------	-------

	77PSL3-2 / F58A 9F824 AA									
--	--------------------------	--	--	--	--	--	--	--	--	--

HAYES-DANA										
1982	77PSL3-1/F2AC 9F924 AA	0	0	0	0	0	0	0	0	0
1983	77PSL3-1/F2AC 9F924 AA	0	0	0	0	0	0	0	5.0	16.23
1984	77PSL3-1/F2AC 9F924 AA	8.9	8.9	8.9	8.9	4.9	4.9	0	0	0
SPECIFIC CRUISE										
1985	77PSL3-2/F58A 9F924 AA	0	0	0	0	0	0.238	0	0	0.714
1987	77PSL3-2/F58A 9F924 AA	0	0	0.238	0	0	0.238	0	0.238	
1988	77PSL3-2/F58A 9F924 AA	0	0	0	0	0	0	0	0	0.238
HILITE INDUSTRIES										
1986	77PSL3-1/F2AC 9F924 AA 77PSL2-3/F3TA 9F924 CA	0	0	0	8.00	14.5 3.3	8.68	14.2 1.42	12.51 2.3	5.23 2.3
1987	77PSL2-3/F3TA 9F924 CA 77PSL3-1/F2AC 9F924 AA 77PSL2-1/F2VC 9F924 AB	3.00 0 0	0 8.52 0	2.1 8.52 0	2.6 18.0 0	0 6.7 0	0 6.7 0	8.8 8.50 0	8.3 14.75 0	0 7.37 0
1988	77PSL2-3/F3TA 9F924 CA 77PSL3-1/F2AC 9F924 AA 77PSL2-1/F2VC 9F924 AB	0	1.10	2.14	0.238	0	0	0	0	0
BOSCH BRAKING										
1986	77PSL3-1/F2AC 9F924 AA 77PSL3-3/F3TA 9F924 CA	0	0	0	0	0	0	0	0	0
1987	77PSL3-1/F2AC 9F924 AA 77PSL3-3/F3TA 9F924 CA	15.7 60.4	18.0 43.5	18.5 57.12	18.88 53.70	15.7 60.4	21.4 43.68	8.68 23.52	4.28 26.9	4.28 60.4
1988	77PSL3-1/F2AC 9F924 AA 77PSL3-3/F3TA 9F924 CA	60.4	60.4	67.12	63.6	47	57.8	47	60.4	63.84

"Note: for 10 basis

<u>Customer</u>	<u>SHIP TO LOC.</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>
DANA CORP. 1992		77 0 0 0	77 0 0 0	77 0 0 0
ITC CORP 1992		77 0 0 0	77 4.28 6.99 1.04	
1993		77 0.714 0 0.962		
1994		77 0.476 0.476 1.19		
1995		77 0 0 0		
PITTS INDUSTRIALITE 1992		77 43.79 44.74 18.68	77 0 0 0	
1993		77 16.00 24.75 20.7	77 0 0 3.33	
1994		77 6.09 0 0	77 34.03 16.8 19.61	77 0 0 0.5
1995		77 0.04 2.85 5.85	77 1.18 0.734 4.04	77 0 0 0
1996		77 0 0 0	77 0 0 0	77

FORD MOTOR					
1982	Service (Brown Township)	77	0	0	0
	Laredo, Texas	77	9.52	17.73	15.23
	Brown Township/ Laredo/ Canada(Oakville) Kansas City				
	Assey/Louisville Wayne/Lorain				
	Norfolk	77	71.87	60.92	44.26
	Brown Township	77	0	0.47	0
1983	Service (Brown Township)	77	0.238	0	0
	Laredo, Texas	77	0	0	0
	Oakville/Brown Township	77	0.387	0.478	0.714
	Brown Township/ Laredo/ Canada(Oakville) Kansas City				
	Assey/Louisville Wayne/Lorain				
	Norfolk	77	0.714	0.633	0.652
	Brown Township	77	0	0	0
1984	Service (Brown Township)	77	0	0	0
	Laredo, Texas	77	0	0	0
	Oakville/Brown Township	77	30.7	20.84	10.84
	Brown Township/Laredo/Romulus	77	0	0	0
	Brown Township	77			
1985	Oakville	77	25.46	11.18	9.75
1986	Oakville/Dearborn/Brown Township	77	19.04	14.51	15.47
	Service (Brown Township)	77	0.478	0	0
	Brown Township/Laredo/Romulus	77	1.2	0	0
1987	Oakville/Dearborn/Brown Township	77	24.27	24.75	17.37
	Service (Brown Township)	77	0	0.714	0
	Brown Township/Laredo/Romulus	77	0.48	0.98	0.259
1988	Oakville/Dearborn/Brown Township	77	22.84	28.17	16.18
	Service (Brown Township)	77	0.96	0	0
	Brown Township/Laredo/Romulus	77	2.68	2.68	1.2
	Rivervale/Ford Australia	77	0	3.33	0.238

KELSEY-HAYES CO.
1983

77 0 0 0

ALLIED SIGNAL
1983

1984	77	0	0.238	
	77	2.81	20.38	33.36
	77	0	0	4.5
1985	77	15.47	17.13	19.98
	77	80.48	43.58	40.32
1986	77	14.28	1.42	
	77	67.2	6.72	

TOKICO
1983

1984	77	60	50	40.16
	77	10.08	15.12	49.92
1985	77	61.2	48.32	47.52
1986	77	88.4	64.8	64.08
	77			0.02
1987	77	48	62.28	83.84
	77			
1988	77	85.04	89.12	44.4
	77			

HAYES-DANA				
1982	77	29.96		
1983	77	4.99	14.00	0.0
1984	77	0	0	0
SPECIFIC CRUISE				
1985	77	0	0	0
1987	77	0	0.476	0.236
1988	77	0.236	0	0
HEILITE INDUSTRIES				
1986	77	16.32	2.0	6.4
	77		2.66	
1987	77	1.19	0	0
	77	0	0	
	77	0	0	1.19
1988	77	0	0	0
	77			
	77	0	0.236	
BOSCH BRAUNG				
1986	77	0	11.42	22.84
	77	0	48.66	57.1
1987	77	0	0	0
	77	67.1	53.76	50.4
1988	77			
	77	80.64	53.7	70.6

TYPICAL / PMA SPECIA														
1007	TYP13-4 / PTA/EPIC/CA	23	10.04	10.04	70.2	124.06	121.0	87.1	107	10	48	48.25	53.04	7 (red, 40) OE Methyl OTX 600
	TYP13-4 / PTA/EPIC/AA													10 (blue, 40) OE Methyl OTX 600
1008	TYP13-5 / PTA/EPIC/CA	80.0	111.04	111.04	70.02	65.02	40.0	70.0	110.0	110.0	60.0	60.12	44.4	7 (red, 40) OE Methyl OTX 600
	TYP13-5 / PTA/EPIC/AA													10 (blue, 40) OE Methyl OTX 600
HARDWARE														
1002	TYP13-6 / PTA/EPIC/AA	0	0	0	0	0	0	0	0	0	0	0	0	3 (yellow, 40) OE Methyl OTX 600
1003	TYP13-6 / PTA/EPIC/CA	0	0	0	0	0	0	0	0	0	0	0	0	3 (yellow, 40) OE Methyl OTX 600
1004	TYP13-7 / PTA/EPIC/AA	80	11.0	11.0	9.0	49	41	0	0	0	0	0	0	3 (yellow, 40) OE Methyl OTX 600
SPECIFIC CIRCUITS														
1005	TYP13-8 / PTA/EPIC/AA	0	0	0	0	0	0.000	0	0	0.004	0	0	0	10 (blue, 40) OE Methyl OTX 600
1007	TYP13-9 / PTA/EPIC/AA	0	0	0.000	0	0	0.000	0	0.000	0	0.000	0	0	10 (blue, 40) OE Methyl OTX 600
1008	TYP13-9 / PTA/EPIC/AA	0	0	0	0	0	0	0	0	0	0	0	0	10 (blue, 40) OE Methyl OTX 600
HARDWARE														
1001	TYP13-10 / PTA/EPIC/AA	0	0	0	0.00	10.0	10.00	14.0	12.01	9.00	10.02	2.0	6.4	3 (yellow, 40) OE Methyl OTX 600 1 (black, 40) Colorless 400
1007	TYP13-11 / PTA/EPIC/CA	4.00	0	2.1	2.6	0	0	3.0	2.5	0	1.15	0	0	1 (black, 40) 3 (yellow, 40) OE Methyl OTX 600 3 (yellow, 40) Colorless 400
	TYP13-11 / PTA/EPIC/AA	0	0.00	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0	0	0	3 (yellow, 40) Colorless 400
1008	TYP13-11 / PTA/EPIC/AA	0	1.00	2.14	0.000	0	0	0	0	0	0	0	0	1 (black, 40) 3 (yellow, 40) OE Methyl OTX 600 2 (yellow, 40) Colorless 400
BRIGHTENERS														
1006	TYP13-12 / PTA/EPIC/AA	0	0	0	0	0	0	0	0	0	0	11.62	22.84	3 (yellow, 40) OE Methyl OTX 600
	TYP13-12 / PTA/EPIC/CA	0	0	0	0	0	0	0	0	0	0	40.00	67.1	7 (red, 40) OE Methyl OTX 600
1007	TYP13-13 / PTA/EPIC/AA	15.7	20.0	18.0	18.06	16.7	21.0	18.0	17.0	17.0	0	0	0	3 (yellow, 40) OE Methyl OTX 600 3 (yellow, 40) Colorless 400
	TYP13-13 / PTA/EPIC/CA	50.4	60.0	47.72	50.70	50.4	61.00	50.4	50.4	50.4	0	0	0	7 (red, 40) OE Methyl OTX 600
1008	TYP13-14 / PTA/EPIC/AA	50.4	50.0	47.32	50.0	47	50.2	47	50.4	50.4	0.00	28.7	70.0	5 (yellow, 40) OE Methyl OTX 600 7 (red, 40) OE Methyl OTX 600

11 (page 1 of 4) - 04 May 2006

12 (page 2 of 4) - October 2006

3713 8311

77PS-Molded Base

<u>Entry No.</u>	<u>Rev No.</u>	<u>ATE of EC</u>	<u>Draw Sys</u>	<u>Value IMP Devlon Eng</u>	<u>FORD P/N</u>	<u>T1P/N</u>	<u>P/N 48615</u>
1	A	First Issue 9-Nov-90	Angle	Replaced E Steve Office dated 08/26/90 Callanex 4300	F2VC-9F92 77PSL-2-1 F6LC-9F92 77PSL2-3	2 (brown, #1) 1 (black, #1)	
2	B	8-Jan-91	Angle	Callanex 43 Steve Office CN 155597 Correct polarity print views	F2VC-9F92 77PSL2-1 F6LC-9F92 77PSL2-3	2(brown, #2) 1 (black, #1)	
3	C	4-May-92	Angle	Added (-3) Steve Office GE Noryl GTX 630 CRM 08866	F2AC-9F92 77PSL3-1 94DA-9F92 77PSL4-1 F3DC-9F92 77PSL5-2	3 (natural #1) 3 (natural #1) 3 (natural #1)	
4	D	21-May-92	Angle	Added (-4) Steve Office CRM 09125 (-4, -7) GE Noryl GTX 6 (-5, -6, -8, -9) Callanex 43	F2AC-9F92 77PSL3-1 F2VC-9F92 77PSL2-1 F3DC-9F92 77PSL5-2 F3TA-9F92 77PSL3-3 F3TA-9F92 87PSL2-2 F3TA-9F92 87PSL2-3 94BP-9F92 87PSL11-2	3 (natural #1) 3 (brown #2) 3 (natural #1) 7 (red, #1) 5 (gray #1) 6 (gray #1) 8 (green #1)	
5	E	9-Jul-92	Angle	Added -10 Steve Office (GE Noryl GTX 630) CRM 09961	F58A-9F92 77PSL3-2	10 (dk gray)	
6	F	29-Dec-93	Angle	Clarified dL size Rahman CRM 16919			
7	G	1-May-96	Cadras	Dim added Hrls Wagner CRM 28787			
8	H	20-May-96	Cadras	Note 4 Hrls Wagner Regrind was 50% CRM 29087			
9	J	13-Jun-97	CAD	Adjust 2 not D1 Ha Added note CAD drawing CRM 32804			
10	K	16-Dec-97	CAD	Change dL D1 Ha Remove 45-65 degrees chamfer, CRM 32825			
11	L	23-Feb-98	CAD	Change .06 D1 Ha chamfer to .030/.020 CRM 39157			

12	M	1-Apr-98	CAD	Added -11 GE Noryl GTX 830 CRM 39986	DI Ha	XW43-3NB	87PSL2-8	11 (brown #
13	N	6-May-98	CAD	Added 12 Cellonex 4900 ECN M40636	DI Ha	A80620	87PSL2-8	12 (white #

Material

Cellanex 4300

Cellanex 4300

Cellanex 4300

Cellanex 4300

GE Noryl GTX 830

GE Noryl GTX 830

GE Noryl GTX 830

GE Noryl GTX 830

Cellanex 4300

GE Noryl GTX 830

GE Noryl GTX 830

Cellanex 4300

Cellanex 4300

GE Noryl GTX 830

GE Noryl GTX 830

GE Noryl GTX 630

Cellonex 4300

3713 6315