

ODI Action Number: **PE00-043**

Date: **10-20-2000**

Subject: **FORD MOTORS COMPANY
1998 - 1999 CROWN VICTORIA POLICE
INTERCEPTOR**

ALLEGED REAR AXLE TRAILING ARM FRAME MOUNTING FAILURE

This file contains consumer letters received by the National Highway Traffic Safety Administration which complain of the alleged defect that is the subject of this Preliminary Evaluation. It also contains correspondence between this agency and the manufacturer on the subject. Portions of that correspondence may be withheld where the manufacturer has claimed that they are confidential pursuant to the Freedom of Information Act, 5 U.S.C. § 552(b)(4), which exempts from disclosure confidential commercial and financial information. Additional documents relating to this Preliminary Evaluation may exist, but have not been included in this public file.

If you have any information or concerns you would like to discuss with NHTSA staff, please call the

toll free AUTO SAFETY HOTLINE

800-424-9393

(in the Washington, DC metropolitan area, please call 202-366-0123)

Also, if you wish to discuss the investigation with NHTSA staff, the HOTLINE contact representative will have a technical staff member return your telephone call.



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

ODI RESUME

INVESTIGATION: PE00- 043
 SUBJECT: Rear Axle Trailing Arm Frame Mounting Failure
 PROMPTED BY: IE00-078 - Peter C. Ong
 PRINCIPAL INVESTIGATOR: S. B. York

DATE OPENED: 20-OCT-00

MANUFACTURER: Ford Motor Company
 MODEL(S): Crown Victoria Police Interceptor
 MODEL YEAR(S): 1998-1999
 VEHICLE POPULATION: 25,000 (Est.)

PROBLEM DESCRIPTION: Reportedly, the frame mounting bracket for the rear axle trailing arm frame develops cracks and trailing arms have completely detached from the frame.

FAILURE REPORT SUMMARY

	ODI	MANUFACTURER	TOTAL
REPORTS:	29	0	29(Note)
CRASHES:	0	0	0
#INJURIES:	0	0	0
#FATALS:	0	0	0
FIELD REPORTS:	0	0	0

NOTE: Three reports of complete separation and 26 reports of cracking.

ACTION: A preliminary evaluation has been opened.

ENGINEER: S B York DIV CHF: Thomas Logan OFC DIR: [Signature]
10/2/00 10/2/00 10-20-00
 DATE DATE DATE

SUMMARY: Five law enforcement agencies have reported cracking at the welds that secure the rear axle trailing arm to the vehicle frame. In three incidents, it is reported that the arm completely detached from the frame. Ford has not issued a Technical Service Bulletin but has developed a frame reinforcement service kit (F8AZ-5L005-AA) and has issued a Special Service Message (#12714) to address "cosmetic" cracks in all 1998 and 1999 Crown Victoria and Grand Marquis Town Cars operated under severe service conditions.

2-1119
10-20-00



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

ODI SCREEN RESUME

IDENTIFICATION: IE00-078
SUBJECT: Rear Trailing Arm Mount Detachment
PROMPTED BY: VOQ
INVESTIGATORS: Peter C. Ong

DATE OPENED: 27-Sep-2000

MANUFACTURER: Ford Motor Company MODEL: Crown Victoria Interceptor
VEHICLE POPULATION: Total - TBD MODEL YEAR(S): 1998-1999

PROBLEM DESCRIPTION: The rear lower trailing arm mount allegedly detached from the frame

FAILURE REPORT SUMMARY

	SYMPTOM #1	SYMPTOM #2	N/A
COMPLAINTS/REPORTS:	3	26	
- DRIVER-SIDE	0	0	
- PASSENGER-SIDE	3	0	
- UNSPEC.	0	26	
# INJURIES:	0	0	
# CRASH:	0	0	
OTHERS:			

DESCRIPTION OF SYMPTOM (S): #1 Rear trailing arm mount from the frame completely detached.
#2 Rear trailing arm mount cracked.

ACTION: Recommend opening an investigation

INVESTIGATOR: Peter C. Ong
DATE: 9/27/00

DIVISION CHIEF: [Signature]
DATE: 9/27/00

SUMMARY: ODI has received reports from five law enforcement and emergency response jurisdictions alleging that the rear lower trailing arm mount detached from the vehicle frame due to inadequate welding bond between the mount and the vehicle frame.

There has been no Technical Service Bulletin or recall issued by Ford for the subject vehicle concerning this issue. However, Ford issued a Special Service Message about cosmetic cracks in the frame at the rear trailing arm when operated under severe duty conditions.

Detachment of the rear trailing arm on police vehicles may cause vehicle instability during high speed pursuit leading to a possible loss of vehicle control. An investigation is recommended to ascertain the scope of the issue.

DEC 1 2 11

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Louis Camp, Director
Automotive Safety and Engineering Standards Office
Ford Motor Company
Fairlane Plaza South
330 Town Center Drive, Suite 400
Dearborn, MI 48126

NSA-12sby
PE00-043

Dear Mr. Camp:

This letter is to advise you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) is conducting a Preliminary Evaluation of Rear Axle Trailing Arm Frame Mounting Failure in Model Year 1998 and 1999 Crown Victoria Police Interceptor vehicles.

NHTSA has received 4 complaint reports (copies enclosed) alleging either total failure or cracking of the subject frame mounting. Unless otherwise stated in the text, the following definitions apply to this information request:

- **Subject vehicles:** 1998 and 1999 Crown Victoria Police Interceptor vehicles.
- **Ford:** Ford Motor Company, all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Ford (including all business units and persons previously referred to), who are or, in or after 1996, were involved in any way with any of the following related to the alleged defect in the subject vehicles:
 - a. design, engineering, analysis, modification or production (e.g. quality control);
 - b. testing, assessment or evaluation;
 - c. consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analyses, claims, or lawsuits; or

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d. communication to, from or available to zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.

- **Alleged defect:** any reports of rear trailing arm failures, rear trailing arm mounting bracket failures or cracking, or frame cracking in the area where the trailing arms are attached that have resulted in allegations of handling problems or collisions.
- **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all nonidentical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by the manufacturer, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a nonidentical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by the manufacturer or not. If a document is not in the English language, provide both the original document and an English translation of the document.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests.

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In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Please repeat the applicable request verbatim above each response. After Ford's response to each request, identify the source of the information and indicate the last date the source updated the information prior to the preparation of the response. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the Information Request letter (including the subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

If Ford cannot respond to any specific request or subpart thereof, please state the reason why it is unable to do so. If Ford claims that any document or other information or material responsive to any of the following items need not be provided to NHTSA because it is privileged or the work product of an attorney, separately by information request number, for each document or other information or material state the nature of that information or material and identify any document in which it is found by date, subject or title, name and position of the person from, and the person to whom it was sent, and the name and position of any other recipient. Ford must also describe the basis for the claim, and explain why Ford believes it applies.

1. State the total number of the subject vehicles that Ford has sold in the United States broken down by model and model year.
2. State the number and provide copies of the following and all documents related to the following, from all sources, of which Ford is aware and which relate, or could relate to the alleged defect in the subject vehicles:
 - a. owner/fleet reports of collision or handling incident complaints;
 - b. field reports of collision or handling incident complaints;
 - c. subrogation claims involving collisions or handling incidents;
 - d. lawsuits involving collisions or handling incidents; and
 - e. third-party arbitration proceedings involving collisions or handling incidents (where Ford is a party to the arbitration).

Please list and collate your response for each category ("a" through "e") by date of claim and the state in which the failure occurred. Please provide for each item in this question the incident date, mileage of vehicle at time of incident (if known), approximate age of vehicle or model year, disposition of matter, and where a fleet vehicle is involved, the name of the fleet, and the name and telephone number of a contact person at that fleet. For items "a" through "c," please provide all related information and reports whether or not Ford has verified each one. For items "d" and "e," summaries are acceptable. Please identify in the summary the caption, court, docket number, and filing date of each lawsuit if a copy of the complaint initiating the lawsuit is not provided.

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4. Furnish Ford's opinion of the alleged defect in the subject vehicles. Include an assessment of the following:
 - a. an analysis of how and why the failures occur; and
 - b. the risk to motor vehicle safety presented by the alleged defect.

This letter is being sent to Ford pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49. Ford's failure to respond promptly and fully to this letter could subject Ford to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. Other remedies and sanctions are available as well.

Ford's response to this letter, in duplicate, must be submitted to this office by January 19, 2001. Please include in Ford's response the identification codes referenced on page one of this letter. If Ford finds that it is unable to provide all of the information requested within the time allotted, Ford must request an extension from Thomas Z. Cooper at (202) 366-5218 no later than five business days before the response due date. If Ford is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information Ford then has available, even if Ford has received an extension.

If Ford considers any portion of its response to be confidential information, 49 CFR Part 512, "Confidential Business Information," requires that Ford submit two copies of those document(s) containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted, to the Office of Chief Counsel, National Highway Traffic Safety Administration, Room 5219 (NCC-30), 400 Seventh Street, SW, Washington, D.C. 20590. In addition, Ford must provide supporting information for the request for confidential treatment in accordance with part 512.4(b) and (e) and include the name, address, and telephone number of a representative to receive a response from the Chief Counsel

If you have any technical questions concerning this matter, please call Scott B. York of my staff at (202) 366-5209.

Sincerely,

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

Enclosures: ODI #'s 555117, 705645, 867404, and 555118.

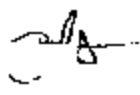
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Attachment 1

**DENVER POLICE DEPARTMENT
INTER-DEPARTMENT
CORRESPONDENCE**

555117

TO: Peter Ong, U.S. Department of Transportation
FROM:
DATE: Friday, September 15, 2000
SUBJECT: Ford Crown Victoria-Rear trailing arm failure



The Denver Police Fleet Maintenance Facility observed failures of the right rear trailing arm assembly as it pertains to the 1998-1999 Police Interceptor model of the Ford Crown Victoria. The vehicles effected were in the 40,000 mile range that arrived at this facility as a result of a repair report indicating that the right rear trailing arm was dragging on the road surface.

Subsequent investigation into this issue revealed that the stresses of police utility driving likely caused a weld to fail along the right side of the vehicle frame. In the City of Denver it is not uncommon for police vehicles to go over curbs and through "California" style drains located in the roads. As a result, the frames and suspensions of vehicles assigned to this service receive extraordinary stresses. These stresses are likely to commonly occur in any police fleet. These stresses, again, likely caused the bracket welded to the right side of the frame of the Crown Victoria to separate from frame. The separation, in the opinion of this facility, was the result of an inadequate weld that attaches the bracket to the vehicle frame. The weld would begin to crack on the forward surface of the bracket. This bracket connects the trailing arm to the frame. The crack would go undetected by the operator until the bracket peeled away from the frame causing the trailing arm to fall.

This facility observed this consistent type of failure in 6 of 500 assigned vehicles and took corrective action. The trailing arm failure effects the handling characteristics of the car and as a result, this facility considered this to be a safety issue. This prevented the cars from being put back in service until the trailing arm assembly was re-connected to the frame. One vehicle was sent to Ford for warranty work. The remainder were repaired by this facility by building a heavier bracket and welding this new bracket to the frame.

No accidents were attributed to this failure and no police pursuits were terminated as a result of this failure.

As a result of the above, this facility routinely checks the trailing arm bracket welds on vehicles that pass through this facility.



Vehicle Owner's Questionnaire 705645 submitted 4/15/99 8:20:58 AM

Owner Information

home phone :
 business phone :
 fax :
 email :
 Springfield, PA :

Have NHTSA send signature card for authorization? No

Vehicle Information

vin 2FAFP71WXXX109276 /
 make FORD model CROWN VICTORIA PO year 1999
 odometer 4272
 purchase date 12/98 new or used? New body style 4-Door
 dealer Warnock Fleet
 175 Route 10 - PO box 524
 East Hanover, NJ 07936-0524
 973 8-84 -2100
 engine size 4.6L cylinders 8 fuel injection Y turbo N fuel type Gas
 antilock br. N cruise control N drive train Front
 driver's airbags passenger's airbags seat belts
 front Y front Y 3-point N
 side N side N 2-point N
 motorized N

Incident(s)

Incident Number 1

failed component / part details

major assembly POWER TRAIN: REAR AXLE ASSEMBLY

description rear trailing arm - bolt worked loose

location		original	number of failures	date of failure	mileage at failure	speed at failure	manufacturer contacted	NHTSA contacted
left/right	front/rear							
Right	Rear	Original	1	1/14/99	1000	35	N	N

incident details

airbags deployed number of persons injured number of fatalities estimated property damage police report filed
 accident fire driver's passenger's
 N N front N side N front N side N N

Tire Information

DOT number manufacturer name size

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Vehicle Owner's Questionnaire 705645

submitted 4/15/99 8:20:58 AM

Page 2

Comments

Vehicle is a police package Crown Victoria used for paramedic service. We began to notice the vehicle sway subtly with braking, acceleration, and road imperfections in Jan 1999. In March, the rear axle began to make a loud banging noise upon moderate acceleration from a stop. It was taken to Chapman Lincoln-Mercury, Baltimore Pike, Springfield, PA 19064 (610-544-0100), where the diagnosis of a loose/missing passenger side rear trailing arm was made. Apparently, a bolt had worked loose, and that side of the axle was basically held in place by the shock absorber and leaf spring. Obviously, this would adversely affect the high speed handling of the vehicle, or even cause the axle to break completely free, with potentially fatal implications. I would appreciate being informed of the outcome of this, preferably via E-mail. Thanks.

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DOT Auto Safety Hotline Vehicle Owner's Questionnaire (VOQ) U.S. Department of Transportation National Highway Traffic Safety Administration NATIONWIDE 1-888-DASH-2-DOT 1-888-327-4236 www.nhtsa.dot.gov/hotline		FOR AGENCY USE ONLY 155 Date Received 10-AUG-2000 Old or rt_cr _____ od_rt _____ up_itr _____ Reference No. 867404 Work Number _____ Home Number _____				
OWNER INFORMATION (Type or Print) _____ _____ RUTHERFORD NJ 626051						
Do you authorize NHTSA to provide a copy of report to the manufacturer of your vehicle? <input 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. Signature of Owner _____ Date _____						
VEHICLE INFORMATION						
Vehicle Ident. No. (VIN) <small>(Located at bottom of windshield on driver's side)</small> 2FAPF71W1WX119113		Vehicle Make FORD	Vehicle Model CROWN VICTORI	Vehicle Year 1998	Current Odometer Reading _____	
Purchase Date <input checked="" type="checkbox"/> New <input type="checkbox"/> Used	Dealer's Name _____ City _____ State _____ Zip Code _____		Engine Size (CID/CCA) _____ No Cylinders _____	<input type="checkbox"/> Turbo <input type="checkbox"/> Diesel <input type="checkbox"/> Gas <input type="checkbox"/> Fuel Injection	_____	
Transmission Type <input type="checkbox"/> Manual <input type="checkbox"/> Automatic	Antilock Brakes <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Restraint System <input type="checkbox"/> 3-Point Belt <input type="checkbox"/> Driverside Airbag <input type="checkbox"/> Passengerside Airbag <input type="checkbox"/> Motorbelt <input type="checkbox"/> 2-Point Belt	Cruise Control <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Drive Train <input type="checkbox"/> Front <input type="checkbox"/> Rear <input type="checkbox"/> 4-Wheel	Vehicle Type <input type="checkbox"/> Car <input type="checkbox"/> Van <input type="checkbox"/> Minivan <input type="checkbox"/> Other	Body Style <input type="checkbox"/> Sport UT <input type="checkbox"/> Truck <input type="checkbox"/> Motorcycle <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 02509000	Part Name(s) SUSPENSION:TANDEM AXLE:REAR		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 _____	Date(s) of Failure(s) <u>27-JUL-2000</u> Mileage at Failure(s) <u>85</u> Vehicle Speed at Failure(s) _____		Failed Part(s) Available? <input type="checkbox"/> Yes <input type="checkbox"/> No	NHTSA Previously Contacted? <input type="checkbox"/> Yes <input type="checkbox"/> No		
APPLICATION INCIDENT INFORMATION (Please describe in detail the incident(s), Failure(s), Crash(es), and injury(ies) on the back of this form)						
Crash <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fire <input type="checkbox"/> Yes <input checked="" 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)						
POLICE PACKAGE VEHICLE, WHILE DRIVING THE TRAILING ARM WHICH SECURE BY A BRACKET AND LINK TO THE AXLE AND TO FRAME, DEATTACH WHICH CAUSE THE REAR AXLE TO DROP WHICH MAY HAVE CAUSE A CRASH. PLEASE PROVIDE FURTHER INFORMATION.L						
CONTINUE ON BACK IF NEEDED						
The Privacy Act of 1974-Public Law 93-579 This information is requested pursuant to authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your 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 proceeds with administrative enforcement or litigation against a manufacturer, your response, or a statistical summary thereof, may be used in support of the agency's action.						

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**DEPARTMENT OF POLICE**

To: Peter Ong, US Department of Transportation

From: :

Re: Greenwich Police Department - Crown Victorias

Date: August 14, 2000

In follow up to your phone conversation today and per Chief Peter Robbins request, please find enclosed a copy of the report he did concerning problems experienced with our Crown Victorias.

If you have any questions regarding the contents, please contact us at (203) 622-8010.

Enclosure

**REPORT ON FATIGUE CRACKS/FRAME CRACKS
FORD CROWN VICTORIA POLICE INTERCEPTOR CRUISERS
GREENWICH POLICE DEPARTMENT**

On July 11th, 2000 a Greenwich Police Officer working the 4 x 12 shift in Unit #57 was dispatched to a motor vehicle accident on the Merritt Parkway @ North Street. The officer had cleared the accident and experienced the cruiser swerving back and forth seemingly losing control. The officer pulled the vehicle to the side of the highway and a wrecker was sent to tow it to the Fleet facility. The vehicle, a 1998 model, had 71,384 miles on the odometer at the time.

On July 12th, the vehicle was inspected and an initial assessment resulted in an opinion that the vehicle had struck something which caused the damage. A Police Lieutenant was sent to view the damage. It was determined that the vehicle had a broken trailing arm on the right rear of the vehicle and cracks in the frame. The Chief of Police then directed all police vehicles to be inspected on July 13th. On the afternoon of July 13th, only two vehicles had been inspected, Unit #56 (1999 with 64,579 miles) and Unit #59 (1999 with 92,824 miles). Upon learning this information, Chief Robbins and Officer VanIngen went to the Fleet facility to encourage a quicker inspection of the remaining vehicles.

By evening the following seven units were removed from service because of the discovery of cracks in the frames on both sides of the rear trailing arm assemblies.

Unit #1	1998	93,081
Unit #2	1998	90,171
Unit #3	1998	48,612
Unit #24	1998	78,851
Unit #56	1999	64,579
Unit #57	1998	71,384
Unit #59	1999	92,824

Due to the serious nature of this problem, a nationwide message was sent to all police agencies through our COLLECT system. Several agencies then contacted either the Greenwich Police Department or Fleet Operations to inquire about how to locate the problem.

Police Unit #45 had been taken out of service in early June. It had logged over 101,000 miles and was deemed unsafe for further operation; the engine needed to be replaced. On July 18th this vehicle was found to have the same type of damage when Fleet personnel decided to remove the right trailing arm from that vehicle and use it as a replacement for the broken trailing arm on Unit #57; no new parts were available at that time. On July 20th the Chief of Police directed that a new trailing arm be placed on Unit #57 rather than the arm removed from a vehicle already taken out of service.

A Ford technical specialist arrived in Greenwich on Saturday, July 15th, and with Fleet mechanics and a welder, all the cracks were repaired on the frames of the police units. The Ford representative informed us that another technician would arrive on Tuesday, July 18th, with steel plates and angled pieces to correct the apparent manufacturing problems. A Fax dated July 14th from Ford stated, "A few cases of this fatigue cracking have been reported on higher-mileage or heavily-loaded vehicles in other police fleets." The Police Chief informed the Fleet Director and the Ford technician that the vehicles would not be placed back on the road until all the repairs were complete and both had signed off on their relative safety for police use.

On July 18th another Ford technician arrived spending the afternoon and evening overseeing the modifications to the frames and trailing arm assemblies by the Fleet mechanics and a welder. The Chief of Police still refused to place the vehicles back into service because no reasonable written safety assurance was received from either Ford or the Fleet Director.

A meeting with the Town Attorney and First Selectman, subsequent to the repairs, resulted in a decision to replace the damaged units with current budgeted funds for vehicle replacement. On July 26th Unit #52, a 1998 model with 77,765 miles, was brought in for regular preventative maintenance. Cracks were found in the front-end area of the frame, and they were spot welded. The vehicle was returned to service, as it had been assigned to the Central Post, which logs fewer miles than many of the other cruisers.

On July 27th Unit #43, a 1999 model with 57,101 miles, was found to have cracks on the frame near the rear trailing arms. It was subsequently taken out of service and will be replaced.

On July 31st a meeting was held with the Town Attorney, Comptroller, First Selectman and Fleet Director concerning the problems with the police cruisers. A decision to replace the 1998/1999 model cars was agreed upon. The Fleet Director mentioned at the time, and it was later published in the Greenwich Post, that the Los Angeles Police Department had noticed the problem in "hundreds of its Crown Victorias

in January 2000; the cars were fixed and they never considered keeping the cars off the street." This is contradictory to our first memo received from Ford that stated a "few" cases were found. It also contradicts a statement made to me by the Ford technician on July 15th who stated that he knew of only five other cars with this type of problem to date, specifically broken trailing arms. I might add that Ford had not manufactured the steel pieces to be placed on our units until Friday, July 14th, or Monday, July 17th.

On August 10, 2000, we talked to Paul Bardon, Director of Police Transportation of the Los Angeles Police Department. Mr. Bardon oversees a fleet of six-hundred police cars serviced in twenty-two city-run garage operations. Currently the fleet consists of 98/99 Ford Crown Victorias. Their problem was first detected during the early part of 2000.

A "couple" of units were found to have cracks near the trailing arm assembly on the frames. Ford insisted the cracks were "cosmetic"; Bardon insisted they be repaired or replaced by Ford Motor Company. Ford manufactured plates and welded them to the frames of the cars at Ford dealerships. Since then, inspections have identified forty cars with similar cracks which are being repaired by local Ford dealers using factory-supplied "kits". The Los Angeles Police Department did not have any vehicles with severed trailing arms and "they could not afford to take any cars out of service". The press was never made aware of their problem.

I believe the problem with other police fleets is related to a technical memo with regard to cosmetic cracks on the front-end frames. It is important to note that Ford only issued a technical bulletin for the trailing arm problems after our problem was detected and carried by the media. The date of the bulletin was July 26, 2000; no technical bulletins are known to have preceded that bulletin.

The impact upon Police Department operations has resulted in the following problems:

- 1) Not enough units available when a full-shift complement is working.
- 2) A damaged vehicle is being utilized (Unit #3) to fill the void when a current working unit needs service. Unit #3 is a non-pursuit low-speed emergency replacement during service periods.
- 3) Unmarked vehicles being utilized to replace marked police cruisers.

GPD Report on Police Vehicles

- 4) Marked units have rear prisoner containment partitions. Officers utilizing unmarked cars must call for available marked cruisers for prisoner transportation.
- 5) Wasted administration hours (approximately one hundred) to manage fleet operations: vehicle assignments, service, and other transportation arrangements.
- 6) Assignment of trucks, special purpose vehicles to augment patrol operations.
- 7) Confusion with car assignments due to radio programming indicators within the dispatch center.
- 8) Requirement to rent a vehicle for a staff officer attending a three-month school.
- 9) Requesting personnel to use their privately owned vehicles for schools and seminars or undercover vehicles assigned to the Criminal Investigations Divisions.
- 10) Continual transfer of equipment from the trunks of marked, unmarked and under-cover vehicles.
- 11) Overtime hours related to vehicle transfers at working incidents and a police officer assigned to oversee fleet repairs and operations.
- 12) Confidence with Fleet Operations in question by Police Officers and Administrators.
- 13) Five major incidents have occurred during this period, which limited the Police Departments ability to respond to the situation promptly with equipment and personnel.
 - 3 Major accidents on the Connecticut Turnpike
 - 1 S.W.A.T. or Special Response Unit Call
 - 2 Major accidents on local roadwaysSome of these incidents required personnel to be dropped off at or near scenes, utilize trucks, or personal vehicles.

GPD Report on Police Vehicles

- 14) Impact on vehicles currently being utilized, i.e., mileage and serviceability.
- 15) Replacement of vehicles with a different fleet color which causes confusion for the public and further impacting what should be an orderly fleet changeover.
- 16) Wasted man-hours by supervisors arranging for vehicle replacements and equipment changeovers.
- 17) Overall morale and confidence issues with police officers and supervisors.
- 18) Diminished patrol capacity and activity with regard to surveillance and enforcement assignments.

August 11, 2000

AS OF 8/7/00

2000 Unmarked/Marked Ford Vehicles

Car No.		Mileage	Date in Service
46	Marked	11,156	03/22/00
55	Marked	8,733	05/10/00
54	Marked	10,095	04/26/00
53	Marked	15,600	04/06/00
51	Marked	14,572	03/30/00
44	Marked	11,659	04/19/00
20	Unmarked	7,343	03/21/00
40	Unmarked	5,655	03/29/00
50	Unmarked	5,832	04/24/00
30	Unmarked	6,535	04/06/00
58	Marked	34,310	12/30/99
42	Marked K-9	9,078	Replacement Due to accident 03/08/00

**Unmarked/Marked Ford Vehicles
1996 - 1999**

Car No.	Year	VIN	Mileage	Assignment	Replace
21	1996	2FALP71W3TX149535	60,633	Detective	
22	1996	2FALP71W1TX149534	46,407	Youth	X
23	1996	2FALP71W8TX149532	36,756	Youth	
31	1997	2FALP71WXVX214352	38,513	Detective	
32	1999	2FAFP71W8XX133849	17,428	Detective	
33	1996	2FALP71W4TX149530	86,931	Detective	X
34	1996	2FALP71WXTX149533	86,737	Detective	X
41	1996	2FALP71W6TX149531	57,589	Traffic	X
48	1994	1FM DU34X3RUB40141	61,085	Explorer	X
49	1994	1FM DU34X1RUB40140	78,210	Explorer	X

1998/99 Marked Cruisers Taken Out of Service

Car No.	Year	VIN	Mileage	Date Out of Service
45	1998	2FAFP71W9WX26021	101,000	6/26/00
56	1999	2FAFP71W9XX133845	64,579	7/13/00
57	1998	2FAFP71W2XX133844	71,384	7/11/00
59	1999	2FAFP71W9XX133844	92,824	7/13/00
1	1998	2FAFP71W4WX126024	93,081	7/13/00
2	1998	2FAFP71W7WX126020	90,171	7/13/00
3	1998	2FAFP71W9WX126018	48,612	7/13/00 (non pursuit use only)
43	1999	2FAFP71W4XX133847	55,386	7/27/00
24	1998	2FAFP71W8WX126026	78,851	7/13/00

1998/99 Marked Cruisers Still In Service

Car No.	Year	VIN	Mileage	Replace
			8/7/00	
52	1998	2FAFP71W6WX126025	78,933	X
47	1999	2FAFP71W5XX203887	23,672	



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

ODI RESUME

INVESTIGATION: PE00-043
 SUBJECT: Rear Axle Trailing Arm Frame Mounting Failure
 PROMPTED BY: IE00-078 - Peter C. Ong
 PRINCIPAL INVESTIGATOR: S. B. York

DATE CLOSED: 02-FEB-01
 DATE OPENED: 20-OCT-00

MANUFACTURER: Ford Motor Company
 MODEL(S): Crown Victoria Police Interceptor, Taxi, Natural Gas Vehicle, and Town Car Limousine
 MODEL YEAR(S): 1998-1999
 VEHICLE POPULATION: 186,920

PROBLEM DESCRIPTION: Reportedly, the frame mounting bracket for the rear axle trailing arm frame develops cracks and trailing arms have completely detached from the frame.

FAILURE REPORT SUMMARY

	ODI	MANUFACTURER	TOTAL
OWNER:	29	48	77
FIELD REPORTS:	0	48	48
CRASHES:	0	0	0
#INJURIES:	0	0	0
#FATALS:	0	0	0

NOTE:

ACTION: This preliminary evaluation has been closed.

ENGINEER: AB York DIV CHIEF: Thomas Longen OTC DIR: [Signature]
 DATE: 2/2/01 DATE: 2/2/01 DATE: 2-2-01

SUMMARY: See following page.

10/2/01

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SUMMARY: This investigation was based on reports from five law enforcement agencies reporting cracking at the welds that secure the rear axle trailing arm to the vehicle frame on 29 police vehicles. In three incidents, it was reported that the arm completely detached from the frame. Ford reported 48 additional owner reports and 48 field reports of cracking in the same location.

In response to ODI request, Ford conducted vehicle handling tests on the subject vehicles. The purpose of the tests was to assess the effect of the subject failures on vehicle handling. In the Ford evaluations, the lower trailing arm was completely unbolted from the frame bracket simulating a bracket fully separated from the vehicle frame. This failure mode represents the worst-case scenario based on field experience. The vehicle was driven through severe maneuvers including high speed lane change and handling maneuvers. The drive evaluations demonstrated that the effect on vehicle handling and stability was very minor and detectable. The vehicle remained stable and controllable through all maneuvers. It was concluded that the drive evaluations demonstrated that separation of a control arm does not cause loss of vehicle control. Ford also stated that the basic design of the rear suspension including the lateral Watts link, provides an inherently very stable system. In the worst-case scenario, a full trailing arm separation, there are still three other longitudinal arms and one lateral arm to constrain the rear suspension and thereby allow the driver to easily maintain control of the vehicle. NHTSA staff members, during a visit to Dearborn, Michigan, verified this design and test drove the vehicle with the disconnected trailing arm as described above.

Ford maintains that based on its testing and lack of allegations of collisions or handling problems contained in reports received by either ODI or Ford, that the subject failures do not represent a safety related problem.

However, in the interest of customer satisfaction, Ford will conduct a full field service campaign to inspect, repair, and modify all of the 186,920 subject vehicles. The repair procedure will include inspection for the presence of any cracks in the trailing arm bracket area and the addition of welded reinforcement gussets between the bracket and frame rail. On vehicles where cracks are identified, the cracks will be welded and additional reinforcing welds will be added in specific locations before the reinforcement gussets are welded in place. Ford will begin notifying owners by the week of February 5, 2001.

Based on the results of Ford's testing and the lack of reports of handling problems, a safety-related defect trend has not been identified at this time and further use of agency resources does not appear to be warranted. The closing of this investigation does not constitute a finding by NHTSA that no safety-related defect exists. The agency reserves the right to take further action on these models if warranted by the circumstances.

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YORK

PE00-043

<u>DATE</u>	<u>SUBJECT</u>	<u>PAGE NUMBERS</u>
10-20-00	OPENING RESUME (PROMPTED BY IE00-078)	(2) (3)
12-01-00	Letter to Ford from ODI. Request for information concerning alleged rear axle trailing arm frame mounting failure in 1998-1999 Crown Victoria Police Interceptor vehicles.	(4-7)
	ATTACHMENT	(8-19)
02-02-01	CLOSING RESUME	(20-21)