

EA03-005

8/27/03

Letter to

ODI

**GM634A**  
**EA03-005**

**ATTACHMENT "1"**

See INME-EA03-005-16044  
Memo to TIS

**GM634A**  
**EA03-005**

**ATTACHMENT "1A"**

GENERAL MOTORS CORPORATION  
CHEVROLET DIVISION  
GM RESTRICTEDCUSTOMER:  
ADDRESS:  
HOME PHONE:

HALEIWA , HI 96712

CASE NUMBER: 01606177 VIN: 1GNDU06E4WD177569  
MODEL YEAR: 1998  
DATE OPENED: 2000-09-18 SERIES: VENTURE  
DATE CLOSED: 2001-09-07 MILEAGE: 34000  
SOURCE: Phone DELIVERY DATE:  
ERC TYPE: No DEALER NAME: SERVICE MOTOR COMPANY  
ERC PARENT: DEALER ADDRESS: 105 S KAMEHAMEHA HWY, WAHIAWA, HI, 96786, USA

## \*\*\*\*\*GENERAL CASE INFORMATION\*\*\*\*\*

F33 Rear Control Arms/Ball Joints/Linkage/Stabilizer - Torsion  
Broken  
0 REPAIR ATTEMPT(S) ARM BROKE CAUSING VEH TO GO OUT OF CONTROL.

T55 Protection Plan Administration (GM Purchase) Customer Satisfaction  
1 REPAIR ATTEMPT(S) AVM REQUEST 72/100K MAJOR GUARD W/\$0 DED

G01 Axle/Differential/Driveline Broken  
1 REPAIR ATTEMPT(S) REAR AXLE ASSEMBLY REPLACED

2 Battery Broken  
REPAIR ATTEMPT(S) REPLACED

F17 Front Control Arms/Stabilizer/Torsion Bar (including Bushings)  
Broken  
1 REPAIR ATTEMPT(S) FRT STABILIZER LINK

CUST CALLED WITH CONCERNS ABOUT THE SAFETY OF HER VEH AFTER WHILE DRIVING DOWN ROAD WITH HER PREGNANT COUSIN IN THE VEH, THE "CONTROL ARM, OR TRAILING ARM", SUPPORT FOR THE AXLE BROKE CAUSING THE VEH TO GO OUT OF CONTROL. SHE GOT IT STOPPED AND NO ONE WAS HURT AND NO DAMAGE OTHER THAN TO THE VEH. SHE IS PRESENTLY TALKING TO THE SALES DEPT AS TO POSSIBLE TRADING OUT OF VEH. SHE IS AFRAID TO DRIVE IT, WONDERING WHAT ELSE IS GOING TO BRAKE AND MAYBE HURT HER FAMILY. ED WILLIAMS PDX

## \*\*\*\*\*WORK HISTORY\*\*\*\*\*

cust called back in stating that the previous crm told her to go to the sls dept to assist her on trade value for her veh. cust states that the owner of the dlrship was willing to assist and was hoping that Chevrolet would back this up since it was not anormal thing to have happen and it caused the wheel to be moved all the way into the wheel well and the brake line to be pinched. crm will contact ASM of that dlrship for their involvement.  
crm/lucas hobbs/pdx; 0; 338265765  
2000-09-20

crm checked AVM messages this morning and there was no response. crm will check this evening.  
crm/lucas hobbs/pdx; 0; 338325304  
00-09-20

ASM, JENNIFER ROBBINS, CALLED IN STATING SHE RECEIVED A MESSAGE FROM A CRM. ASM STATES SHE IS THE AREA SALES MGR NOT THE AREA SERVICE MGR. TIFFANY BAKER/AVM GROUP/TAMPA; 0; 338337905  
2000-12-01

asm mr roberts (DO NOT GIVE OUT TO ANYONE:1-800-906-0123 box 58655) stated could crm read comments on case/req file...crm advised certainly would do so...crm did...crm was advised by roberts that he still has to review case/req/cust veh history, etc...also further stated would be contacting dlrshp srv mgr for additional review...asm stated would be contacting w/additional comments at a later date...noted:joyce baker/avm/tpa; 0; 344563774  
2000-11-21

cust states that they are upset w/ the way they have been treated. cust seeks to have a meeting w/ AVM. cust states that dlrshp is going to repurchase vehicle, but cust doesn't like the way she has been treated. crm tried contacting srv mgr at dlrshp. srv mgr not available. crm left vme for srv mgr stating that cust would like appt for rep they are working w/ and would like a call back w/ info. crm advised cust that crm left vme, and that crm will contact cust on 11-24-00 to see if dlrshp contacted her. andrea senz/pdx/cars; 0; 343684749  
2000-11-24

crm contacted cust to see if dlrshp has been in contact. cust states that they haven't. crm states that crm will contact cust 11-27-00 around 3:30-4:30pm pacific time. crm will contact dlrshp in morning. andrea senz/pdx/cars; 0; 343960002  
2000-11-27

DLRSHP PHONE # IS 808-621-8454.; 0; 344200352  
2000-11-27

crm contacted srv mgr. srv mgr states that they have fixed the vehicle, but the ASM is working w/ sis mgr and the general mgr. srv mgr states that cust will have to work w/ them to make appt. andrea senz/pdx/cars; 0; 344200659  
2000-11-27

crm contacted cust and advised cust of what srv mgr stated. cust states that she will try to get a hold of the General Mgr or the sis mgr. crm advised cust of file #. andrea senz/pdx/cars; 0; 344219174  
2000-12-01

AVM DWIGHT ROBERTS STATES HE SPOKE TO CUST. AND ADVISED GMPP WILL PROVIDE A GMPP EXTENDED SERVICE PLAN. CUST. DECLINED. OWNER LOOKING FOR FULL PAYMENTS BACK. GM DECLINED. DEALER OFFERED TO TRADE VEHICLE IN. CUST. DECLINED. AVM STATES OWNER IS OUTSIDE LEMON LAW PARAMETERS AND OWNER WILL TAKE NEXT ACTION ON HER OWN. TIM MADDEN/TAMPA AVM LINE; 0; 344565007  
2000-12-22

CORN RECEIVED. CUST'S LETTER RESTATING HER POSITION AND THAT OF GM. LETTER INDICATED CUST IS ESCALATING TO BBB ETC. CRM WILL ATTACH AND TAKE NO FURTHER ACTION SINCE AVM HAS GIVEN THE NO ASSIST. JIMHUGHES/CAC/PDX; 0; 346358681  
2001-03-09

WARRANTY HISTORY INCLUDES: REAR AXLE ASSEMBLY REPLACED, BATTERY, FRT STABILIZER ARM, ETC. KEN SIMPSON/AVM TEAM/TAMPA; 0; 353017449  
2001-03-09

AVM, DWIGHT ROBERTS AT 800-536-8189 BOX 8655, STATES CUST'S VEHICLE REAR AXLES BROKE IN TWO. STATES CUST HAS BECOME UNCERTAIN ABOUT VEHICLE, EVEN THOUGH IT IS REPAIRED. AVM SEEKS TO HAVE PROCESS, IN THE INTEREST OF CUSTOMER SATISFACTION AND CUST CONFIDENCE FOR WHICH CUST HAS ACCEPTED, A MAJOR GUARD 72/100K, W/90 DED. CRM VERIFIED CUST PHONE AND ADDRESS, ADVISED AVM OF FILE NUMBER AND WILL PROCESS REQUEST. KEN SIMPSON/AVM TEAM/TAMPA; 0; 353017891  
2001-03-09

WORK PROCESSSED AND PASSED ON TO TEAM LEAD THIS DATE. KEN SIMPSON/AVM TEAM/TAMPA; 0; 353018038  
2001-03-12

TEAM LEAD HAS REVIEWED REQUEST FOR GMPP MAJOR GUARD 72/100 WITH 0 DEDUCT. REQUEST MEETS SOG GUIDELINES. N TORRES/TL/TPA; 0; 353270131  
2001-03-13

GMPP MAJOR GUARD 72/100/0 HAS BEEN PRE-APPROVED BY SHANTA MORRIS/TPA GOODWILL LIAISON.; 0;  
3361082  
01-03-14

1ST LEVEL OF APPROVAL BY JOY NIXON-TAMPA APPROVAL GROUP; 0; 353441538  
2001-03-17

GMPP ON IT'S WAY LETTER REQUESTED ON 3-17-01 REFERENCE #00295357. DONNA CAVE/GOODWILL  
LIAISON/TAMPA; 0; 353694220  
2001-03-19

GMPP ON IT'S WAY LETTER RELEASED 3-19-01  
EUREKA ALLEN/TPA/APPROVAL GROUP; 0; 353888932  
2001-03-30

CRM HAS RECEIVED DOCS TO BE ASSIGNED....  
CRM TO ATTACH DOCS TO FILE.  
NO FURTHER ACTION TAKEN.  
CESAR CADENAS TAMPA; 0; 354847910  
2001-06-11

Crm received call from avm Dwight Roberts who seeks status of GMPP. Crm advised letter  
released.  
Kelley Williams/Avm Team/TPA; 0; 361154069  
2001-09-07

AVM DWIGHT ROBERTS CALLED, STATES THAT CUST HAS NOT YET REC'D ANY INFO ABOUT GMPP ISSUED BY  
CAC. AVM SEEKS TO KNOW WHY CUST HAS NOT REC'D ANYTHING. CRM ADVISED AVM THAT GMPP ON IT'S  
LETTER SENT 03/19/01, AND SYSTEM IS SHOWING GMPP MG 72/100 ACTIVE ON VER. CRM ADVISED  
OF ADDRESS ON FILE, WHICH AVM COULD NOT VERIFY AT THIS TIME. CRM CONTACTED DLR AND  
SPOKE W/ SM BRIAN, WHO ADVISED THAT HE HAS ALREADY TOLD CUST THAT COVERAGE IS ACTIVE ON VER.  
SM VERIFIED CORRECT ADDRESS ON FILE. CRM CONTACTED GMPP AND SPOKE W/ REP VICTOR  
JAROSIEWICZ, WHO CONFIRMED THAT GMPP HAS SAME ADDRESS ON FILE AS CAC. CRM REQUESTED THAT  
ANOTHER INFO PACKAGE BE SENT TO CUST, AS FIRST PACKAGE WAS NOT REC'D. CRM CONTACTED CUST  
AND ADVISED THAT SECOND INFO PACKAGE IS BEING SENT BY GMPP. CRM CONTACTED AVM AND ADVISED  
OF RE-SENDING INFO. CRM CLOSING REQ AS NO FURTHER ACTION REQUIRED. TREVOR D'GABRIEL/AVM  
TEAM/TAMPA; 0; 368744130

\*\*\*\*\*PAR INFORMATION\*\*\*\*\*

INCIDENT DATE: INCIDENT TIME:  
INCIDENT LOCATION:

DRIVER NAME: DRIVER AGE:  
DRIVER DISABILITY:

OWNER DESCRIPTION:

ALLEGED DEFECTIVE COMPONENT:

INCIDENT RESULT: ROAD CONDITION: ROAD SURFACE:  
POLICE REPORT: BODY INJURY:  
NUMBER OF PEOPLE: 0  
INJURIES:

WAS ANOTHER VEHICLE INVOLVED:  
NUMBER OF VEHICLES: 0

PROPERTY DAMAGE:

WAS VEHICLE INSURED:

INSURANCE COMPANY NAME:  
INSURANCE COMPANY ADDRESS:  
AGENT NAME:  
AGENT PHONE NUMBER:

MORE INFORMATION:  
MAINTENANCE LOCATION:  
CURRENT LOCATION OF VEHICLE:  
NOTIFY NAME:

WAS VEHICLE INSPECTED:  
MILEAGE AT INSPECTION:  
WHERE WAS INSPECTION DONE:

INSPECTORS NAME: INSPECTION DATE:

WAS VEHICLE ROAD TESTED:  
ROAD TEST DESCRIPTION:  
ROAD TEST RESULT:  
COMP INSPECTED:  
INVESTIGATIVE SUMMARY:  
PAR STATUS:

\*\*\*\*\*PAR INFORMATION\*\*\*\*\*

SOURCE:  
REQUEST TYPE:  
REPURCHASE REASON:

TRANSACTION:

DEALER BAC:  
DEALER NAME:  
DEALER ADDRESS: , ,  
CONTACT: ,

PHONE NUMBER:  
PRODUCT CODE:

FAX NUMBER:  
BODY TYPE:  
TRIM:  
TRANSMISSION:  
VEHICLE DRIVEABLE:  
BRC WARRANTY DATE:  
NADA: 0  
SALES TAX:

ENGINE TYPE:  
MILEAGE @ BUY-BACK: 0  
MSRP:

DEPRECIATION:  
UPGRADE:  
AFTERMARKET:  
LEASE TERM:  
DAMAGE:  
OTHER:

BRANCH:  
ACCOUNT NUMBER:  
INTEREST RATE:

NAME:  
INTEREST PAID:  
DEALER BUYOUT:

ACCOUNT BALANCE:  
LEGAL:

LEGAL TYPE:  
LEMON LAW:  
VEHICLE DESTINATION:  
LIEN PAYOFF:  
TITLE BRAND:

DEALER ADMINISTRATION:  
RELEASE:

REPLACEMENT VIN:

\*\*\*\*\*BODILY INJURY\*\*\*\*\*

NUMBER OF INJURIES: 0  
COMMENTS:

NAME:  
ADDRESS: ,  
CITY/STATE: ,  
PHONE NUMBER:

LOCATION:

RESTRAINT:  
IF SO, WHERE:

## \*\*\*\*\*ADR INFORMATION\*\*\*\*\*

EXTERNAL CASE NUMBER:	DATE:
TITLE NAMES:	
BUSINESS:	% BUSINESS: 0
ACCIDENT:	DATE OF ACCIDENT:
DESCRIPTION OF DAMAGE:	
PURCHASE/LEASE: 0	DATE OF PURCHASE/LEASE:
MILEAGE AT PURCHASE: 0	PURCHASE/LEASE AS:
DOES OWNER HAVE POSSESSION OF VEHICLE:	
RESOLUTION SOUGHT:	

## \*\*\*\*\*BRC CONTACT INFORMATION\*\*\*\*\*

NAME:	CONTACT NUMBER:	1
COMPANY:	CONTACT TYPE:	
	CONTACT PHONE:	
ADDRESS:		



March 19, 2001

  
Request: C01606177

Dear Mrs. 

Thank you for your support of Chevrolet. As we agreed, the necessary paperwork has been completed and forwarded to General Motors Protection Plan (GMPP). The processing time will take approximately eight weeks. The GMPP Major Guard plan for your 1998 Chevrolet Venture, Vehicle Identification Number 1GNDU06E4WD177569, is for the following:

- 72 months or 100,000 miles, whichever occurs first
- Standard rental
- A \$0.00 deductible

You will be notified by GMPP once the plan has been processed. This letter will serve as your policy until the plan confirmation is received. Please contact GMPP at 1-800-631-5590 if you have additional questions. Your complete satisfaction is very important to us. We hope this transaction demonstrates our appreciation of you as a valued Chevrolet customer.

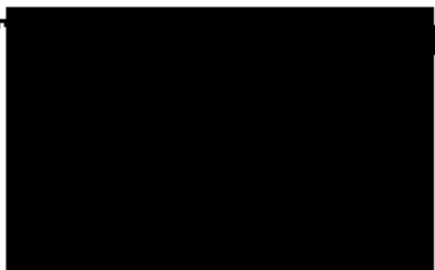
If you have any future questions, please feel free to contact our Chevrolet Customer Assistance Center at 1-800-222-1020 Monday through Friday between 8:00 a.m. and 11:00 p.m., Eastern Time. Please refer to your request number above and any of our Customer Relationship Managers will be happy to assist you.

Thank you for allowing us the opportunity to assist you.

Sincerely,

Donna Cave  
Customer Relationship Manager

RS0011-T/eea



DESTROYED MAIL



7077 3220 0008 3480 9271

RETURN RECEIPT  
REQUESTED



U.S. POSTAGE  
10¢  
DEC 13 08  
MILWAUKEE

\$3.20  
DEC 13 08

Mr. Kurt Ritter  
General Manager of Marketing  
P.O. Box 33170

Detroit, Michigan

48232-5170

12-20-00P04:02 RCYD

82:61 00/61/21 21x 374 00/00/00 x 00/00/00 x 00/00/00 x

48232-5170



November 21, 2000

To whom it may concern,

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The following is a history of my defective 1998 Chevy Venture, Chevrolet case #C01606177.

**History:**

On about September 14, 2000, I was driving my 1998 Chevy Venture with my pregnant cousin as a passenger. I was driving in a normal fashion when the trailing arm to my rear axle snapped and I lost control of my vehicle. Fortunately, I was able to get off the road safely. Had the defective part snapped five minutes later on the mountain road I was heading to, it would have been a very sad scenario. I parked the car on a street off of the highway, and the next morning went there with some friends who helped me to photograph the car. (See enclosed photos). I had the vehicle towed by Chevy Roadside Service to Service Motors Wahiawa.

I contacted Chevrolet Customer Assistance who started a file #C01606177. They told me not to deal with the service department but to contact the sales manager. I did this and they handed me over to Clyde Miyataki, Vice President.

I spoke with Mr. Miyataki. He said it was unusual and could not believe it happened and agreed that my cousin and I had been very lucky. I told him that I no longer wanted to drive the car because I was afraid to, as I have two small children and an elderly grandmother that I regularly drive around, not to mention the safety of myself and my husband. After speaking to the service department, he informed me that the part that snapped was defective, and that they would replace the part under warranty.

This was an unsatisfactory situation. I bought the van brand new specifically for the safety features and reliability. The dealer rented us a van until the repair work was done. Although the dealer has now loaned us an Echo, it is not appropriate for our family size, lifestyle and business.

My husband is a team captain for a large amateur surf team and is not able to do his job in such a small car.

Clyde Miyataki was very personable, and said that he understood my fears and concerns and would try to get us into another vehicle. We discussed a trade in scenario that involved a full trade in value for my Chevy Venture. I also said that I would consider an upgrade and pay more for a new car. I also told him that we were looking for a second car, and may possibly buy one from Servco if we could walk away as satisfied customers on our trade in. We, as satisfied customers and being well connected in the community, would have spoken highly of their customer service and sent them future customers.

Mr. Miyataki said that he expected Chevrolet to help Servco absorb the loss on the defective vehicle. I said that I thought that was fair, seeing as Chevy manufactured the car.

I told him that I had talked to Chevy Customer Service at 1-800-222-1020 and asked to speak to the representative from Hawaii. I never heard back from Chevy for about two weeks. He told me to let him talk to the rep, and that I did not need to. I was relieved, as I was feeling very stressed and helpless in my situation.

Another two weeks or so passed, and Mr. Miyataki informed me that the rep was on vacation on the East Coast. He said that when he returned he would get back to me.

#### **The Problem:**

Finally, in the beginning of November the rep returned and Servco said he offered me a five year additional warranty on my Chevy Venture! This does me absolutely no good, as I am afraid to drive it because I lack confidence in its structural frame!

Then Servco offered me \$9,000 on my van on trade in! Not only would this would represent an approximate \$11,000 loss to our family, it falls far below the bluebook value of approximately \$14,000. Not to mention the stress and total inconvenience that this has caused us. This is unacceptable. We told Servco that if this was all they were willing to do to remedy the situation then we'd prefer not to do business with them or Chevy again. Regardless, they said that was their final position. I found that odd, since they seemed so understanding in the beginning. It was our sole vehicle, and the delay on getting a satisfactory replacement has been very costly and inconvenient.

I have asked both Servco and Chevy Customer Service on several occasions for the name and number of the Chevrolet representative for Hawaii. Servco insisted on speaking to the rep on our behalf, and Customer Service could not give me any information.

Finally on about December 1, 2000, approximately three months from the time my van suddenly broke, the Chevy representative for Hawaii called me. He quickly introduced himself and started speaking about my van. I had to interrupt him and ask him for his name and title, since he never mentioned that he was the Hawaii rep. I told him I was happy to finally speak to him as I had been trying to reach him for months.

He said that he could not understand why the defective part had caused me to lose confidence in the whole car, and questioned if my tire blew out would that cause me to lose confidence in my car. I said no, it would cause me to lose confidence in the tires. He said what if my brakes gave out? I said that this part was not a part that normally needs replacing, like brakes or tires, and that it was a defective part. He said I had two choices, either trade it in or sell it if I no longer wanted it. I said I tried to trade it in, and was offered by Servco only \$9,000.00. He said that cars depreciate in value. I said I knew that, but blue book was \$14,000.00 approximately. I told him selling it on the street would be difficult since it had a defective part. He said the car was fixed, I said I was not confident in the rest of the vehicle.

He then went on to insist that I was still responsible for the payments. I said I had already paid it off. Regardless, he said he maintained his position and could not do anything more for me than the extended five year warranty. I thanked him for his time, and told him that I was going to contact and pursue the matter with his higher ups.

The van had a defective part. It was not the result of an accident, abuse, neglect, or alteration. When the defective part failed, I was fortunately driving at a slow speed. It could have caused sudden and catastrophic failure on the road under other circumstances, like driving on the freeway, or up Pupukea Road, or on the highway going the legal speed limit.

Because the part was defective, I am concerned and frightened that other metal parts may also be defective. I don't feel right trying to sell the van to someone else, because this defect substantially impairs the use, value and safety of the vehicle. Even the dealership valued it at well below blue book.

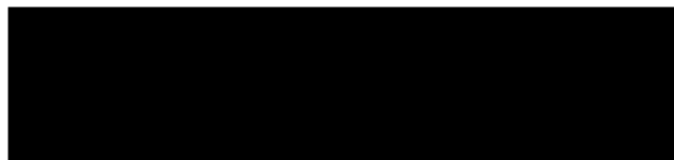
**What I would like to see happen:**

**I would like to get a refund on my vehicle. Originally, I wanted to trade in the vehicle and possibly upgrade. At this time I am asking for a full refund on my vehicle.**

**Lastly, I do not expect that my family should to be treated like a "number ." We are real people with lives that depend on our car being safe. We use it every day to go to school and work. If anything happened to any one of us because of a bad part on a \$20,000 supposedly safe family vehicle, it would destroy many lives. I know that you probably have a family of your own. Put yourself in our position, please. Treat us as you would expect your family to be treated.**

**Thank you for you time and attention to this matter. Please respond within three weeks of signed receipt of this letter.**

**Sincerely,**



*CC: Better Buissness*

*Rico*

*Hawaii Auto Dealer Center*

*Clyde Miyataki V.P. Service Motor Co*

*Eric Fukunaga. President and COO. Servco Pacific Inc.*

GMPP REQUEST FOR PROCESSING

Motors Insurance Corporation  
National Mechanical Service Center  
P.O. Box 6855  
Chicago, IL 60680-6855

03-29-Q1P03:12 RCVD

Please process the attached GMPP Contract Registration form:  
Customer Information:

Customer Name

File Number: 01606177

Personal Use: ☒ Commercial Use: ☐

Reason for offering GMPP: Rear Axle replaced, Flt Stabilizer arm replaced, battery replaced, etc.  
Vehicle Information: (Circle one below)

Make: Buick Cadillac Chevrolet GMC Truck Oldsmobile Pontiac

VIN# 1GNDK06E4WD127569

Year: 1998 In service Date: 6/10/98 Mileage: 34000

Division Dealer Code Information: (Circle one below)

Pontiac - 16-89101  
Buick - 11-89001

GMC Truck - 48-81784  
Chevrolet - 13-70011

Oldsmobile - 15-88001  
Cadillac - 12-89000

Payment Approval and Type:

General Motors has agreed to: (Check one below)

- ☒ Approve and pay for a new plan -- no GMPP coverage currently  
☐ Authorize a new plan or upgrade; customer will pay total cost  
☐ Approve and pay for an upgrade; apply original coverage refund to Division making request  
☐ Pay for all coverage costs; refund the original coverage cost to customer  
☐ Cancellation

Payment Approval:  
GMU (decision maker): Kim Supper, Ben Avon Dwight Roberts

Plan Selection: M.G. 72/100K & Acc.

Team Manager/Supervisor: Carol K. [Signature] Date: 9/12/01

00295357

76972504

## Contract Registration

VEHICLE IDENTIFICATION NUMBER (must be 17 characters)

16NDL06E4WD177569

YEAR 1998 MAKE Chevrolet MODEL Venture

CURRENT ODOMETER 34000 PLAN PURCH. DATE 3/9/01 COMM. EMER. 4WD

SELECT ONE OR TWO

GMPP

MRP

MAJOR GUARD

CUSTOM

POWERTRAIN

X

X

Subject to acceptance by the Plan provider, contract coverage for the term stated below begins on the date this Registration is signed. THE TERM OF THIS AGREEMENT INCLUDES THE TERM OF THE NEW VEHICLE LIMITED WARRANTY.

PLANS PURCHASED DURING THE NEW VEHICLE LIMITED WARRANTY PERIOD

The time and mileage limits of any selected plan commence on the same date as the manufacturer's warranty and at zero miles, and end at the earlier of the selected thresholds option. Unless an optional deductible is selected, these plans come with a \$0 deductible.

## MECHANICAL TERM

VEHICLE IN SERVICE DATE

6/2/98

	36	48	60	72	OPTIONAL DEDUCTIBLE
MONTHS				X	\$100
MILES				X	\$200
	50,000	60,000	75,000	100,000	

The time and mileage of any plan selected below will be calculated from the date and mileage on the vehicle on the date of the purchase of the service contract. These plans can be purchased only at the time of vehicle purchase. Unless an optional deductible is selected, these plans come with a \$0 deductible.

## MECHANICAL TERM

	12/12,000	24/24,000	36/36,000	OPTIONAL DEDUCTIBLE
				\$100
				\$200

SmartCare<sup>SM</sup> and Mech. Coverage

TOTAL \$

00

Upon acceptance of this registration, the time and mileage term for SmartCare<sup>SM</sup> coverage will be calculated from the date and mileage on the vehicle on the purchase date of this agreement.SMARTCARE<sup>SM</sup> TERM

MONTHS	MILES	MONTHS	MILES	MONTHS	MILES
12	12,000	30	30,000	36	50,000
	18,000			48	60,000
24	24,000	36	36,000	60	75,000
	30,000		45,000	72	100,000

SMARTCARE<sup>SM</sup> PRICE \$ .00

TAX \$ .

TOTAL \$ .

MECHANICAL COVERAGE PRICE \$ .00

TAX \$ .

TOTAL \$ .

The Plan provider is authorized to charge my account for the cost of this agreement and my share of any subsequent cancellations.

DEALER NAME

Chevrolet

DEALER CODE

13-70011

ADDRESS

P.O. Box 33170

CITY

Detroit

STATE

MI

ZIP

48232

LIENHOLDER NAME

GMAC or Chevrolet

MAILING ADDRESS

P.O. Box 33170

CITY

Detroit

STATE

MI

ZIP

48232

front and back of this form. I acknowledge that coverage(s) will begin and end as stated in the section on a Coverage Agreement will be mailed to the address indicated on this form.

3-12-01

DATE



GENERAL MOTORS CORPORATION  
PONTIAC DIVISION  
GM RESTRICTED

CUSTOMER:  
ADDRESS:

ELIZABETHTOWN  
PA 170229527

HOME PHONE

CASE NUMBER: 06411631 VIN: 1GMDX03E3XD204858  
DATE OPENED: 2002-02-22 MODEL YEAR: 1999  
DATE CLOSED: 2002-03-26 SERIES: TRANS SPORT EXTENDED  
SOURCE: Phone MILEAGE: 46000  
BRC TYPE: No DELIVERY DATE:  
BRC PARENT: DEALER NAME: ARNOLD PONTIAC-OLDSMOBILE, INC.  
DEALER ADDRESS: 15 S RIVER ST., MAYTOWN, PA, 17550, USA

\*\*\*\*\*GENERAL CASE INFORMATION\*\*\*\*\*

F30 Rear Suspension/Track Bar	Other
1 REPAIR ATTEMPT(S)	BROKE
S85 CAC Resolved With Goodwill	CAC Resolved With Goodwill
0 REPAIR ATTEMPT(S)	\$1000.00 OLC
T58 Retention Certificate/Owner Loyalty	Customer Satisfaction
0 REPAIR ATTEMPT(S)	\$1000.00

Vehicle repair request - Repair not done

INSTRUCTIONS TO CRM:

- \*Probe to identify failed item/component
  - \*Determine Customers Expectation
  - \*Using delivery date, establish if vehicle is within any warranty coverage
  - \*Listen carefully to evaluate cause of failure - defect or damage  
(If damage, consider explaining the consumers responsibility)
  - \*Review Specific Solutions [[SPECIFIC SOLUTIONS RUN  
C:\Progra-1\Plus\Micros-1\Iexplore.exe  
<http://carsweb/webknowledge/ProductCenter/GeneralInfo/content/SolutionsByComponentCode.htm>]]
  - \*Identify if earlier repairs have been attempted? -[[Possible Chronic Rep RUN  
C:\Progra-1\Plus\Micros-1\Iexplore.exe  
<http://carsweb/webknowledge/CARSCP/SBS/html/ChronicAlerts.htm>]]  
(1st attempt - offer to coordinate repair at a dealership)  
(Previous repairs)
    - 1) Review warranty history on "VIN Profile" tab
    - 2) Contact appropriate Service dealership to discuss
    - 3) Determine if TAC was previously contacted or is now necessary
    - 4) Establish & document a diagnosis and repair plan
  - \*Coordinate with dealership to assist with customer's repair request
  - \*Be prepared to answer "I don't want my car anymore / repurchase"[[ Vehicle Repurchase Link  
RUN C:\Progra-1\Plus\Micros-1\Iexplore.exe  
<http://carsweb/webknowledge/CARSCP/SBS/html/CustomerRequestsVehicleRepurchase.htm>]]
- Vehicle repair request - Repair not done

\*\*\*\*\*WORK HISTORY\*\*\*\*\*

CUST STATES: PONTIAC MONTANA 1999 ORIGINAL OWNER CUST HAS 40,000 FRIDAY NIGHT WAS GOING TO A DIFFERENT TOWN, CUST HEARD CRACK IN REAR END, CUST CONTINUED TO DRIVE TO DESTINATION, THEN HOME, 40 MILE TRIP. WIFE WAS GOING OUT OF STATE, BUT STOPPED FOR GAS, THE REAR END BROKE. VEH IS CURRENTLY IS AT THE DLR FOR A BROKEN TRAILING ARM, ON THE RIGHT HAND SIDE. CUST SEEKS: TO GET OUT OF THE VEH. CRM ADVSD: CONTACTED SVC MGR KEITH ARNOLD STATES: TAC NUMBER 5415816 CUST IS LOYAL CUST MAINTANANCE, OWNED 12 GM VEH'S, CUST PURCHASED VEH NEW FROM DLR, SVC MGR

SUGGESTED OLC, AS THIS WOULD COMPLETELY SATISFY THE CUSTOMER. CRM ADVSD: CONFERENCED WITH TM LYNDLE LEMIS WHO APPROVED \$1000.00 OLC. CRM ADVSD: OFFERED THIS TO CUST. WHO WOULD LIKE TO SEARCH BEFORE ACCEPTING. CRM ADVSD: WILL C/B MONDAY FROM 3-4PM PST CRYSTAL BROWN/CAC/PDX; 383267284  
2002-02-25

CUST STATES: IS NOT SATISFIED WITH OFFER B/C HE FEELS GM SHOULD DO MORE. CRM ADVSD: CUST IS NOT SATISFIED WITH OFFER THEREFOR THE OFFER HAS BEEN RECINDED, CUST UNDERSTOOD. REQUEST CLOSED SATISFIED. CRYSTAL BROWN/CAC/PDX; 0; 383530100  
2002-02-28

SALESMAN, MIKE NARDINI OF CHEVYLAND OF HERSHEY, STATES THAT CUST CAME TO DLR STATING THAT HE HAD AN OLC DUE TO AXLE BREAKING. CRM LOCATED FILE AND ADVISED MR NARDINI THAT OFFER OF \$1,000 WAS RESCENDED SINCE IT DID NOT SATISFY CUST. MR. NARDINI STATESTHAT CUST IS TALKING ABOUT A LAWSUIT AND FEELS THAT IF GM COULD OFFER CUST \$2,000 IT WOULD AVERT THIS POTENTIAL SITUATION. CRM ADVISED THAT COULD LOOK INTO MATTER BUT IT MAY NOT BE POSSIBLE TO GET THIS APPROVED AND TO CUST BEFORE THE END OF TODAY. SALESMAN APPREC. LOOKING INTO IT. SALESMAN STATED THAT CUST PAID \$28,856 FOR VEH WHICH WAS VERY CLOSE TO MSRP. CUST HAS PUR 3 NEW VEH FROM ARNOLD DLR IN LAST 10 YRS. CRM SPOKE W/KEITH ARNOLD, SVC MGR, WHO STATED THAT THIS CONCERN WAS NOT DUE TO ABUSE OR LACK OF MAINT; CUST HAD MAINT DONE AT DLR; VEH WELL MAINT.; WIFE WAS AFRAID TO DRIVE THE CAR AND THAT IT COULD HAVE BEEN A VERY SERIOUS ACCIDENT; COST OF PART ALONE WAS \$1300 AND THAT LABOR IS ABOUT 3-4 HOURS.  
\*\*\*\*\*CONT\*\*\*\*\*; 0; 383788226  
2002-02-28

REPAIR IS ALMOST DONE, MGR WAITING ON SOME BOLTS. MGR STATES THAT CUST HAS BEEN IN A RENTAL FOR 6 DAYS. GM IS COVERING COST OF REPAIR. TERI STEWART/CAC/PDX; 0; 383788269  
2002-02-28

CRM TRIED TO REACH MIKE NARDINI. LEFT MSG W/NATE WAGNOR THAT WOULD HAVE TO DO FURTHER SEARCH TO SEE WHAT IF ANYTHING MORE CAN BE DONE FOR THIS CUST. CRM WILL TRY TO REACH MR. NARDINI TOMORROW. TERI STEWART/CAC/PDX; 0; 383800533  
2002-03-01

CRM TRIED TO REACH SLS MGR TO CONFIRM THAT CUST DID PUR VEH W/UNDERSTANDING THAT WOULD RECEIVE AN OLC FROM SLSMAN. CRM TO SEE IF AN OLC COULD APPLY RETROACTIVELY. TERI STEWART/CAC/PDX; 0; 383879584  
2002-03-04

CRM SPOKE W/MR. [REDACTED] AND RESTATED THAT AN OLC FOR THIS AMOUNT WAS NOT GUARANTEED BUT WAS BEING LOOKED INTO. CRM ASKED IF THIS COULD BE RETROACTIVE AND AGAIN MR NARDINI WAS NOT SURE. CRM HAD TM DAN PASLIN LOOK INTO THIS ISSUE AND IF AUTHORIZATION COMES THROUGH, THEN IT MAY BE POSSIBLE THROUGH DEC. CRM ADVISED MR NARDINI THAT WOULD ADVISE HIM AS SOON AS INFOR IS AVAIL. TERI STEWART/CAC/PDX; 0; 384122363  
2002-03-04

CRM RECEIVED MSG FROM AVM WINONA GRAHAM WHO WAS CONFUSED OVER WHO OFFERED AN OLC. AVM LEFT DIRECT PHONE#914-701-6972. CRM L/M CLARIFYING THIS INFOR AND ASKING FOR ADVISE ON HOW TO PROCEED. TERI STEWART/CAC/PDX; 0; 384131442  
2002-03-05

AVM, WENONA GRAHAM STATES SHE SEEKS TO UPDATE THIS REQUEST. AVM STATES SHE WILL NOT AUTHORIZE/APPROVE ANY AMOUNT OLC FOR THIS CUSTOMER. AVM STATES THE CUST WAS OFFERED A \$1,000 OLC AND DID NOT ACCEPT. AVM STATES THE CUST THEN WENT TO THE DLR SAYING HEHAD A \$2,000.00 OLC, WHICH WAS NOT TRUE. CRM ADVISED AVM THAT THE REQUEST HAS BEEN UPDATED AND IS BEING FORWARDED TO TERI STEWART TO RETAIN OWNERSHIP. CRM ALSO SENT NOTIFICATION. REBECCA AGGS/AVM TEAM/TAMPA; 0; 384200023  
2002-03-05

CRM ADVISED MR [REDACTED] OF AVM RESPONSE. MR [REDACTED] APPRECIATED THE CALL. CRM TRIED TO REACH CUST, L/M. CRM WILL CHECK FILE FOR ACTIVITY IN 5 BUSINESS DAYS. TERI STEWART/CAC/PDX; 0; 384206689  
2002-03-07

crm checking file. tari stewart/cac/pdx; 0; 384381864  
2002-03-12

CRM STEWARTT n/a. TM is sending call CAC ltr & completing req dissat as cust will most likely be dissat w/ resolution.  
TM Daniel Paslin/PDX/CAC; 0; 384817680  
2002-03-12

Reviewed & approved letter Rs0006. Submitted to nex for printing.....Kari  
Willson/cac/pdx/approver; 0; 384845089  
2002-03-26

CUST STATES HE RECEIVED LETTER FROM CAC. CUST STATES HE ALREADY TRADED VEH TO HERSHEY CHEV,  
CUST STATES DEALERSHIP DID GIVE HIM THE \$2000 DISCOUNT. CUST STATES HE IS SATIFY  
W/DEALERSHIP. CUST STATES GM COULD HAVE HANDLE SITUATION ON FASTER TIME FRAME.CRM APOLOGIZE  
TO CUST ABOUT THE TIME FRAME. CUST SATIFY W/RESULTS. CRM CLOSED FILE SATIFY.  
GMEJIA/CAC/ATX.; 0; 386031285.

\*\*\*\*\*PAR INFORMATION\*\*\*\*\*

INCIDENT DATE: INCIDENT TIME:  
INCIDENT LOCATION:

DRIVER NAME: DRIVER AGE:  
DRIVER DISABILITY:

OWNER DESCRIPTION:

ALLEGED DEFECTIVE COMPONENT:

INCIDENT RESULT: ROAD CONDITION: ROAD SURFACE:  
POLICE REPORT: BODY INJURY:  
NUMBER OF PEOPLE: 0  
INJURIES:

WAS ANOTHER VEHICLE INVOLVED:  
NUMBER OF VEHICLES: 0

PROPERTY DAMAGE:

WAS VEHICLE INSURED: INSURANCE COMPANY NAME:  
INSURANCE COMPANY ADDRESS:  
AGENT NAME:  
AGENT PHONE NUMBER:

MORE INFORMATION:  
MAINTENANCE LOCATION:  
CURRENT LOCATION OF VEHICLE:  
NOTIFY NAME:

WAS VEHICLE INSPECTED: INSPECTORS NAME: INSPECTION DATE:  
MILEAGE AT INSPECTION:  
WHERE WAS INSPECTION DONE:

VEHICLE ROAD TESTED:  
ROAD TEST DESCRIPTION:  
ROAD TEST RESULT:  
COMP INSPECTED:  
INVESTIGATIVE SUMMARY:  
PAR STATUS:

\*\*\*\*\*PAR INFORMATION\*\*\*\*\*

SOURCE:  
REQUEST TYPE:  
PURCHASE REASON:

TRANSACTION:

DEALER BAC:  
DEALER NAME:  
DEALER ADDRESS: , ,  
CONTACT: ,  
PHONE NUMBER:  
PRODUCT CODE:

FAX NUMBER:  
BODY TYPE:  
TRIM:  
TRANSMISSION:  
VEHICLE DRIVEABLE:  
BRC WARRANTY DATE:  
NADA: 0  
SALES TAX:

ENGINE TYPE:  
MILEAGE & BUY-BACK: 0  
MSRP:

DEPRECIATION:  
UPGRADE:  
AFTERMARKET:  
LEASE TERM:  
DAMAGE:  
OTHER:  
BRANCH:  
ACCOUNT NUMBER:  
INTEREST RATE:

NAME:  
INTEREST PAID:  
DEALER BUYOUT:

ACCOUNT BALANCE:  
LEGAL:

LEGAL TYPE:  
LEMON LAW:  
VEHICLE DESTINATION:  
LIEN PAYOFF:  
TITLE BRAND:

DEALER ADMINISTRATION:  
RELEASE:

REPLACEMENT VIN:

\*\*\*\*\*BODILY INJURY\*\*\*\*\*

NUMBER OF INJURIES: 0  
COMMENTS:

NAME:  
ADDRESS: ,  
CITY/STATE: ,  
PHONE NUMBER:  
SEATING POSITION:  
TYPE OF INJURY:  
TREATED:

LOCATION:

RESTRAINT:  
IF SO, WHERE:

\*\*\*\*\*ADR INFORMATION\*\*\*\*\*

EXTERNAL CASE NUMBER:  
TITLE NAMES:  
BUSINESS:  
ACCIDENT:  
DESCRIPTION OF DAMAGE:  
PURCHASE/LEASE: 0  
LEASE AT PURCHASE: 0  
LESSEE OWNER HAVE POSSESSION OF VEHICLE:  
RESOLUTION SOUGHT:

DATE:  
% BUSINESS: 0  
DATE OF ACCIDENT:  
DATE OF PURCHASE/LEASE:  
PURCHASE/LEASE AS:

\*\*\*\*\*BRC CONTACT INFORMATION\*\*\*\*\*

NAME:  
COMPANY:  
ADDRESS:

CONTACT NUMBER: 1  
CONTACT TYPE:  
CONTACT PHONE:

March 12, 2002

  
Request: C06411631

Dear Mr. 

We would like to discuss your recent concerns regarding your 1999 Pontiac Trans Sport, but we have been unsuccessful in our attempts to contact you.

To help us review your request in a timely manner, please contact our Pontiac Customer Assistance Center at 1-800-762-2737 Monday through Friday between 8:00 a.m. and 11:00 p.m., Eastern Time. Please refer to your request number above and any of our Customer Relationship Managers will be happy to assist you.

Sincerely,

Teri Stewart  
Customer Relationship Manager

RS0006-P/kaw

**GM634A**  
**EA03-005**

**ATTACHMENT "1B"**

# TECHNICAL ASSISTANCE SYSTEM

\*\*\* GM RESTRICTED \*\*\*

Case No:	3198486	VIN Number:	1GMDX03E3D200380
Date Opened:	05/03/1999	Model Year:	1998
Date Closed:	03/03/1999	Series:	TRANSPORT EXTEND
Dealer Code:	P07688	Mileage:	5517
Address:	SAWYERS PONTIAC, INCEAST LANSING	State:	MI
Dealer Phone:			

SYMPTOM ABSTRACT— REAR TIEROD WELD BROKEN AT AXLE

RESOLUTION ABSTRACT- BOLTS, FASTENERS AND FITTINGS, AXLE AND DIFFERENTIAL

UCC CODE 1—

UCC-1 DESCRIPTION— SUSPENSION

UCC CODE 2—

UCC-2 DESCRIPTION—

UCC CODE 3—

UCC-3 DESCRIPTION—

05/03/1999 11:21:48 SBD TEMPLATE - KOLODZIEG

STRATEGY BASED DIAGNOSTICS

\_1\_ NUMBER OF TIMES IN FOR THE SAME CONDITION

\_1\_ NUMBER OF DAYS VEHICLE IN DEALERSHIP

\_Y\_ (Y/N) IS THE VEHICLE IN THE DEALERSHIP

\_N\_ (Y/N) IS THE VEHICLE MODIFIED/NON-PRODUCTION ACCESSORIES (IF YES LIST)

\_\_\_ (Y/N) CAN COMPLAINT BE DUPLICATED (IF YES, FREQ, HOT, COLD, ETC.)

\_\_\_ (Y/N) HAVE YOU COMPARED THIS WITH AN IDENTICAL VEHICLE

\_Y\_ (Y/N) CAN YOU ISOLATE THE AREA OF THE CUSTOMERS COMPLAINT

\_\_\_Y (Y/N) S/M SEARCH COMPLETED (IF YES, LIST SECTION, PG.)

\_\_\_ (Y/N) BULLETIN OR PI SEARCH PERFORMED:

\_Y\_ (Y/N) IS THE CUSTOMER CONCERN THE SAME AS SYMPTOM DESCRIPTION (IF NO LIST)

\_\_\_ (Y/N) CONDITION DETAILS (LIST DTC'S, ETC.)

\_\_\_ (Y/N) DIAGNOSIS (PARTS REPLACED, VEH. HISTORY, ETC.)

05/03/1999 11:21:48 HISTORY - KOLODZIEG -TOM SAYS THE TIE  
ROD END MOUNT WELD IS BROKEN OFF AXLE HOUSING.

WK SUGGESTS: REWELD IF POSSIBLE. CALL WITH RESULT.



# TECHNICAL ASSISTANCE SYSTEM

\*\*\* GM RESTRICTED \*\*\*

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Case No:	4285606	VIN Number:	1GNDU06E6XD287262
Date Opened:	10/20/2000	Model Year:	1999
Date Closed:	10/26/2000	Series:	VENTURE 3 DR
Dealer Code:	B08475	Mileage:	34792
Address:	NALLEY CHEVROLET ATLANTA	G	State: GA
Dealer Phone:			

---

SYMPTOM ABSTRACT— ARM BROKEN CONTROL LEFT REAR SUSPENSION L/R C

RESOLUTION ABSTRACT- LOW LT ARM BUSH RPL

UCC CODE 1—

UCC-1 DESCRIPTION— SUSPENSION

UCC CODE 2—

UCC-2 DESCRIPTION—

UCC CODE 3—

UCC-3 DESCRIPTION—

10/20/2000 10:03:50 SBD TEMPLATE - NICHOLS

## STRATEGY BASED DIAGNOSTICS

\_1\_ NUMBER OF TIMES IN FOR THE SAME CONDITION

\_2\_ NUMBER OF DAYS VEHICLE IN DEALERSHIP FOR SAME CONDITION

\_Y\_ (Y/N) IS THE VEHICLE IN THE DEALERSHIP

\_N\_ (Y/N) IS THE VEHICLE MODIFIED/NON-PRODUCTION ACCESSORIES (IF YES LIST)

\_Y\_ (Y/N) CAN COMPLAINT BE DUPLICATED (IF YES, FREQ., HOT, COLD, ETC.)

\_Y\_ (Y/N) HAVE YOU COMPARED THIS WITH AN IDENTICAL VEHICLE

\_Y\_ (Y/N) CAN YOU ISOLATE THE AREA OF THE CUSTOMERS COMPLAINT

\_Y\_ (Y/N) S/M SEARCH COMPLETED (IF YES, LIST SECTION, PG.)

\_Y\_ (Y/N) BULLETIN OR PI SEARCH PERFORMED:

\_Y\_ (Y/N) IS THE CUSTOMER CONCERN THE SAME AS SYMPTOM DESCRIPTION (IF NO LIST)

\_Y\_ (Y/N) CONDITION DETAILS (LIST DTC'S, ETC.)

\_N\_ (Y/N) DIAGNOSIS (PARTS REPLACED, VEH. HISTORY, ETC.)

10/20/2000 10:03:50 HISTORY - NICHOLS

CONDITION: ALVIN CALLED STS THE L/R TRAILING/CONTROL ARM BROKE IN HALF IN THE CENTER OF THE ARM. ALVIN STS DOES NOT SEE ANY MARKS WHERE THE ARM WAS HIT TO CAUSE THE TRAILING ARM TO BREAK. ALVIN STS THE VEHICLE IS IN THE BODY SHOP AND THEY ARE TAKING PICTURE AT THIS TIME.

**CORRECTION:**

SPOKE WITH WILLIE JONES ON THIS CONDITION. ADVISE TO ORDER THE PARTS BUT DO NOT REPAIR THE VEHICLE UNTIL WE CAN SEE IF AN RSE CAN LOOK AT THIS VEHICLE.

1. ADVISE TO ORDER PARTS TO REPAIR THE VEHICLE BUT DO NOT REPAIR THE VEHICLE WE ARE TRYING TO GET AN RSE TO LOOK AT THIS VEHICLE.

2. ADVISE I COULD CALL THE DEALER BACK ON 20 OR 23 OF OCT.00 ON THIS CONDITION.

ALVIN ADVISE TO CALL HIS SM ( MATT MODY PHONE #

.....NICHOLS 40744

10/24/2000 10:35:43 NICHOLS

SPOKE WITH WILLIE JONES TODAY. WILLIE WANT THE DEALER TO TAKE PICTURE OF THE BROKEN CONTROL ARM/ TRAILING ARM AND TO E-MAIL THEM TO TOM.GEIST@GM.COM. WILLIE ALSO WANT AN ENGINEER TO LOOK AT THIS VEHICLE ADVISE TO SEND CASE TO MY TEAM LEADER FOR A RSE REQUEST.

1. CALLED MATT MODY ADVISE TO SEND THE PICTURE TAKING TO TOM.GEIST@GM.COM.

2. ADVISE WE ARE REQUESTING AN RSE TO COME AND LOOK AT THIS VEHICLE PER OR LIAISON (WILLIE JONES).

3. SEND CASE TO MY TEAM LEADER (JOE PAWLIK) FOR AN RSE REQUEST...NICHOLS 40744

10/24/2000 11:02:52 NICHOLS

LEVEL 2 ESCALATION CHECK LIST

  5   NUMBER OF DAYS VEHICLE HAS BEEN OUT OF SERVICE FOR THIS CONDITION.

  1   NUMBER OF TIMES THE VEHICLE HAS BEEN TO THE DEALER FOR THIS CONDITION.

  Y   VEHICLE AT DEALER

  Y   THOROUGH SEARCH OF DATA BASE FOR APPLICABLE SERVICE INFORMATION.

  Y   BULLETINS OR P.I.S THAT HAVE BEEN RECOMMENDED ARE DOCUMENTED IN CASE TEXT.

  Y   RESULTS OF REQUESTED TESTS, TEMPLATES OR CHARTS ARE DOCUMENTED IN CASE TEXT.

Y RE-CAP REPAIR HISTORY (THIS COMPLAINT) INCLUDING PARTS REPLACED  
IN CASE TEXT.

Y CHANGE ASSIGN LEVEL TO LEVEL 2.

Y SEND CASE TO YOUR TEAM LEADER'S INBOX.

Y SEND VME TO TEAM LEADER ADVISING OF CASE ESCALATION.

10/24/2000 13:49:55 PAWLIK - LEFT VME FOR LIAISON TO  
FORWARD TO THE FIELD FOR RSE REQUEST.

10/25/2000 09:03:58 SCHOCKE - I HAVE SPOKEN TO THE RELEASE  
ENGINEER (STEVE ESSELINK) ON THIS ISSUE. NORMALLY WHAT CAUSES THIS  
CONDITION IS ONE OF TWO THINGS. IF A TIE DOWN (USED ON FLAT BED TOW  
TRUCK. ETC.) IS ATTACHED TO THE REAR TRAILING ARM CAUSING STRESS/FATIGUE  
ON THE ARM, THIS CAN CAUSE IT TO BREAK. IF THE REAR WHEEL HITS A CURB OR  
SOMETHING LIKE A CURB, THAT CAN FATIGUE OR BEND THE TRAILING ARM WHICH  
CAN CAUSE IT TO BREAK. LOOK FOR SIGNS OF RUST WHERE THIS MAY HAVE  
OCCURED. THE ENTIRE AXLE/BUSHING ASSEMBLY NEEDS TO BE REPLACED, PART  
#10414207. THESE PARTS ARE ON RETURN THROUGH THE WPC, SO IF THIS REPAIR  
IS COVERED UNDER WARRANTY, THE DRE WILL RECEIVE THE PARTS. SEE TAG CASE  
4243299 FOR FURTHER INFO. ANY OTHER QUESTIONS CALL JEFF SCHOCKE FIELD  
CONTACT GROUP, 810-947-3741....

10/26/2000 09:28:12 FISHER - RSE UPDATE  
CONDUCTED DEALER VISIT ON 10/25/2000 AND REVIEWED VEHICLE AND CONDITION.  
FOUND LT REAR CONTROL ARM BROKEN IN HALF. IT APPEARS UPPER PORTION OF  
CONTROL ARM WAS CRACKED FOR SOME TIME AS EVIDENCE BY CORROSION IN  
BREAK/CRACK AREA. AFTER FLEXING FOR SOME TIME, AREA WEAKENED AND BROKE  
AND THE LOWER PORTION FATIGUED UNDER STRESS. DIGITAL PICTURES WERE TAKEN  
AND WILL BE EMAIL TO BQM IF REQUESTED. DEALERSHIP WAS INFORMED PARTS MAY  
BE REQUESTED SO RETAIN. CONTACT PERSONS WOULD BE JEFF SOCHA (BYC MGR) OR  
MATT MOODY (SVC ADVISOR). THERE WERE NO INDICATIONS OF PHYSICAL CONTACT  
OR THAT VEHICLE HAD BEEN EITHER TOWED AND TIED DOWN INCORRECTLY.  
INSPECTED RT REAR CONTROL ARM AND DID NOT SEE ANY INDICATIONS OF CRACKS,  
ETC.

BILL FISHER, RSE S.E. REGION VME NODE 4040828389.

DEALERSHIP IS REPLACING REAR CONTROL ARM ASSY. AXLE LABEL CODE WAS "LLZ"  
#251780.

**GM634A**  
**EA03-005**

**ATTACHMENT "7A"**

# Return Parts

<u>Number</u>	<u>VIN #</u>	<u>Labor Op</u>	<u>Yr.</u>	<u>Miles</u>	<u>Build</u>	<u>RO Date</u>	<u>Engineering Comments</u>
1	1GMDX03E3XD118471	E5700	1999	58,849	09/23/1998	05/27/2003	No preexisting damage indicated by witness marks, sent to lab for analysis
2	1GNDX03E13D134806	E5700	2003	3,717	08/19/2003	05/30/2003	No trailing arm problem, bushing is improperly pressed in place
3	1GNDX13E51D244562	E5700	2001	20,202	02/01/2001	05/09/2003	No trailing arm problem, shock mount broken
4	1GNDX03E02D144591	E5700	2002	28,211	09/10/2001	04/16/2003	No apparent trailing arm damage
5	1GMDX13E43D208458	E5700	2003	2,919	11/19/2002	06/17/2003	No repair order, no arm fracture, weld between tube and end plate missing, probably a noise issue
6	1GMDX13E53D124798	E5700	2003	5,999	08/15/2002	06/17/2003	No trailing arm fracture, witness marks indicate park brake cable rubbing, probably a noise issue
7	1GMDU23EX2D315694	E5700	2002	10,548	06/12/2002	07/02/2003	Trailing arm fractured, arm missing, witness marks indicate prior damage, sent to lab for analysis
8	1GNDX03E01D147795	E5700	2001	23,207	09/14/2000	06/16/2003	Witness marks indicate prior damage, sent to lab for analysis
9	1GMDX03E22D182912	E5700	2002	21,657	11/07/2001	07/10/2003	No trailing arm damage, bushing pops out will not stay in
10	1GNDX03E11D228580	E5700	2001	20,148	01/03/2001		Vehicle hit on front pass. side Mar 03, complaining of May-03 noise, stopped at stop sign, trailing arm broken



**BRENNECKE CHEVROLET CO.**  
700 East Jackson Blvd.  
Jackson, Missouri 63755  
(573) 243-3521

P.O. #104751 TIRE REPL'D

TOW IN - SPELLING #650  
4V

REIMBURSE  
CUSTOMER

#6500 TOW BILL  
HE HAS PAID  
ALREADY. NEED  
COPY OF TOW BILL

Thank you for the opportunity to serve you. It is our aim to perform all the repairs requested on this repair order to your complete satisfaction. If our service was satisfactory tell your friends, if not, please tell us immediately.

**12 MONTH/12,000 MILE WARRANTY  
ON ALL GM PARTS INSTALLED  
IN OUR SERVICE DEPARTMENT.  
SEE YOUR SERVICE ADVISOR FOR  
DETAILS OF THIS LIMITED WARRANTY.**

SERVICE HISTORY							
DATE	FLYER ORDER	MESSAGE	ADVISOR	TECHNICIAN	OFFICE	LOCATION	REMARKS
03/18/03	251141	55328	8888				FREE JACK SALES LITE ENGINE OIL CONCERN EXTRA CONCERN WHEEL/TIRE CONCERN BODY ADJUSTMENTS 03/22/03 JACKSON STORE

SERVI				SALESPERSON NO. 30			
VEHICLE NO. 16MDX03E3XD119471				YEAR / MAKE / MODEL 99/PONTIAC/MONTANA/MONTANA			
CUSTOMER NO. 20572		SERVICE CONTRACT		DELIVERY DATE 04/12/02		STOCK NO. J02055A	
COLOR WHITE		CONTRACT NO.		DELIVERY MILE 36800		BILLING DEALER NO. 05/27/03	
TURBO		M/MC CVZZ		AIR COND. Y		P.S. Y	
TIME RECEIVED 08:24 AM		LABOR RATE		TOW 58848		ADVISOR NO. 8888	
05/27/03 08:00 PM		PRIORITY		EXPIRATION DATE		EXPIRATION MILES	
DAY/TIME		YES		NO		TAG NO. 9471	
<p><b>TERMS: STRICTLY CASH UNLESS ARRANGEMENTS MADE</b></p> <p>I hereby authorize the repair work herein set forth to be done along with the necessary material and agree that you are not responsible for loss or damage to vehicle or articles left in vehicle in case of fire, theft or any other cause beyond your control or for any delays caused by unavailability of parts or delays in parts shipments by the supplier or transporter. I hereby grant you and/or your employees permission to operate the vehicle herein described on streets, highways or elsewhere for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on the vehicle to secure the amount of repairs thereto and any amount I owe for other goods/services.</p> <p><i>[Signature]</i></p>							

ORIGINAL CUSTOMER ESTIMATE: TOTAL 500.00

X.....

C 47CVZZ0

AXLE CONCERN

CUSTOMER STATES WHILE DRIVING DOWN THE INTERSTATE  
THE RIGHT SIDE REAR END NEXT DOWN. VEHICLE TUNED IN.

3.9

ES100 1.9 2.0

APE

10414207 849.90

10331459 25.26

15353442 24.19

10245050 21.12

TIRE 58.86

TOW 65.00

AUTH. WARRANTY

SERV. LITE. ECU

#### DISCLAIMER OF WARRANTIES

The only warranties, if any, applying to this part(s) and/or service are those offered by the manufacturer. The selling dealer hereby expressly disclaims all other express or implied warranties of merchantability or fitness for a particular purpose, and neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this part(s) and/or service. Buyer shall not be entitled to recover from the selling dealer any consequential damages, damages to property, damages to time, or loss of time, or incidental damages.

2378  
JACKSON TIRE CENTER  
1901 E JACKSON BLVD  
JACKSON MO 63755  
BRP TO

new

Rear Right Lower.

RR lower control arm Broken.

Replaced Rear axle with new unit.  
Swapped Hubs & Brakes. Bled Brakes.

Inject shock s  
RR shock Bent.

Replaced RR shock.

ABS Light is on

RR wheel speed sensor wiring harness torn.  
Replaced RR wiring harness.  
cleared code.

Inject Rear susp.  
Found (stabilizer Bar) track Bar Bent.

Replaced track Bar (stabilizer Bar)

Rear AXLE

\$1907.34

RR SHOCK

\$93.75

Repair ABS wiring

\$115.00

Tire ????

\$216.09

75.00

2191.09

22000

USED AXLE / New shock & Repair ABS /

\$450.00

tire ????

\$1116.09

75.00

1191.09

22000

STRAIGHT TIME ONLY	FLAT RATE PRICE	P.O. NO.	TIME	DATE
6/20	39	257571	4907 W	3E16
				119471

# "RACE TO PREAKNESS" PREAKNESS CHEVROLET

Visit Us At:  
www.preaknesschevy.com

2317 Hamburg Turnpike • WAYNE, N.J. 07470  
TEL. (973) 835-5050 - FAX: (973) 835-6422  
RECOMMENDED SERVICES

01CV205-05K	3,000 MILE SERVICE	MI	109.95	01CV202-04	C.M. CRACK LINE	MI	27.45
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## SERVICE HISTORY

02/20/03 10/15/02 08/05/02	99367 94649 93073	8 7 5	5101 5101 66	45 45 32	W	60CV203-D2 60CV203-D2 60CV201	CLEAN FOR DELIVERY CLEAN FOR DELIVERY PDI FOR STOCK
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SALESPERSON NO. 5115 JON T BECCARI

## S E R V I C E

REPLACED PARTS REQUESTED BY CUSTOMER <input type="checkbox"/> YES <input type="checkbox"/> NO	VEHICLE ID. NO. <b>1GNDX03E13D134606</b>	YEAR/MONTH/MAKE <b>03/CHEVROLET TRUCK/VENTURE/4DR VENT</b>	PRODUCTION DATE <b>4710</b>	BOOK NO. <b>4710</b>	LICENSE NO. <b>03242</b>
ALL PARTS ARE NEW UNLESS OTHERWISE SPECIFIED	DATE RECEIVED <b>06:31pm 05/31/03</b>	DATE OF SERVICE <b>04:00pm</b>	DELIVERY DATE <b>02/22/03</b>	DELIVERY MILE <b>15</b>	DELIVERED BY <b>05/80/03</b>
APPROVAL <input type="checkbox"/> CLIENT <input type="checkbox"/> INTERNAL <input type="checkbox"/> WARRANTY	LABOR RATE	LABOR RATE	CONTRACT NO.	INSPECTION DATE	INSPECTION MILE <b>8125</b>
I hereby authorize the repair work herein set forth to be done by you, together with the handling by you of the necessary parts and other material for such repair, and agree that you are not responsible for any delays caused by unavailability or delayed availability of parts or material for any reason; that you neither assume nor warrant any other person to assume for you any liability in connection with such repair; that you shall not be responsible for loss or damage to the above vehicle, or articles left therein in case of fire, theft or other causes beyond your control; that an express mechanic's lien is hereby acknowledged on the above vehicle to secure the amount of repairs furnished; that your employees may operate the above vehicle on streets, highways or elsewhere for the purpose of testing and/or inspecting such vehicle.			ADDRESS NO. <b>65</b> ADDRESS <b>BRYAN</b>		

ORIGINAL CUSTOMER ESTIMATE: TOTAL <b>109.95</b>	I HEREBY WAIVE MY RIGHT TO RECEIVE A WRITTEN ESTIMATE OF THE COST TO COMPLETE THE REQUESTED REPAIRS. X
ORIGINAL ESTIMATE PARTS \$ LABOR \$ TOTAL \$ ADD'L REPAIRS AUTHORIZED BY: DATE TIME RELEASED BY <b>3717</b>	AUTHORIZED ADDITIONS PARTS \$ LABOR \$ TOTAL \$ TECH. NO. RELEASED BY <b>3722</b>
New Jersey State Inspection Due on: _____ Month/Year	
ALL PARTS INSTALLED ARE NEW UNLESS SPECIFIED OTHERWISE. ALL PARTS REMOVED WILL BE DISCARDED UNLESS OTHERWISE SPECIFIED. <input type="checkbox"/> BARE	
DISCLAIMER OF WARRANTIES THE SELLER, HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF SAID PRODUCTS.	
PREAKNESS CHEVROLET, INC. 2317 Hamburg Turnpike Wayne, N.J. 07470 TEL. (973) 835-5050 - FAX: (973) 835-6422	



ADDITIONAL INSTRUCTIONS  
OR ESTIMATES

Called June 3

Loss

10.20 AM

651 4393

John Host  
Savoy

MECHANIC'S FINDINGS AND REMARKS

MECHANIC'S NAME & NUMBER

Left - complete  
banging noise underneath - coming  
from right rear - Road tested  
confirmed noise  
Customer must return for  
further diagnosis

MECHANIC'S NAME & NUMBER

Noise Rear Axle  
Rt Arm Loose on bushing  
Called T.A. Told to replace  
Arm & Axle  
Rear fit bushing fits Loose  
in Rt Arm  
Replace rear Axle

MECHANIC'S NAME & NUMBER

ELAPSED  
TIME

TIME  
DATE

OFF

JUN 31 '03 PM 10:53

JUN 31 '03 PM 2:20

ON

OFF

ON

OFF

JUN 02 '03 PM 8:45

JUN 02 '03 PM 2:32

OFF

ON

OFF

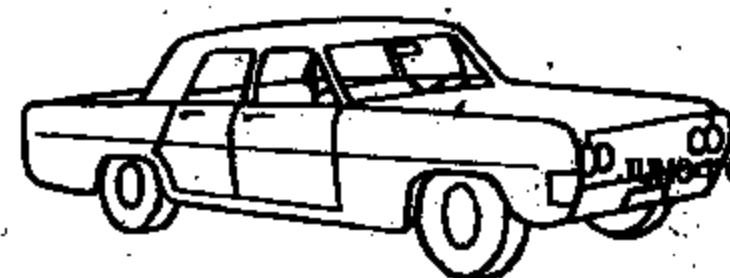
JUN 04 '03 PM 8:37

ADDITIONAL FLAGS

FLAG

OWNER'S INITIALS

REPAIR ITEM NUMBER	PLATE NO.	WORK NO.	TIME	OFF
		103242		Krieger
		OPER. NO.		
		EMP. NO.		5-31



JUN 03 '03 PM 12:00

REPAIR ITEM NUMBER	PLATE NO.	WORK NO.	TIME	OFF
		103242		R. W. King
		OPER. NO.		
		EMP. NO.		6-8-03

FLAG



# POTAMKIN

## Cadillac • Buick • Chevrolet • GMC • Pontiac Hummer of Manhattan LLC

798 Eleventh Avenue  
New York, New York 10019  
212 • 708-3095

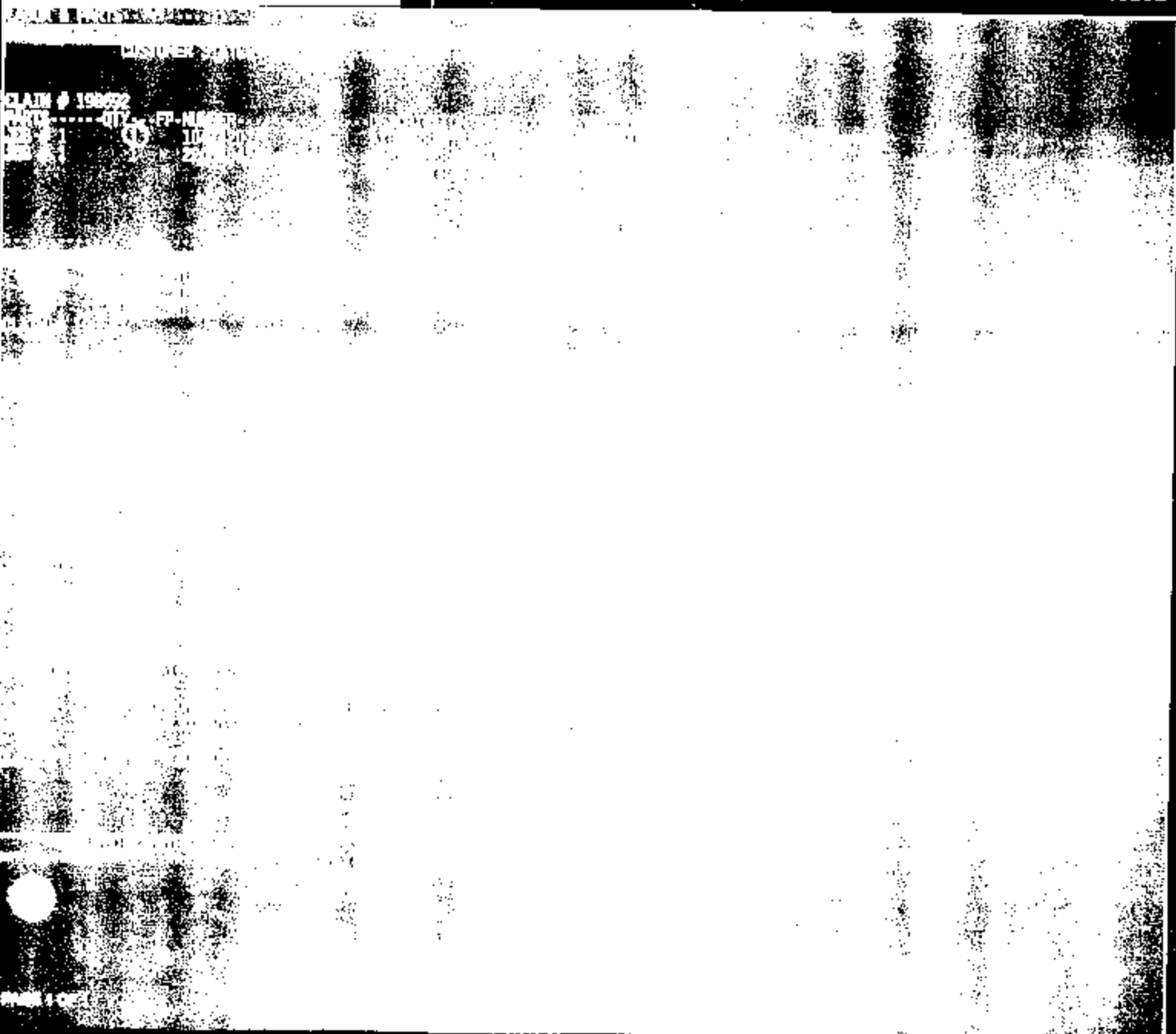
ANY WARRANTIES ON THE PRODUCTS SOLD HEREBY ARE THOSE MADE BY THE MANUFACTURERS. THE SELLER HEREBY DISCLAIMS ALL WARRANTIES EITHER EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF SAID PRODUCTS. THOSE PARTS AND ACCESSORIES THAT ARE NOT SUPPLIED OR MARKED BY GENERAL MOTORS ARE NOT WARRANTED BY GENERAL MOTORS, NOR ARE THEY WARRANTED BY THE SELLING DEALER. ASK YOUR SERVICE REPRESENTATIVE FOR SPECIFIC WARRANTY INFORMATION ON THESE PRODUCTS.

N.Y.S. REPAIR SHOP REG. NO. R-7068908, 7062072

NYC • DCA LIC. NO. 916764, 1120840

CONTRACT NO. <b>156731</b>	SALES REP. <b>RANDY SMITH</b>	SALES REP. ID. <b>974</b>	SALES REP. ID. <b>3804</b>	DATE OF SALE <b>05/28/03</b>	PRODUCT NO. <b>CVN5198692</b>
	SALES PRICE <b>92.58</b>	DI CKU 8893	20,202	GY7	35079A
	VEHICLE MAKE/MODEL <b>01/CHEVROLET/VENTURE/VAN</b>			DATE OF DELIVERY <b>04/22/03</b>	DELIVERY PRICE <b>19,395</b>
	VEHICLE VIN NO. <b>1GNDX13E51D244562</b>			SALES DEALER'S	PRODUCTION DATE
	P.T.E. NO.		P.O. NO.	<b>05/09/03</b>	
	COMMENTS				

MO: 20202



04-16-03

<b>CARLOS</b>	<b>JACINTO</b>
<b>MARTIN</b>	<b>WILLIAM</b>
<b>JOSE</b>	<b>JOHN</b>
<b>ANTONIO</b>	<b>JOHN</b>

Chas. S. Hollister, Jr. (signed)

Dealer Name R# 46124	
Telephone Number R# 46124	
Request Number (From DCS Message)	
Prepared For Shipping By (Dealership Employee)	
Please Attach All Paperwork To The Back Of This Tag Using One Staple Only	

Vehicle ID Number: 20144571

Date: 05-01-03

R# 46124

WPC RETURN INFORMATION

POWER WFO CODE

**203498**

**NICK CHEVROLET, INC.**

22 WEST 7TH AVENUE  
TARENTUM, PA 16864

LOCAL: (724) 224-2700 PITTSBURGH: (412) 382-3924  
FAX: (412) 382-3707

**FAX: (412) 962-9707**

**HOURS:**

MONDAY - FRIDAY 8:00 A.M. - 5:00 P.M.  
SATURDAY 8:00 A.M. - 1:00 P.M.

## WARRANTY

PAGE 1

**SERVICE ADVISOR: 316 GLENN MATOVCIK**

COLOR		YEAR	MAKE/MODEL	VIN		MILEAGE		MILEAGE IN/OUT		TAB
SILVER		03	PONTIAC	1GMDX13E53D124798		DBX5388		5999/5999		T792
DEL DATE	PROD DATE	WARR EXP	RRP MSRP	MSRP	DATE	PAYMENT	INV DATE			
11JAN2003			17:00	17JUN03		CASH	17JUN2003			

REG. OPENED	READY	OPTIONS: DLR:513596 ENG:3.4 Liter MFI
-------------	-------	---------------------------------------

07:36 17JUN03 12:14 17JUN03

LINE	OPCODE	TECH	TYPE	HOURS	LIST	NET	TOTAL
------	--------	------	------	-------	------	-----	-------

COURT STATES THERE IS A LOSS COMING FROM THE REAR OF VAN FOR REAR

## AXLE

CAUSE: LOOSE INSIDE AXLE TUBE

E5700 AXLE ASSEMBLY, REAR - REPLACE

260 RAZPOTHNIK, RANDY R LICH: 7698

WMP4 1.90

116.85 116.85

1	10414207	AXLE, RR	1491	06	1189	86	1189	86
---	----------	----------	------	----	------	----	------	----

FC: 2W

PART#: 10434202

COUNT: 1

## CLAIM TYPE:

AUTH CODE:

◆◆◆

84990 118986 TPARTS

3145 11685 23480

## REPLACE REAR AXLE TUBE

COST, SALE, & COMP TOTALS 88135 130671 0

**ALL PARTS INSTALLED ARE NEW  
UNLESS SPECIFIED OTHERWISE.**

THE FACTORY WARRANTY CONSTITUTES ALL OF THE WARRANTIES WITH  
RESPECT TO THE SALE OF THIS ITEM/ITEMS. THE SELLER HEREBY  
EXPRESSLY DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED,  
INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS  
FOR A PARTICULAR PURPOSE. SELLER NEITHER ASSUMES NOR  
AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN  
CONNECTION WITH THE SALE OF THIS ITEM/ITEMS.

CHARGE	TOTALS
LABOR AMOUNT	116.85
PARTS AMOUNT	1189.86
GAS, OIL, LUBE	0.00
SUBLET AMOUNT	0.00
MISC. CHARGES	0.00
TOTAL CHARGES	1306.71
LESS INSURANCE	0.00
SALES TAX	0.00
PLEASE PAY THIS AMOUNT	

**WARRANTY COPY**



MICH. REG. # F-103308

CLASSIFICATION	ADDRESS	YAM NO.	INVOICE DATE	
1800	DONALD CARGO 1541		01/03/103	
	LEAD NO.	MILEAGE	01/03/103	01/03/103
	YEAR / MAKE / MODEL	10548	301 WEDGHE	301 WEDGHE
	CHRYSLER CTRANG SPORTLDR EXT WBLE		01/03/103	7
			01/03/103	PRODUCTION DATE
	PYREX COOLER 10548		01/03/103	
			01/03/103	

### DCS AUDIT SLIP

DCS DATA FILE: GNGWF.873

02/07/2003

### WARRANTY-NEW CLAIM

RO NUMBER	RO DATE	YIN	DTV	DEALER	ODMETER	SERVICE ADVISOR #
089701	07/02/2003	18NDU21E3Z0315694	6	11633	10848	364-86-3820

LN	JOB	CT	CC	PC	PART-NO.	TOT-PTS	FC	LABOR	LIRS	CHRS	NET-ART.	LAB-TOT
LN	TOT				TECH 330			ESTD	1.9			110.24
AUTH CODE:                      AUTH. AUTHOR.:												

LN JOB CT CC PC PART-NO. TOT-PTS FC LABOR LIRS CHRS NET-ANT. LAB-TOT.  
 2 01 75.00 376-98-8684 AUTH CODE: AUTH. AUTHOR : 75.00

**R.O. TOTAL: 1375.10**

DUPLICATE INVOICE

### PARTS, SERVICE AND BODY SHOP HOURS

**9 AM - 5 PM**

**MON - FRIDAY**

**8 AM - 12 NOON**

**SATURDAY**

THE ONLY WARRANTIES APPLYING TO THIS PARTNER ARE THOSE WHICH MAY BE OFFERED BY THE MANUFACTURER. THE SELLING DEALER HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OTHER THAN THOSE OF HIS USE, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH THE SALE OF THIS PARTNER. NEITHER SELLER OR DEALER SHALL BE ENTITLED TO RECOVER FROM THE SELLING DEALER ANY CONSEQUENTIAL DAMAGES, DAMAGES TO PROPERTY, DAMAGES FOR LOSS OF USE, LOSS OF TIME, LOSS OF PROFITS OR INCOME OR ANY OTHER ECONOMIC DAMAGES.

THE CHALMERS-57'S LABOR TIME GUIDE REFLECTS AN AVERAGE TIME REQUIREMENT FOR PERFORMANCE OF SPECIFIC VEHICLE REPAIRS AND MAY THEREFORE BE EITHER MORE OR LESS THAN THE ACTUAL CLOCK TIME IN ANY GIVEN INSTANCE.

A 50¢ charge of 5% of the charge for repair labor is added for drop supplies such as nuts, bolts, washers, lugs, pins, springs, shims, screws, washers, wire, window glass, etc. Minimum charge is \$10.00.

*Thank You!*

REPAIRS PROPERLY COMPLETED  
& CHECKED BY



# GLEN SAIN CHEVY-CADILLAC

918 First Street • Kennett, MO 63857  
Phone (573) 888-1972 • Fax (573) 888-1747



10801	FGNDX03E01D147795				09/16/03
10801	CHEV	ADVENTURE	BLK		129
10807	2500	09/20/00	BLK		6294
					6294

1) RIGHT REAR WHEEL AND JAIL LOCK SPRING CAME  
D LOCKED UP  
RIGHT REAR LEVELING ARM BROKE, AXLE, REAR SHOCK.  
REPLACE RIGHT REAR AXLE, HUB ASSY, REAR SHOCK,  
WHEEL SPEED SENSOR,  
AUTH"EP"  
(10-0805 BRAD-)

E57D0	1D	CM	A	31	175.18
(P) 10414207		AXLE, RR		1	1189.86
7470549		BEARING		1	265.09
22132416		SPRING		1	68.38
88945977		ABSORBER		2	40.64
15353942		HARNESSES		1	33.87
Total Repair (WC)					1773.01

2) TOWING  
(04-6294 GS-)

T2020	1D	CM	A	0	.00
MCMAHONS W 10801		T2020			85.00
Total Repair (WC)					85.00

3) RENTAL 2 DAYS  
(04-6294 GS-)

E7902	98	MJ	A	0	
RENTAL 2	10801				60.00
Total Repair (WC)					60.00

WARRANTY SERVICE JUL 03 10801-01-01

## DISCLAIMER OF WARRANTIES

All work on the product sold hereby is done made by the manufacturer. The seller disclaims all warranties other expressed or implied, including any liability for consequential damages for a particular purpose, and neither assumes nor warrants any person to assume for any liability in connection with the sale of this product. Any work done on the product sold hereby is done made by the manufacturer.

TERMS  
No returns on stocked or special order items. A restocking charge will be applied on all merchandise returned for credit or refund. No returns after 30 days.

175.18  
1597.83  
145.00  
.00  
.00  
1918.01

Parts	.00
Sublet	.00
Shop Supplies	.00
Oil/Grease	.00
Total	.00
Tax	.00
Total	.00

10801

Job 10801

Customer Copy

RF:

B** C/S NOISE FROM R/REAR OVER BUMPS.							
CAUSE: RIGHT REAR TRAILER ARM BUSHING OUT OF AXLE HOUSING AND WONT STAY IN NEC TO REPLACE REAR AXLE ASSEMBLY AND TRANSMISSION PARTS							
ESTD AXLE ASSEMBLY, REAR REPLACE							
	695	WS94	1.90	151.15	151.15	3990	15115
1	10414207	AXLE, RR	1491.06	1359.84	1359.84	84930	135384
2	10239185	BUSHING	9.63	8.78	17.56	1098	1756
PC, RC							
PART#: 10414207							
COUNT: 1							
CLAIM TYPE:							
ADPH CODE:							
NM							

	LABOR AMOUNT		<b>STATEMENT OF DISCLAIMER</b>  The factory warranty constitutes all of the warranties with respect to the sale of this item/terms. The Seller hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose. Seller neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this item/terms.
	PARTS AMOUNT		
	GAS,OIL, LUBE		
	SUBLET AMOUNT		
	MISC. CHARGES		
	TOTAL CHARGES		
	LESS INSURANCE		
	SALES TAX		
	PLEASE PAY THIS AMOUNT		<b>CUSTOMER SIGNATURE</b> <b>X</b>

The factory warranty constitutes all of the warranties with respect to the sale of this item/terms. The Seller hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose. Seller neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of this item/terms.

**CUSTOMER SIGNATURE**

X

**WARRANTY COPY**



165297

WORKORDER

PAGE 1

MALOUF BUICK-PONTIAC-GMC TRUCKS

Route 1 and Adams Lane, North Brunswick, New Jersey, 08902

Sales (732) 821-8400 Service (732) 821-8407

www.malouf.com

SERVICE ADVISOR: 305 BIERMAN, KENNETH

COLOR	YEAR	MAKE/MODEL	VIN	PLANT	MILEAGE IN/OUT	TAG
	02	PONTIAC MONTANA	1GMDX03E22D182912		21667/21697	T800
IN SVC DATE	PROB DATE	WARR EXP	PROB EXP	DO NO	DATE	PAYMENT
01JAN1980			17:00 10JUL03			CASH
DO OPENING	READY	OPTIONS: DLR:34840 ENG:3.4 Liter, V6, MFI				
10JUL2003 08:11						

LINE OF CODE TECH. TYPE DESCRIPTIONS/INSTRUCTIONS  
 # A C/C C/A AT TIMES DASH LIGHTS AND CROSS FLICKER AND GO OUT

① C/C NOISE FROM R/R OVER BUMP.

② Reimb cust 2 days work  
 \$430 per day to complete repairs

10414207 1,491.00 x 06  
 10239185 9.63 x 06  
 10331459 x

## EXCLUSION OF WARRANTIES

Any warranties on the parts and accessories sold hereby are made by the manufacturer. The undersigned purchaser understands and agrees that dealer makes no warranties of any kind, express or implied, and disclaims all warranties, including warranties of merchantability or fitness for a particular purpose, with regard to the parts and/or accessories purchased; and that in no event shall dealer be liable for incidental or consequential damages or commercial losses arising out of such purchase. The undersigned purchaser further agrees that the warranties excluded by dealer include, but are not limited to any warranties that such parts and/or accessories are of merchantable quality or that they will enable any vehicle or any of its systems to perform with respect to safety, efficiency, or comfort.

## TERMS OF CASH (INCLUDE APPROVED BY SIGN)

I hereby authorize the repair work hereafter set forth to be done along with the necessary material and agree that you are not responsible for loss or damage to vehicle or articles left in vehicle in case of fire, theft or any other cause beyond your control or for any delays caused by unavailability of parts or delays in parts shipment by the supplier or warehouse. I hereby grant you under your employees permission to remove the vehicle from described location, highways or elsewhere hereby authorized on vehicle to carry the

COMPLETE THE FOLLOWING REPAIRS

CUSTOMER LABOR CHARGES ARE BASED ON A RATE OF \$ PER FLAT RATE HOUR.

CUSTOMER LABOR CHARGES	0	AMOUNT OF \$ BY	<input type="checkbox"/> CASH	O.E. BY
WARRANTY	0	DATE	<input type="checkbox"/> VISA	
TOTAL \$	0	YEAR	<input type="checkbox"/> MC	

TECHNICIAN'S SIGNATURE

I HAVE I HAVE

## COMPLAINT

## CAUSE

## **CORRECTION**

**LABOR RECORD**[illegible]

A Rd. to 30 miles

Did not get  
Post to Koppin

B Run Horse  
R.R. Trail  
and Busting  
act of Girl  
Housing. - Went  
stay in. Put Back  
in place and Pops  
out again.

Deputy Rec  
Appl. asst.  
Trans for Post  
ad. P. Baker  
Signature

**COMPONENT I.D. NO.**

## COMMENTS

**ENGINE** \_\_\_\_\_

**TRANS** \_\_\_\_\_.

**REAR** \_\_\_\_\_

Axle  
R.S.

SHAWNEE Year (cont.)	MAX BIDS PRICE	R.O. NO.	6509	DATE	7/11
19		65			

**GM634A**  
**EA03-005**

**ATTACHMENT "7B"**



# GM Evaluation Report

12-02-04 (Revised)

Platform	Project/NO No.	Requirement No.	Procedure No.	VPP/TA/PC	Model Year	Model No.	PER/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11308

Reference Issue Report (IR) No. NA

Category: MAT

Function: ☒ Development

Validation

Method: Math Based

☒ Hardware Based

Date: 6/17/2003

☒ Final

Title: Report for STR # 11358

☐ Interim No.

Man Hour: 18 Hours

☐ Release Date of Release:

To: (Requestor) ERIC M JAROSZYNSKI

Date of Request: 06/04/2003

From: Victor Ma

Dates of Evaluation: 6/5/2003 - 6/17/2003

- The results published within this report relate only to the items tested.
- This report shall not be reproduced except in full, without the written approval of the laboratory manager or his/her designate.
- Tests identified with an asterisk in the Procedure/Method section are not included in the laboratory's A2LA scope of accreditation. These non-accredited tests may be referenced in other sections without the asterisk.

## Objective:

Determine the cause of the fracture in a trailing arm from a 2001 U-van.  
Evaluate the metallurgical properties of the trailing arm.

## Conclusions:

- Both fractures appeared to initiate inside slot corners of the arm by fatigue.
- The fractured trailing arm showed bending in one side of the arm and the fatigue fracture in bend side showed multiple origins along the surface.
- No surface damage, which could contribute to the fracture was observed.
- Secondary fatigue cracks were also observed in both sides of the arm near the primary cracks.
- We believe that the trailing arm fractured in slot corners of the arm in bended side by fatigue first and the root cause of the fracture is unclear.

Design Evaluated: n/a

GMUTS Rating: n/a

Veh. Mileage: n/a

Part/Test Object Name(s)	Veh/Buck/PT/Part No./RPO	Revision Date/Level
Part Category:	10414207	n/a
Part Name: Rear Axle/Susp. - Control Arm		
Material		

Distribution:	
Name: ERIC M	Loc: 480-208-314
Name: Lana M. Dugan	Loc:
Name:	Loc:
Name:	Loc:
Name:	Loc:

Author: Victor Ma	Date: 6/17/2003
(Title/Phone) Lead Analyst / (588) 647-8888	
(Location) GMNA Materials Lab - Warren	
Approver: Bob Stiles	Date: 6/18/2003
(Title) Final Report Approver	
(Location) GMNA Materials Lab - Warren	
Approver: NA	Date: NA
(Title) NA	
(Location) NA	

GMNA Warren Materials Laboratory

Mail Code: 480-716-800, 30003 Van Dyke Avenue, Warren, MI 48090-0000 Fax: (588) 575-1555 (8-535)



# GM Evaluation Report

1945-04 Mechanical

Platform	Project/EWO No.	Requirement No.	Procedure No.	VPP/NA/UPC	Model Year	Model No.	PER/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11368

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

☒ Hardware Based

## Recommendations:

N/A

## Requirements:

N/A

## Background:

### Sample Condition as received:

Fracture of trailing arm

### Sample History:

Warranty Return part fractured in service.

### Unusual Circumstances:

None noted.

### Previous Performance:

None noted.

## Assumptions/Limitations:

N/A

## Equipment:

Fracture Analysis\* was accomplished utilizing OM001134 Amray 1830 SEM, OM001156 Noran Vantage X-Ray microanalysis system.

ASTM E0003-01 Preparation of Metallographic Specimens was accomplished utilizing OM000905 Struers cut-off wheel, OM001190 Buehler autopolisher, OM001194 Buehler mounting press, OM001211 Marvel band saw. ASTM E0018-02 Rockwell Hardness & Superficial Hardness of Metallic Materials was accomplished utilizing OM000880 Wilson Rockwell hardness tester.

Metallography\* was accomplished utilizing OM001143 Nikon metallograph w/digital camera.

Photography\* was accomplished utilizing OM001141 Leica Zoom Stereomicroscope, OM001149 Olympus digital camera.

## Procedure/Method:

Items with a "dev" designation directly following the identification number have deviations associated with the test method. These deviations are discussed in file "Deviations to Published Test Methods for Accredited Testing" located on SSPR (<http://epd.gm.com/sspr>).

Fracture Analysis\* was done by Victor Ma.

ASTM E0003-01 Preparation of Metallographic Specimens was done by Victor Ma.

ASTM E0018-02 Rockwell Hardness & Superficial Hardness of Metallic Materials was done by Victor Ma.

Metallography\* was done by Victor Ma.

Photography\* was done by Victor Ma.

Detailed Test Instructions: Please perform a fracture analysis. Part was removed from a 2001 U-van with 20,000 miles. Inspect part for witness marks due to damage from Tie-downs.



# GM Evaluation Report

925-44 Mechanical

Platform	Project/END No.	Requirement No.	Procedure No.	VPP/VA/UPC	Model Year	Model No.	FEUR/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11358

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development ☐ ValidationMethod: Math Based ☐ Hardware Based ☒

## Results:

One warranty return rear axle trailing arm, removed from a 2001 U-van, was submitted for metallurgical analysis due to fracture. Figure 1 shows the broken trailing arm.

## Fractography

Visual examination of the fractured trailing arm showed bend in upper side of the arm, as shown in Figure 2. The fracture surfaces were severely rusted and corroded, as shown in Figure 3 and Figure 4. No surface damage, which could contribute to the fracture was observed. The fracture surfaces were cleaned using oakite reagent in the ultrasonic cleaner and Figure 5 displays one of the cleaned fractured surfaces. The fractures appeared to initiate in the inside slot corners of the arm with a fatigue mechanism. The fracture in bend side revealed multiple origins along surface and the fatigue cracks appeared to propagate cross through the plate of the arm. The fracture in other side also displayed a fatigue crack, which initiated in the corner of the arm slot. Unlike the fracture on the other side, this crack revealed extreme plastic deformation and the fatigue crack had not propagated cross the entire plate of the arm before final fracture. The final fracture was ductile dimple fracture. Secondary cracks were also observed in both sides of the arm near the primary cracks and one secondary crack was opened for fractographic analysis. Scanning Electron Microscope (SEM) examination of the opened secondary crack indicated that the secondary crack was a fatigue crack as well, as shown in Figure 6.

## Microexamination

One microsample, cut near the crack, was examined to evaluate the metallurgical characteristic of the trailing arm. Microstructure of the trailing arm appeared to be acceptable, which contained fine grain size microstructure. A secondary crack was also found near the fracture surface, as shown in Figure 7.

## Hardness

Hardness of the trailing arm was taken using the Rockwell Hardness Tester at HRB scale and the average hardness reading was 97 HRB. The specification requirements of the mechanical property of the trailing arm are unknown. The thickness of the wall for the trailing arm was 4.0 mm in both upper side and lower side of the arm.

## Discussion

Since both fractures were fatigue fractures and no defect which could cause the arm cracking was observed, the root cause of the trailing arm fracture is uncertain. Based on the fracture mechanism and the extent of the plastic deformation in fracture surface, we believe that the fatigue cracks in bend side of the arm probably initiated first.



# GM Evaluation Report

1348-01 Material

Platform	Project/EWD No.	Requirement No.	Procedure No.	VPPMA/UPC	Model Year	Model No.	PER Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11358

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

☒ Hardware Based

## References/File Storage:

Original reports are stored in the Engineering Document Management database. All raw data files are stored in the laboratory or Document Retention Center and can be made available upon request.  
Micro: 1348

## Calibration Report information:

All relevant calibration records are stored in the laboratory and can be made available upon request.

# GM Evaluation Report

Platform	Project/IRD No.	Requirement No.	Procedure No.	VPR/VA/RFC	Model Year	Model No.	PER/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11358

Reference Issue Report (IR) No. NA

Category: MAT  
Function: ☒ Development ☐ Validation  
Method: ☒ Math Based ☒ Hardware Based



**Figure 1:**  
Photographs show the broken trailing arm. The left photo shows the broken trailing arm in customer Simra U-van and right photo shows the disassembled trailing arm. (Image 11358a and 11358b: Left photo was provided by requester)



**Figure 2:**  
Photograph shows the closed up view of the broken trailing arm in fracture areas. The photo shows bend in right side (upper side of the arm). Arrows indicate the fracture origins in both sides. (Image 11358d)





00100-01 Engineering

# GM Evaluation Report

Platform	Project/NO No.	Requirement No.	Procedure No.	VPP/DA/PC	Model Year	Model No.	PMT/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11358

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

☒ Hardware Based



Figure 3:

Photographs show the closed up view of the broken trailing arm fracture surfaces in both sides. (Image 11358f and 11358g)

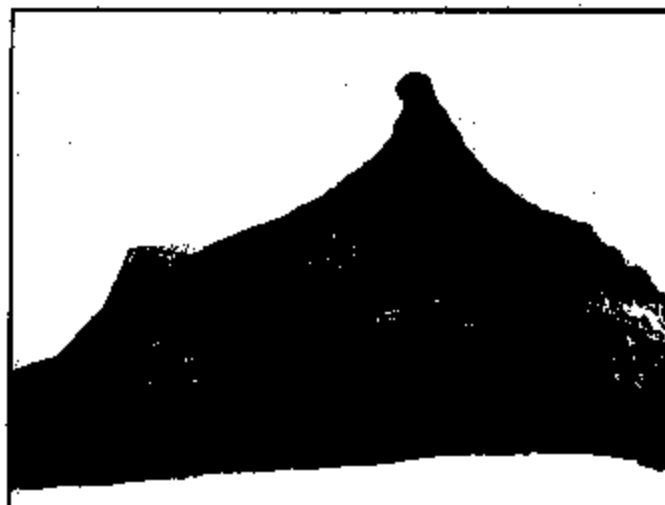


Figure 4:

Photographs show the rusted fracture surfaces in both sides and the right photo shows the fracture surface of the bending side. (Image 11358j and 11358k)

## GM Evaluation Report

Platform	Project/EWO No.	Requirement No.	Procedure No.	VPP/VAUPC	Model Year	Model No.	PER Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11358

Reference Issue Report (IR) No. NA

Category: MAT

Function: ☒ Development

Validation

Method: Math Based

☒ Hardware Based

Figure 5:

Photographs show the cleaned fracture surfaces in bending side, which shows the multiple fatigue origins. Arrows point to the fatigue origins. (Image 11358a and 11358b)

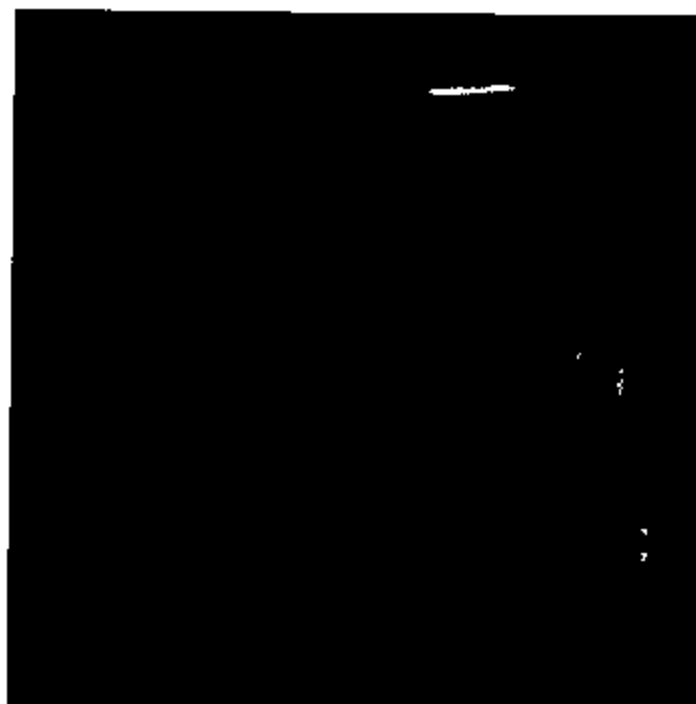


Figure 6:

SEM photograph shows the opened secondary crack, which clear shows that the crack initiated in the corner by fatigue mode. 26X (Image 11358ag)



# GM Evaluation Report

1348-64 Mechanical

Platform	Project/ENO No.	Requirement No.	Procedure No.	VPT/VIA/UPC	Model Year	Model No.	PEX/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11358

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

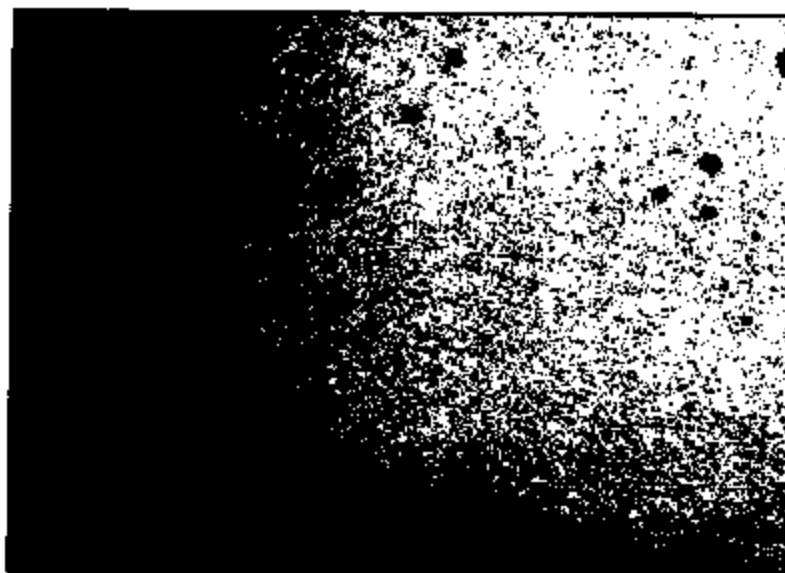
☒ Hardware Based

Figure 7:

Microphotograph shows the 2% nital etched microstructure near the fracture surface. A secondary crack is evident.  
(Image 11358)



## GM Evaluation Report

**1249-04 Mechanical**

Platform	Project/EMC No.	Requirement No.	Procedure No.	VPP/VA/UPC	Model Year	Model No.	PID/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11650

Reference Issue Report (IR) No. NA

Category: MAT

**Function** **Development**

### Validation

**Method:** North Based

- y Hardware Based

**Date:** 07/24/2009

☒ Fined

**Title:** Report for STR #11650

**Interim No.**

☐ Release ☐ Date of Release:

**To: (Requestor) ERIC M JAROSZYNSKI**

Date of Request: 07/16/2003

**From:** Terry A. Payne

**Dates of Evaluation:** 07/17/2008 – 07/24/2008

- The results published within this report relate only to the items tested.
- This report shall not be reproduced except in full, without the written approval of the laboratory manager or his/her designate.
- Tests identified with an asterisk are not included in the laboratory's current A2LA scope of accreditation. These nonaccredited tests may be referenced in other sections without the asterisk.

**Objective:** Perform a fracture analysis on a warranty return GMT200 rear axle trailing-arm that fractured in service.

**Conclusions:** The trailing arm fractured due to fatigue that initiated on the outboard side near the center of the arm. The rubbing deformation present on the opposite arm from vehicle transport may have contributed to the fracture by placing the rear axle in stress. The ferritic microstructure and hardness (98 HRB) are typical for the material and application.

**Requirements:** None provided.

**Design Evaluated: Rear Axle/Suspension**

**CHUATS Rating:** n/a

**Veh. Make:** Not provided

Part/Test Object Name(s)	Velh/Buck/PT/Part No./RPO	Revision Data/Level
Control Arm	10414207	n/a
Material:		
Carbon Steel?		

## Publications

Name: ERIC M	Loc: 480-205-914
Name: Lana M. Dugan	Loc:
Name:	Loc:
Name:	Loc:
Name:	Loc:

00

Author: Terry Payne Date: 07/24/2003  
(Title/Phone) Lead Analyst / 506-402-1283  
(Location) GINA Materials Lab - Warren

Approver: Robert Bleise  
(Title) Final Report Approver  
(Location) GMNA Materials Lab - Warren

Approver: N/A  
(Title)  
(Location)



# GM Evaluation Report

1341-04 Mechanical

Platform	Project/ERO No.	Requirement No.	Procedure No.	VP/MAJPC	Model Year	Model No.	PER Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11550

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

☒ Hardware Based

## Sample Condition as received:

Fractured trailing arm and related rear suspension parts received in good condition.

## Sample History:

Warranty Return part fractured in service (VIN 1GMDX03E3XD119471). Part was removed from a 2001 U-van.

## Equipment:

Instrument Name	Used for:
OM001149 Olympus Digital Camera	Macro Photography
Preparation of Metallographic Specimens: OM000905, OM001137, OM001160	Sample Preparation
OM006800 Wilson Rockwell Hardness Tester	HRS
OM001143 Nikon Metallograph w/Digital Camera	Metallography
OM001134 Amray 1830 SEM	Fracture Analysis

## Procedure/Method:

Items with a "dev" designation directly following the identification number have deviations associated with the test method. These deviations are discussed in file "Deviations to Published Test Methods for Accredited Testing" located on SSPR (<http://edp.gm.com/sspr>).

Fracture Analysis\* was done by Terry A. Payne.

Miscellaneous Unlisted Test\* (Specify in "Detailed Test Instructions") was done by Terry A. Payne.

Photography\* was done by Chris Madsen.

SEM\* was done by Terry A. Payne.

ASTM E0003-01 Preparation of Metallographic Specimens was done by Terry A. Payne.

ASTM E0018-02 Rockwell Hardness &amp; Superficial Hardness of Metallic Materials was done by Terry A. Payne.

Metallography\* was done by Terry A. Payne.

## Detailed Test Instructions:

Please perform a fracture analysis. Inspect part for witness marks due to damage from Tie-downs or any other deformation that may be related to the fracture.



## GM Evaluation Report

### 1345.04 Mechanical

Platform	Project/REQD No.	Requirement No.	Procedure No.	VPM/VAUC	Model Year	Model No.	PID/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11660

Reference Issue Report (IR) No. NA

Category: MAT

Function	Development	Validation
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Method:	Math Based	or	Hardware Based
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**Results:**

### Visual Examination

The rear axle trailing-arm and accompanying parts are shown as-received from the customer in figure 1. The fracture occurred near the middle of the arm offset of the center slot, shown in figure 2. A close visual examination of the accompanying parts revealed some damage evident on the opposite trailing arm, shown in figure 3. The arm appears to be bent out of alignment as well. Figure 4 shows a more detailed image of the damage with heavy oxidation evident in comparison to the fracture surfaces. The damage appears to be consistent with rubbing deformation and likely occurred during transport of the vehicle when the arm was used as a chain-down point. Although, no other damage or witness marks was evident on the fractured arm.

### Fracture Analysis

A fracture analysis was conducted to characterize any features present to further help determine the cause of the incident. The analysis revealed fatigue beach marks evident propagating from the outboard side of the arm, shown in figure 5. A higher magnification view of the fatigue fracture features is shown in figure 6. The secondary fracture on the other side of the slot occurred during overload of the arm.

The fracture surfaces were analyzed in the SEM to locate any stress concentrator that may have contributed to the fracture initiation. Figure 7 shows the fracture initiation site with beach marks propagating from a ratchet step. Figure 8 shows a higher magnification view of the initiation site with no apparent stress concentrator evident. An image of the representative fracture surface captured within the fatigue propagation zone is shown in figure 9.

### **Rockwell Hardness**

A Rockwell hardness test was conducted on a sample sectioned from the fractured arm using a HRB scale. The test was performed per ASTM E18-02. There were no material specifications provided for hardness on the part print for comparison. The results of the test are shown below.

**HRE**

93.0

85.3

97.1

**Avg.** 21.90

## Metallomics

A sample was sectioned adjacent to the fracture surface and prepared for metallographic analysis. Figure 10 shows the carbon steel microstructure as primarily ferritic with a very fine grain structure. The material appears typical for a stamped steel suspension application.



1348-04 Mechanical

## GM Evaluation Report

Platform	Project/EWO No.	Requirement No.	Procedure No.	VPP/MAUPC	Model Year	Model No.	PER Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11850

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

☒ Hardware Based

Figure 1: Image shows the rear axle and accompanying parts as-received from the customer. The fractured trailing-arm is located on the left side of the image.

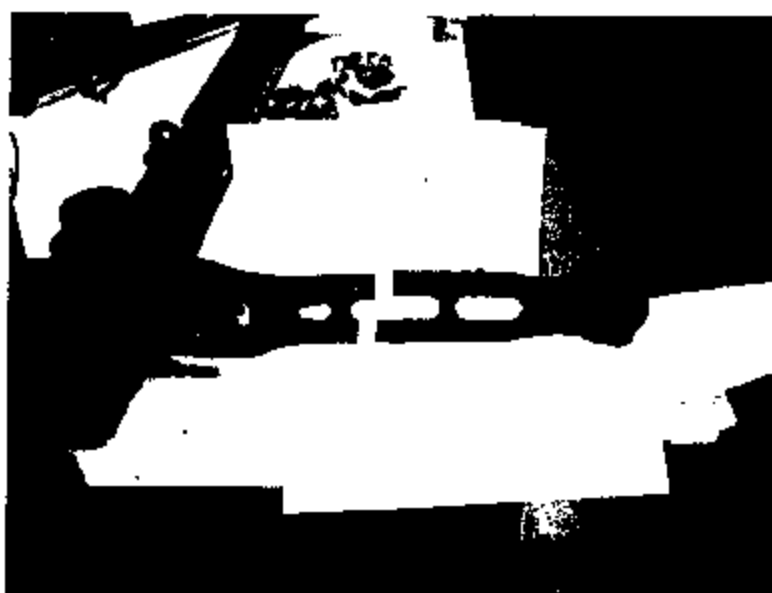


Figure 2: Image shows that the fracture occurred on the center slot of the trailing arm.

## GM Evaluation Report

1348-04 Mechanical

Platform	Project/ECO No.	Requirement No.	Procedure No.	VPP/VU/PC	Model Year	Model No.	PER/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11860

Reference Issue Report (IR) No. NA

Category: MAT

Function ☒ Development

Validation

Method: Math Based

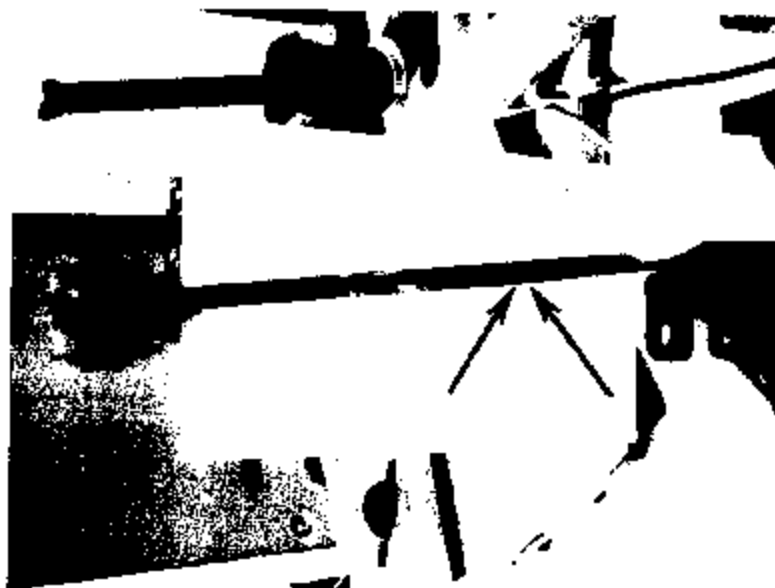
☒ Hardware Based

Figure 3: Image shows the location of damage on the opposite arm (arrows) and that the arm appears to be out of alignment (bent downwards).



Figure 4: Image shows a higher magnification view of the damage shown in figure 3. The heavily oxidized damage is consistent with rubbing deformation from a chain or hook that likely occurred during vehicle transport. Mag.: ~2X



# GM Evaluation Report

1348-04 Mechanical

Platform	Project/NO No.	Requirement No.	Procedure No.	VP/NA/UPC	Model Year	Model No.	FEA Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11660

Reference Issue Report (IR) No. NA

Category: MAT  
Function: ☒ Development  
Method: ☒ Math Based ☒ Validation  
☒ Hardware Based



Figure 5: Image shows the mating fracture halves of the trailing arm with fatigue beach marks evident (arrows).  
Mag.: ~1.2X

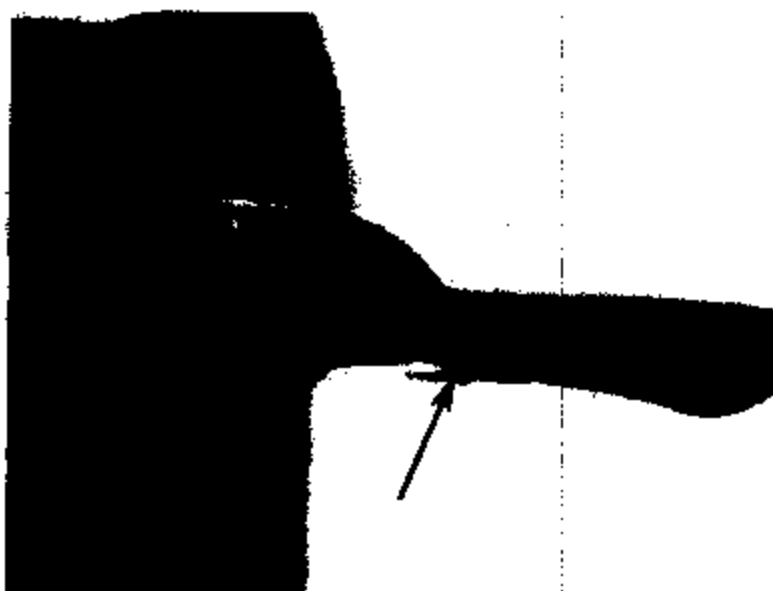


Figure 6: Image shows a higher magnification view of the beach marks pointing back towards the fracture initiation site (arrows). Mag.: ~1.25X

# GM Evaluation Report

1342-04 Mechanical

Pattern	Project/ECO No.	Requirement No.	Procedure No.	VP/VA/UPC	Model Year	Model No.	PSA/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11650

Reference Issue Report (IR) No. NA

Category: MAT  
 Function ☒ Development Validation  
 Method: Math Based ☒ Hardware Based



Figure 7: SEM image shows a more detailed view of the initiation site. Mag.: 14X

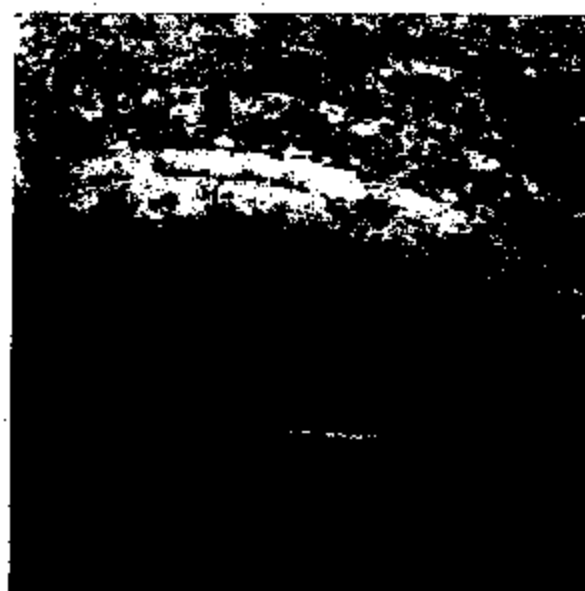


Figure 8: SEM image shows the initiation site with no signs of a stress concentrator evident. Mag.: 50X

## GM Evaluation Report

1348-04 Mechanics

Platform	Project/EWD No.	Requirement No.	Procedure No.	VPP/VVA/UPC	Model Year	Model No.	PER/Report No.
GMT200 VAN & 2002 AWD	n/a	n/a	n/a	n/a	2001	n/a	11660

Reference Issue Report (IR) No. NA

Category:	MAT	
Function	x Development	Validation
Method:	Meth Based	x Hardware Based



**Figure 9: SEM image shows the representative fracture surface captured within the fatigue propagation zone. Mag.: 600X**



**Figure 10:** Image shows the typical ferritic microstructure taken adjacent to the fracture surface. Etchant: 2% Nital – Mag.: 100X



**GM634A**  
**EA03-005**

**ATTACHMENT "9A"**

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - Metals

## HIGH STRENGTH, LOW ALLOY SHEET STEEL

GM6218M

**1 SCOPE.** This specification covers the requirements of several grades of continuously cast high strength low alloy (HSLA) sheet steel used for automotive applications. HSLA sheet steels of this specification will have good formability and weldability.

**1.1** Four (4) grades (strength levels) of steel are included in this specification. The grade of steel specified for an identified part should be based on part requirements (configuration and strength), as well as formability. Material selection should also take into consideration the amount of strain induced by forming and the impact strain has on strength achieved in the finished part.

**1.2** Grade levels correspond to minimum as received yield strengths. The grades 280, 340, 410 and 550 can be specified. The grade must be specified on the drawing and purchase order. The material call-out shall include the specification number, immediately followed by the grade. For example: GM6218M 340

**1.2.1** The designations YLK, XLK, and XLF, which designate the spread between yield and tensile strengths and descriptively identifies the grain structure, may also be included on the drawing. If these designations are omitted from the drawing, it is the responsibility of manufacturing to include this information on the MPS sheet. This designation shall also be included on the purchase order.

**1.3** This specification replaces GM6176M. With approval from the GM Materials Engineer an appropriate grade of this specification can be used for GM6176M specified on old drawings.

## 2 REFERENCED STANDARDS.

GM1000M      GM49769      ASTM A370  
GM6176      9984001

## 3 REQUIREMENTS.

**3.1 RESTRICTED AND REPORTABLE CHEMICALS (GM1000M).** All materials supplied to this specification must comply with the requirements listed in GM1000M, Restricted and Reportable Chemicals.

## 4 CHEMICAL COMPOSITION.

**4.1** Steels furnished to this specification shall conform to the chemical composition (heat analysis) for the grade specified in Table 1.

**4.2** Steel shall contain micro-alloying elements, such as niobium, titanium or vanadium, as strengthening agents. The choice of and limits for additional elements other than those specified above must be established by the supplier along with their identification at the time of source approval. Any change in composition will require approval prior to shipment.

TABLE 1 - CHEMICAL COMPOSITION, MASS% (MAX)

Type	Product	Carbon	Manganese	Phosphorus	Sulfur
Cold Rolled	280	0.12	1.00	0.04	0.05
	340	0.10	1.00	0.04	0.05
	410	0.12	1.00	0.04	0.05
	550	0.12	1.00	0.025	0.035
Hot Rolled	280	0.15	1.00	0.04	0.05
	340	0.15	1.00	0.025	0.035
	410	0.12	1.00	0.025	0.035
	550	0.15	1.65	0.025	0.035

**4.3** The steel used in this product may be made by basic oxygen, electric furnace or other process which will yield a material which satisfies the requirements for the specified grade. Material supplied to this specification must be continuous cast.

**5 MECHANICAL PROPERTIES.** The mechanical properties (longitudinal direction) of this steel shall conform to the requirements for the grade specified in Table 2 and 3.

TABLE 2 - MECHANICAL PROPERTIES, COLD ROLLED

Grade	Product	Yield Strength <sup>1</sup>		Tensile Strength Min (MPa)		Min Total % El. in 50 mm	Bend Test <sup>2</sup>
		Min (MPa)	Max (MPa)	YLK	XLK, XLF		
280	280	280	380	380	350	22	1T
340	340	340	450	440	410	22	1T & 1L
410	410	410	520	510	480	18	1T & 1L
550	550	550	650	650	620	12	1 1/2 T & 1 1/2 L

<sup>1</sup>Min yield strength in longitudinal direction only. Yield strength (0.2% offset, ASTM A370) shall be used in the follow up test procedure between supplier and purchaser.

<sup>2</sup>Bend Test, ASTM A370. Ratio of bend diameter to thickness (T = Transverse specimen and L = Longitudinal specimen.)

<sup>3</sup>Reference shall be made to the mass and finish requirements as shown in 1.1 and 1.2.

Note: YLK & XLK\* - Highly formable, killed, fine grain.

Spread between specified minimum yield and tensile strengths.

\*X\* = 70 MPa

\*Y\* = 100 MPa

XLF - Highly formable, killed, fine grain, inclusion shape controlled.

This standard is available for sale from the American Iron and Steel Institute, Inc. under agreement with the Iron, Steel and Aluminum Industry, Inc. and the American Iron and Steel Institute, Inc. Technical Standards Dept.

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - Metals

HIGH STRENGTH, LOW ALLOY SHEET STEEL  
GMB238MTABLE 3 - MECHANICAL PROPERTIES, HOT  
ROLLED (1.80 MM OR THICKER)

Grade	Pre- heat	Yield Strength <sup>1</sup>		Tensile Strength Min (MPa)		Min Total % El. in 80 mm <sup>2</sup>	Bend Test <sup>2</sup>
		Min (MPa)	Max (MPa)	YLK	YLF, XLF		
280	280	280	350	380	350	27	1T
340	340	340	450	440	410	25	1T
410	410	410	520	510	480	18	1 1/2 T & 1L
550	550	550	630	650	620	18	1 1/2 T & 1L

<sup>1</sup>Min yield strength in longitudinal direction only. Tensile strength (0.2% offset, ASTM A370) shall be used as the reference test procedure between supplier and purchaser.

<sup>2</sup>Bend Test, ASTM A370. Ratio of bend diameter to thickness (T = Transverse specimens and L = Longitudinal specimens.)

<sup>3</sup>Notations shall be made to the mass and finish requirements as shown in 1.1 and 1.2.

Spanned between specified minimum yield and tensile strengths.

"T" = 70 MPa

"Y" = 100 MPa

XLF - Highly formable, killed, fine grain, inclusion shape controlled.

## 5.1 SURFACE REQUIREMENTS.

5.1.1 Mill Oil and Edge Coating. All steel furnished to these specifications shall be coated with a mill oil and edge coating as specified per 9984001.

5.1.2 Surface Defects. Material shall be suitably free from surface defects. As negotiated between the supplier and GM for each individual product.

6 WELDABILITY. Material furnished in accordance with this specification shall be resistance spot weldable as agreed upon between engineering and supplier.

7 TEST REPORTS. Unless otherwise specified, a test report, representative of material shipped, with the chemical analysis, yield strength and total elongation shall be furnished to the purchasing plant.

8 INITIAL SOURCE APPROVAL. No shipment shall be made by any supplier until representative initial production samples have been approved by engineering as meeting the requirements of this specification.

8.1 Completed copies of the Material Safety Data Sheet meeting GM information requirements must be submitted with any new submission or whenever a composition change has occurred.

9 INSPECTION AND REJECTION. All shipments of material or parts under contract or purchase order manufactured to this specification shall be equivalent in every respect to the initial samples approved by engineering. There shall be no changes in either formulation or manufacturing processes permitted without prior notification and approval by engineering. Lack of notification by the supplier constitutes grounds for rejection of any shipment. While samples may be taken from incoming shipments and checked for conformance to this specification, the supplier shall accept the responsibility for incoming shipments meeting this specification without dependence upon purchaser's inspection.

10 APPROVED SOURCES. Engineering qualification of an approved source is required for this specification. Only sources listed in the GM Corporate Materials File under this specification number have been qualified by the Steel Metal Specialists Team, per GM9769P, as meeting the requirements of this specification. Purchased parts which are not in the GM Recycle Program shall meet specification requirements. However, they are not required to be an approved supplier in the GM Corporate Materials File.

11 GENERAL INFORMATION. This standard has been revised from FBMS 16-6, 16-7, 16-78A, 16-75 and 16-80, issued in September 1988. The latest revisions include:

Rev	Date	Description
B	3/90	Revised Tables 1, 2 & 3; added 1.2
C	6/90	Revised 1, 1.2, 4.3, 5 and 10 and Tables 1, 2 and 3

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - General

**RESTRICTED AND REPORTABLE CHEMICALS  
DO NOT USE ON NEW DRAWINGS. SCHEDULED FOR DELETION.  
REPLACED BY GMW3000.  
GM1000M**

**1 SCOPE.** This standard concerns certain chemicals whose use must be known to and approved by GM to assure compliance with U.S. and international regulations. Chemicals referenced in Section 4 are, or will be, prohibited by regulations. Chemicals referenced in Section 4.1.1 may be present if the designated approving department is notified in advance and gives written approval prior to PPAP submission. Chemicals referenced in Section 6 may be present if the designated approving department is notified. Designated approving departments are: Vehicle Engineering Centers Materials Engineering, Powertrain Materials Engineering, Allison Transmission Materials Engineering and Electro Motive Division Remanufactured Material Review Committee. The attached form (GM1000M - Substance Report Form, located in the Appendix, Section A3) must be submitted for any material or part which contains the chemicals addressed in this document. Reference Appendix B for suggested process flow diagrams.

## 2 REFERENCED STANDARDS.

None

**3 ENGINEERING DRAWING NOTE.** It is desirable that this standard be used on engineering drawings and other material specifications in a uniform manner as follows:

Restricted and Reportable Chemicals per GM1000M

**4 RESTRICTED CHEMICALS.** The following chemicals are restricted by either U.S. or international regulations, and must be eliminated as indicated below. Any usage of these chemicals prior to their respective elimination dates must be reported to the designated approving department on the form included in the Appendix, Section A3.

**4.1 CADMIUM AND COMPOUNDS.** Cadmium and its compounds shall not be used as surface treatments (including plating), stabilizers or color pigments for plastics, paints or dyes with the following exception in 4.1.1. Unintended existing impurities may not exceed the limit of 0.01% by weight of chemical/element in the raw material.

**4.1.1** Cadmium plating for safety and for electrical contacts is permitted.

**4.1.2** Cadmium and its compounds shall not be present in any material or component without full disclosure to, and prior written acknowledgment from, the designated approving department. Unintended existing impurities below the level of 0.01% by weight of chemical/element in the raw material do not need to be reported.

## 4.2 CHLOROFLUOROCARBONS - CLASS I AND II SUBSTANCES.

**4.2.1** Class I substances (See Appendix A, A1) shall not be present in any material or component.

**4.2.2** All Class II substances (See Appendix A, A2) must be phased out by January 1, 2030.

**4.2.2.1** Prior to the phase out date, Class II substances shall not be present in any material or component without full disclosure to, and prior written acknowledgment from the designated approving department.

**4.3 POLYCHLORINATED BIPHENYLS (PCB'S).** Polychlorinated biphenyls shall not be present in any material or component.

**5 REPORTABLE CHEMICALS REQUIRING PRIOR WRITTEN APPROVAL.** Unintended existing impurities below the level of 0.01% by weight of chemical/element in the raw material do not need to be reported.

**5.1 ASBESTOS.** Asbestos shall not be present in any material or component without full disclosure to, and prior written acknowledgment from the designated approving department.

**5.2 MERCURY AND COMPOUNDS.** Mercury and compounds shall not be present in any material or component without full disclosure to, and prior written acknowledgment from the designated approving department.

**5.3 POLYBROMINATED BIPHENYLS.** Polybrominated biphenyls shall not be present in any material or component without full disclosure to, and prior written acknowledgment from the designated approving department.

**5.4 RADIOACTIVE COMPOUNDS.** Radioactive compounds shall not be present in any material or component without full disclosure to, and prior written acknowledgment from the designated approving department. Unintended existing impurities do not need to be reported if the material/component does not exhibit a radioactive level which is above background radiation.

**6 REPORTABLE CHEMICALS NOT REQUIRING PRIOR WRITTEN APPROVAL.** Unintended existing impurities below the level of 0.05% by weight of chemical/element in the raw material do not need to be reported.

**6.1 LEAD AND COMPOUNDS.** Lead and compounds shall not be present in any material or component without full disclosure to the designated approving department.

**7 TESTING.** Any discrepancies regarding the presence of these compounds shall be resolved by testing metal (cadmium, mercury and lead) by atomic absorption, organics (CFC's, PCB's, and PBB's) by gas chromatography, and asbestos by polarized light microscopy.

**8 INITIAL SOURCE APPROVAL.** Completed copies of the Material Safety Data Sheet, meeting GM information requirements, must be submitted to the designated approving

This standard contains certain information that is classified as "Confidential" under the Freedom of Information Act. It is the policy of General Motors Corporation to release this information to the public.



## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - General

**RESTRICTED AND REPORTABLE CHEMICALS**  
**DO NOT USE ON NEW DRAWINGS. SCHEDULED FOR DELETION. REPLACED BY**  
**GMW3059.**  
**GM1000M**

department with any new submissions or whenever a composition change has occurred for materials that contain chemicals referenced in this document.

**9 INSPECTION AND REJECTION.** While samples may be taken from incoming shipments and checked for conformance to this specification, the supplier shall accept the responsibility for incoming shipments meeting this specification without dependence upon purchaser's inspection.

**10 GENERAL INFORMATION.** This specification originated with NATP in March 1993 and was approved in January 1994. The latest revisions include:

Rev	Date	Description
B	6/96	Revise form, remove dates that have passed.
C	6/99	Scheduled for Deletion. Replaced by GMW3059.

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - General

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX A

## A1 LIST OF CLASS I SUBSTANCES.

SUBSTANCE	CHEMICAL NAME	CAS NUMBER
Group I:		
CFC-11	Trichlorofluoromethane	75-69-4
CFC-12	Dichlorodifluoromethane	75-71-8
CFC-113	1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1
CFC-114	Dichlorotetrafluoroethane	76-14-2
CFC-115	Monochloropentafluoroethane	76-15-3
Methyl Bromide	Bromomethane	74-83-9
Group II:		
Halon 1211	Bromochlorodifluoromethane	421-01-2
Halon 1301	Bromotrifluoromethane	75-63-8
Halon 2402	Dibromotetrafluoroethane	124-73-2
Group III:		
CFC-13	Chlorotrifluoroethane	75-72-9
CFC-111	Pentachlorofluoroethane	354-56-5
CFC-112	Tetrachlorodifluoroethane	76-12-0
CFC-211	Heptachlorofluoropropane	N/A
CFC-212	Hexachlorodifluoropropane	76564-99-3
CFC-213	Pentachlorotrifluoropropane	N/A
CFC-214	Tetrachlorotetrafluoropropane	2268-46-4
CFC-215	Trichloropentafluoropropane	4259-43-2
CFC-216	Dichlorohexafluoropropane	661-97-2
CFC-217	Monochloroheptafluoropropane	N/A
Group IV:		
Carbon Tetrachloride		56-23-5
Group V		
Methyl Chloroform	1,1,1-Trichloroethane	71-55-6
Methyl Chloroform	1,2,2-Trichloroethane	79-00-5
Isomers of the above substances:		
1,1,1,2-Tetrachloro-2,2-Difluoroethane		76-11-9
1,1,1-Trifluoro-2,2,2-trichloroethane		354-58-5
1,1-Dichloro-1,2,2,2-Tetrafluoroethane		374-07-2
Dichlorotetrafluoroethane		1320-37-2
1,1,1-Trichloro-2,2,2-Trifluoroethane		26523-64-8

The initial list under this subsection shall also include the isomers of the substances listed above, other than 1,1,2-trichloroethane (an isomer of methyl chloroform).

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - General

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX A

## A2 LIST OF CLASS II SUBSTANCES.

SUBSTANCE	CHEMICAL NAME	CAS NUMBER
HCFC-21	Dichlorofluoromethane	75-43-41
HCFC-22	Chlorodifluoromethane	75-45-6
HCFC-31	Chlorofluoromethane	593-70-4
HCFC-121	1,1,2,2-Tetrachloro-1-Fluoroethane	354-14-3
HCFC-121a	1,1,1,2-Tetrachloro-2-Fluoroethane	354-11-0
HCFC-122	1,2,2-Trichloro-1,1-Difluoroethane	354-21-2
HCFC-122a	1,2,2-Trichloro-1,2-Difluoroethane	354-15-4
HCFC-123	2,2-Dichloro-1,1,1-Trifluoroethane	206-83-2
HCFC-124	2-Chloro-1,1,1,2-Tetrafluoroethane	2837-89-0
HCFC-124a	1-Chloro-1,1,2,2-Tetrafluoroethane	354-25-6
HCFC-131	1,1,2-Trichloro-2-Fluoroethane	359-28-4
HCFC-131a	1,1,2-Trichloro-1-Fluoroethane	811-95-0
HCFC-131b	1,1,1-Trichloro-2-Fluoroethane	2366-36-1
HCFC-132	1,2-Dichloro-1,2-Difluoroethane	431-06-1
HCFC-132a	1,1-Dichloro-2,2-Difluoroethane	471-43-2
HCFC-132b	1,2-Dichloro-1,1-Difluoroethane	1649-08-7
HCFC-133	1-Chloro-1,2,2-Trifluoroethane	431-07-2
HCFC-133a	2-Chloro-1,1,1-Trifluoroethane	75-88-7
HCFC-133b	1-Chloro-1,2-Trifluoroethane	421-04-5
HCFC-141	1,2-Dichloro-1-Fluoroethane	430-57-9
HCFC-141a	1,1-Dichloro-2-Fluoroethane	430-53-5
HCFC-141b	1,1-Dichloro-1-Fluoroethane	1717-00-6
HCFC-142	2-Chloro-1,1-Difluoroethane	338-65-8
HCFC-142a	1-Chloro-1,2-Difluoroethane	338-64-7
HCFC-142b	1-Chloro-1,1-Difluoroethane	75-68-3
HCFC-151	Chlorofluoroethane	110587-14-9
HCFC-221	Hexachlorofluoropropane	29470-94-8
HCFC-222	Pentachlorodifluoropropane	116867-32-4
HCFC-223	Tetrachlorotrifluoropropane	29470-95-9
HCFC-224	Trichlorotetrafluoropropane	127364-91-4
HCFC-225	Dichloropentafluoropropane	127364-92-5
HCFC-226	Chlorohexafluoropropane	28987-04-4
HCFC-231	Pentachlorofluoropropane	134190-48-0
HCFC-232	Tetrachlorodifluoropropane	127364-82-3
HCFC-233	Trichlorotrifluoropropane	61623-04-9
HCFC-234	Dichlorotetrafluoropropane	127364-83-4
HCFC-235	Chloropentafluoropropane	108682-83-5

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - General

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX A

HCFC-241	Tetrachloroethane	134190-49-1
HCFC-242	Trichlorodifluoroethane	127564-90-3
HCFC-243	Dichlorotrifluoroethane	116890-51-8
HCFC-244	Chlorotetrafluoroethane	134190-50-4
HCFC-251	Trichlorofluoroethane	134190-51-5
HCFC-252	Dichlorodifluoroethane	134190-52-6
HCFC-253	Chlorotrifluoroethane	26588-25-8
HCFC-261	Dichlorofluoroethane	127404-11-9
HCFC-262	Chlorodifluoroethane	134190-53-7
HCFC-271	Chlorofluoroethane	134190-54-8

The initial list under this subsection shall also include the isomers of the substances listed above.

A3 GM1000M requires that materials or components that contain substances referred to in the standard be reported to the designated approving department on the attached SUBSTANCE REPORT AND CONFORMANCE FORM.

A4 INSTRUCTIONS FOR COMPLETING GM1000M  
SUBSTANCE REPORT AND CONFORMANCE  
FORM

## A4.1 PURPOSE OF FORM

A4.1.1 The GM1000M Substance Report and Conformance Form thoroughly documents the sources, quantities, and available substitutes of GM1000M listed chemicals.

A4.1.2 This form must be submitted by the Tier 1 supplier with all Production Part Approval Process (PPAP) submissions when the GM1000M requirement is evident on the top level, any detail drawing, or material specification as "Restricted and Reportable Chemicals per GM1000M"; this form must also be submitted to the designated approving department for written approval prior to PPAP if the submission contains any GM1000M restricted or reportable chemicals except lead. (See Section II for details.) This form should be used by all suppliers within the supplier chain to ensure consistent reporting. See process flow diagram for details (Appendix B).

A4.2 SECTION I. PART INFORMATION. Complete the information for assembly part number, part name, model year and vehicle line from drawing. If unknown or not applicable, indicate with "N/A". If providing information for raw or bulk material, replace part number and part name with material specification and material name, respectively.

A4.3 SECTION II. CONFORMANCE STATEMENT. Check off appropriate box. Tier 1 suppliers will need to solicit the required information from appropriate raw material and/or part suppliers used in the manufacture of parts or subassemblies.

A4.3.1 Mark NO if the final part/assembly supplied to GM does not contain any of the substances listed in GM1000M. The Tier 1 supplier forwards the form with the PPAP submission after completion of Section IV, Section III and Section V do not require completion.

A4.3.2 Mark YES if any part or raw material in the sample submission contains any restricted or reportable GM1000M chemical.

A4.3.2.1 Parts or materials containing cadmium, CFC's, PCB's, PBB's, asbestos, mercury, and/or radioactive compounds must have prior written approval from the designated approving department prior to PPAP submission. The designated approving department will approve substances for use by completion of Section V. Common components used by more than one vehicle engineering center will require written approval from each vehicle engineering center that uses the component. The Tier 1 supplier forwards the completed form with the PPAP submission. The designated approving department will forward a copy of completed form to Chemical Risk Management for tracking. (Send to: Chemical Risk Management, MC 483-303-300, 465 West Milwaukee, Detroit, MI 48202.)

A4.3.2.2 Parts or materials that contain lead, but do not have any other GM1000M chemical present do not require prior written approval by the designated approving department, but must be reported as detailed in Section III. Completion of Section V is not required. The Tier 1 supplier forwards the completed form with the PPAP submission. Supplier Quality will forward a copy to the appropriate designated approving department for information only. The designated approving department will forward a copy of the form to Chemical Risk Management for tracking.

A4.4 SECTION III. REPORT FORM. Complete all columns. If the space is insufficient, include additional pages with the required information.

## GENERAL MOTORS ENGINEERING STANDARDS

## Materials and Processes - General

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX A

A4.4.1 Column A. State the GM finish part number from the drawing. List all parts which contain any of the materials listed in GM1000M.

A4.4.2 Column B. Provide part name from drawing.

A4.4.3 Column C. Supply name of restricted or reportable chemical from GM1000M.

A4.4.4 Column D. Indicate percent (%) restricted or reportable chemical by mass of raw material.

A4.4.5 Column E. State industry, corporate or divisional material specification from drawing that has the restricted or reportable chemical present.

A4.4.6 Column F. Indicate purpose for using restricted or reportable chemical (e.g. pigment, degreasing, corrosion resistance, stabilizer, etc.) Be specific.

A4.4.7 Column G. List any commercially available substitutes for the GM1000M chemical. Be specific. If none are available, indicate None.

A4.4.8 Column H. Indicate by month/year the date at which you commit to eliminating the GM1000M chemical from this part or raw material. If no plan to substitute, indicate None.

A4.4.9 Column I. If Chemical Abstract number of chemical is known, enter it here.

A4.5 SECTION IV. SUPPLIER INFORMATION AND CERTIFICATION. Complete section. If mailing address differs from site address, use mailing address. The contact person should be the person in your organization best able to answer questions concerning this form.

A4.6 SECTION V. DESIGNATING APPROVING DEPARTMENT. This section is to be completed by the designated approving department when raw materials or parts contain any restricted or reportable chemical per GM1000M as detailed in Section III. Materials or parts containing lead only do not require prior written approval. (See Section II for details.) Designated approving departments are: Vehicle Engineering Center Materials Engineering, Power Train Materials Engineering, Allison Transmission Materials Engineering and Electromotive Division Hazardous Material Review Committee.

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX A

## I Part Information

Assembly/Part Number: \_\_\_\_\_  
 Part Name: \_\_\_\_\_  
 Model Yr/Vehicle Line: \_\_\_\_\_  
 Part Revision Level: \_\_\_\_\_ Revision Date: \_\_\_\_\_

This form must be submitted with all Laboratory PPAP sample submission packages when the GM1000M requirement is evident on the top layer, any detail drawing or material specification as "RESTRICTED AND REPORTABLE CHEMICALS PER GM1000M."

1400-281 (1/90)

## II Conformance Statement

The raw materials or parts associated with this sample submission DO contain the following chemicals identified in the latest revision of GM1000M.

☐ YES (Check all that apply)

☐ Cadmium, Class I Substances, Class II Substances, PCB's, PBB's,  
 Asbestos, Mercury and/or Radioactive Compounds  
 (COMPLETE SECTION III, IV, AND V).

☐ Lead and Compounds  
 (COMPLETE SECTION III AND IV. SECTION V IS NOT REQUIRED).

(Check one) \_\_\_\_\_

☐ NO

(COMPLETE SECTION IV ONLY. SECTION III AND V ARE NOT REQUIRED).

## III Report Form

A PART NUMBER	B PART NAME	C SUBSTANCE	D % WT	E SPECIFICATION NUMBER	F PURPOSE OF CHEMICAL	G AVAILABLE SUBSTITUTES	H DATE FOR SUBSTITUTION	I CAS NUMBER IF KNOWN

## IV Supplier Information and Certification

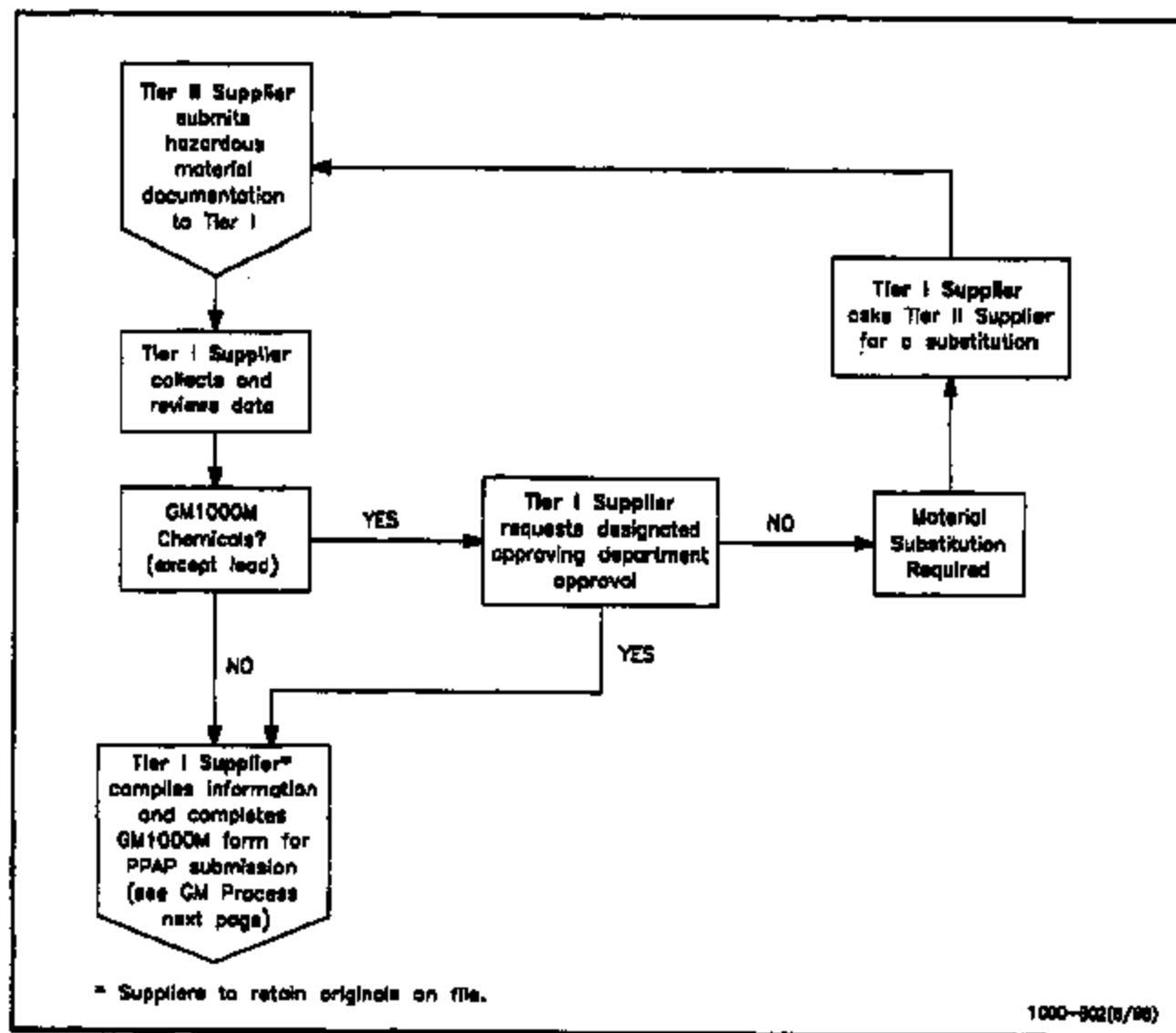
Supplier: \_\_\_\_\_  
 Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Print Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

## V Platform Engineering Review and Approval for Use

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 Print Name: \_\_\_\_\_  
 Platform/Division: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Phone #: \_\_\_\_\_ Fax #: \_\_\_\_\_

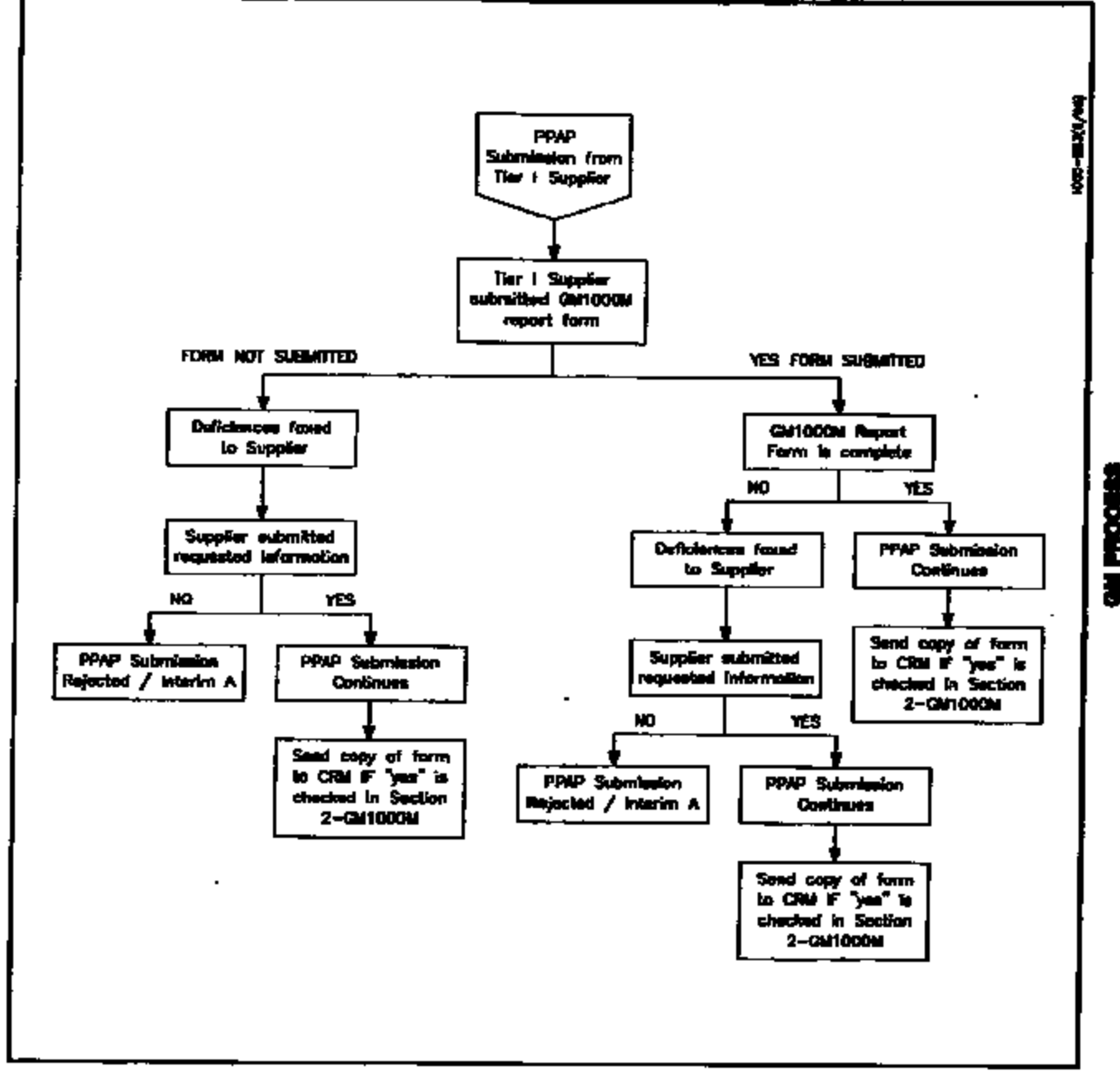
GM1000M - SUBSTANCE REPORT AND CONFORMANCE FORM

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX B

## SUPPLIER PROCESS

## RESTRICTED AND REPORTABLE CHEMICALS

GM1000M  
APPENDIX B



**GM634A  
EA03-005**

**ATTACHMENT "9B"**

**"GM CONFIDENTIAL" MATERIAL  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF  
COUNSEL**

**GM634A  
EA03-005**

**ATTACHMENT "9C"**

**"GM CONFIDENTIAL" MATERIAL  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF  
COUNSEL**

**GM634A**  
**EA03-005**

**ATTACHMENT "9D"**

PART 2 6 04 00 00 1998 MODEL YEAR | ENGINE: 2.0 DURAM | STATUS TO PRINT: P | REVISION DATE: |  
 FROM: | | | CODE: 00 | WEC: 00 | REG SV: | MOD: C | | PRINT DATE: 8/12/98  
 REFERENCE:

ITEM DESC- TION	PART NUMBER	Q TY	DESCRIPTION	QTY U OF N	AVAILABILITY	EXCEPT END OF TUBS LINES TOGETHER WITH
1.0 21 004	12130004		WIRELESS ASM-RR WHL SPD SEN WRS ID-0000 WIRE CAT 3- VERT-10 PRTY-20 UPC-100 FRA-0004J NO-AAAM ENCH-0225	EN 123	UA 00	

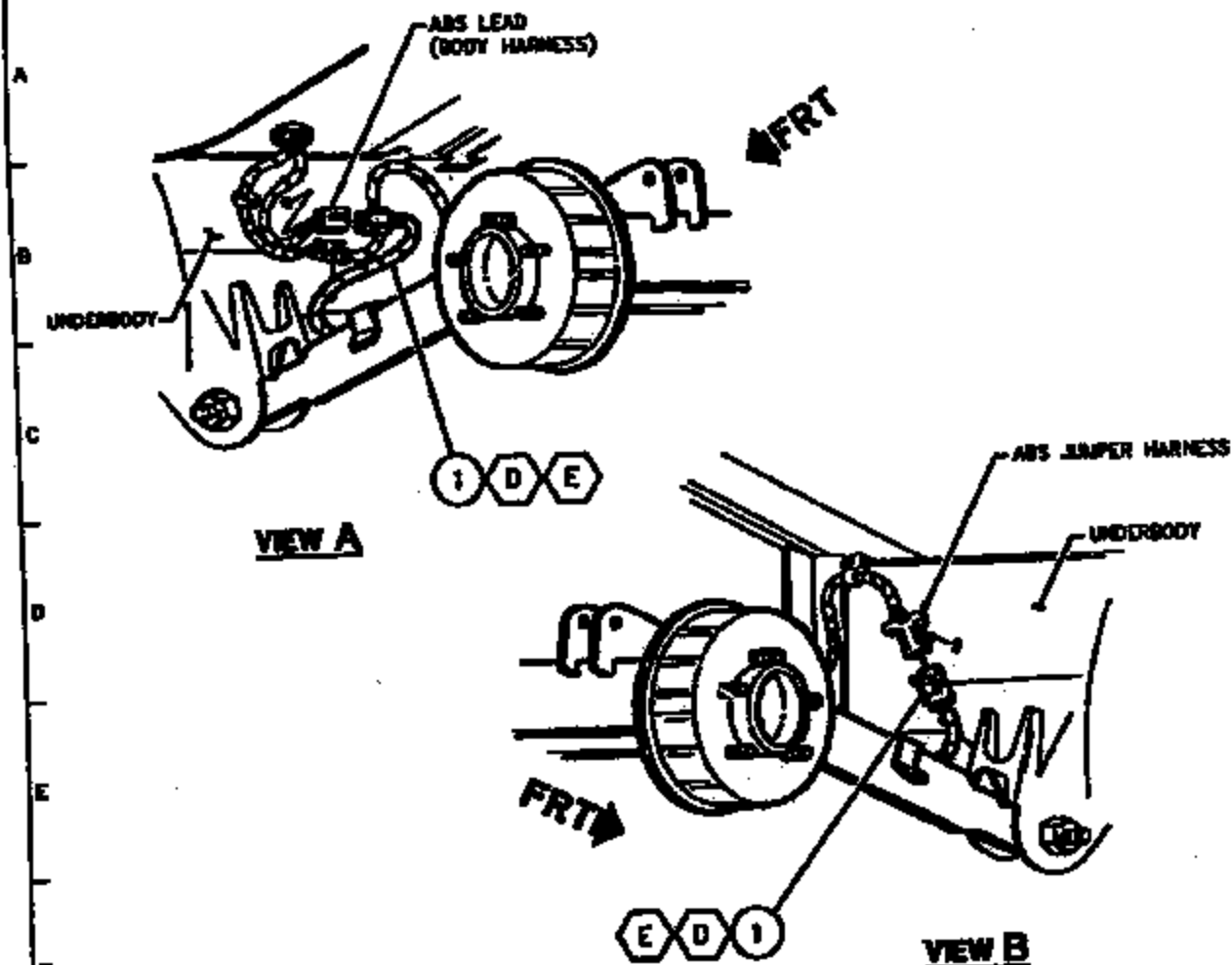
PRINT DATE:

YEAR	W	MONTH	DAY	TIME	DATE	TIME
2	0	04	00	00	00	00

OF THE REPROCESS REAR SPEED SENSOR WIRING

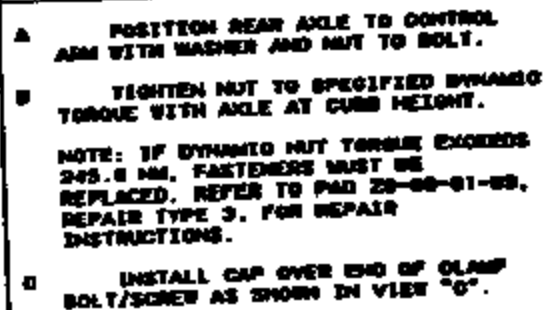
### DESCRIPTION OF OPERATION

- D MAKE ELECTRICAL CONNECTION OF ABS HARNESS (PART OF REAR AXLE) TO ABS LEAD (PART OF BODY HARNESS) AND ABS JUMPER HARNESS.
- E SECURE HARNESS TO UNDERBODY WITH ROSEBUD CLIPS AS SHOWN.



1	1	2	3	4	5	6	7		
REV	DATE	AUTH	EFF PT	INT	CRD	REVISION HISTORY		ENG REF	PLANT USE
								KPC	ISSUE DATE 8-JUN-1995
								MC 14	CODE H740U
									ENGINEER L. GARNICK
									PDT S
TITLE L BR AXLE TO UNDERBODY CONTROL ARM SUPPORTS							FIRST YEAR 1994	PLATFORM 6K200	WSC 25
								PAD	REV 26
								APP 04	CHG 09
								REV 05	PAGE P2 L

### DESCRIPTION OF OPERATION



1							2		3		4		5		6		7		8				
REV	DATE	AUTH	EFF	PT	INT	CRD	REVISION HISTORY							DIC REF		PLANT USE							
																92U-606Z							
																KPC	ISSUE DATE						
																	8-JUN-1995						
																14 F/F	CODE	ENGINEER	PDT				
																	M740UJ	L. GONALE	8				
TITLE: INSTALL RR AXLE TO UNDERBODY CONTROL ARM SUPPORTS														FIRST YEAR	1996	PLATFORM	WSC	PAD	26	04	08	PAGE P1	
														BRAD		SM200	25						

**GM634A**  
**EA03-005**

**ATTACHMENT "9E"**

**P R O D U C T   A S S E M B L Y   D O C U M E N T**

-----

END: 5 000000

ISSUE DATE: 11/30/97

CODE: 20	WIC:	HTG BY:	MCP: C
----------	------	---------	--------

STATUS TO PRINT: A | REVISION DATE:

PRINT DATE: 11/28/97

**REFERENCE**

ITEM SUB- ITEM	PART NUMBER	DESCRIPTION	QTY U OF NOM	AVAILABILITY		EWD OF THOUGHT / EITHER 6 TOGETHER WITH
				0123	UA	
0 SI 001	-----	REFERENCE USAGE FOR ROUTING PURPOSES ONLY VSMY-20 P017-00 UPC- 00 FRA-00027 MC-AAA6 ENCR-3A10	1	0123	UA	00
1 SI 001	-----	REFERENCE USAGE REPRODUCES IN SPEED SENSOR WIPING VSMY-20 P017-00 UPC- 00 FRA-00103 MC-AAA6 ENCR-3A10	AS	0123	UA	00

OF TITLE: REPRODUCED FROM SPEED TYPING WRITING

৮৭ ৭৮





**GM634A**  
**EA03-005**

**ATTACHMENT "9F"**

**"GM CONFIDENTIAL" MATERIAL  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF  
COUNSEL**

**GM634A**  
**EA03-005**

**ATTACHMENT "13"**

Lana M. Dugan  
01/08/2003 11:33 AM

To: Gordon Lewis/US/GM/GMC@GM  
Subject: U-van trailing arm

Hello, Gordon -

It's been awhile since we've talked, I hope all is well with you. As I stated in my VME to you, GM has been contacted by NHTSA regarding several cases of rear suspension arm failures in the field. I have reviewed each of the "Vehicle Owner's Questionnaires" that have been generated and, based on the comments, we are presuming the failures occurred at or near the center of the trailing arms. Steve Esselink and I have retained a great deal of data that has been collected over the past 4+ years pertaining to this issue and we have been asked to provide this data to Paul Blust, GM Product Investigations by January 13, 2003.

Per the attached document, Dave Vestrand (Suspension TIE) and I are currently reviewing and compiling the information as requested:



GM834 Instruction Letter.doc

In question # 8, we are being asked to document all "modifications / changes to the component, including in the quality control area, which may related to the alleged defect". We have been instructed to include only those changes made from the start of production until the present time. I am requesting that PMFD review any data which may be pertinent to this investigation, summarize and provide back to me by Friday, January 10, 2003. My apologies for the late notice - we were only given this assignment very recently. We can request a few extra days if necessary, but GM Legal usually needs 1 1/2 to 2 weeks to review our data and needs to provide their report to NHTSA by January 27, 2003.

Any help that you can provide would be appreciated.

**Lana M. Dugan**

Epsilon Front Suspension DE

☎ (586) 575-1605 fax (586) 947-9916

☎ pager 1-800-769-7243 pin 222-2313

📧 lana.m.dugan@gm.com

📍 30001 Van Dyke  
Warren, MI 48090

Lana M. Dugan  
07/21/2003 07:14 AM

To: Gordon Lewis/US/GM/GMC@GM  
Subject: Instruction letter for GM-834A NHTSA IR EA03-005

Hello, Gordon -

Regarding the GM200 rear twist axle Preliminary Evaluation that you and I discussed earlier this year, NHTSA has elevated this issue to an "Engineering Analysis". As shown in the attached pdf file, question 12, we are being asked to document several items related to the damaged trailing arms that were discovered in the assembly plant. Does PFMD have records which would list the number of damaged parts returned from Doraville?

As was the case in the first inquiry, we have not been granted an extensive length of time in which to provide this data. I have been asked to have all information available by July 31st for a review with our management.

Any help would be appreciated,

**Lana M. Dugan**

Epsilon Front Suspension DE

☎ (586) 575-1605 fax (586) 947-9916

☎ pager 1-800-769-7243 pin 222-2313

💻 lana.m.dugan@gm.com

📄 30001 Van Dyle  
Warren, MI 48090  
MC 480-210-095

— Forwarded by Lana M. Dugan/US/GM/GMC on 07/21/2003 07:07 AM —



**Mark Deason**  
07/17/2003 08:25 AM

To: Howard A. Silverman/US/GM/GMC@GM, Kimberly M. Nothnagle/US/GM/GMC@GM, Beatrice Schmidt/US/GM/GMC@GM, Craig E. Linenger/US/GM/GMC, Jenny Lin/US/GM/GMC@GM, Gregory J. O'Sickey/US/GM/GMC@GM, William J. Kramer/US/GM/GMC@GM, Loren Fusk/US/GM/GMC@GM, Annie K. Chi/US/GM/GMC@GM, Louis Rosenmund/US/GM/GMC@GM, Tim P. Keltner/US/GM/GMC@GM, Kathy Macko/US/GM/GMC@GM, Joe Sepos/US/GM/GMC@GM, Jeff O'Neal/US/GM/GMC@GM, Jack Pantaleo/US/GM/GMC@GM, Tom Reygaert/US/GM/GMC@GM, Sheila D. Summers/US/GM/GMC@GM, Stephanie Lipinski/US/GM/GMC@GM, Bob Homak/US/GM/GMC@GM, Lana M. Dugan/US/GM/GMC@GM, Dave Vestrand/US/GM/GMC@GM  
cc: Rick Fox/US/GM/GMC@GM, Maureen Foley-Gardner/US/GM/GMC@GM, Keith S. Schultz/US/GM/GMC@GM, Keith D. Wilson/US/GM/GMC@GM, Lyndon Lie/US/GM/GMC@GM, Christopher Winn/US/GM/GMC@GM, Mike Maloney/US/GM/GMC@GM

Subject: Instruction letter for GM-834A NHTSA IR EA03-005

Attached please find for your review and action the instruction letter for GM-834A and an attached PDF file of the actual IR from NHTSA.



Instruction letter GM-834A.doc GM834A.pdf

If you have questions please contact me.

**Mark R. Deacon**

**General Motors Product Investigations**

**Pontiac Centerpoint Campus**

**248-753-5439**

**8-238-5439**

**fax 248-753-4543**

**MC 483-512-836**

Lana M. Dugan  
01/09/2003 11:33 AM

To: Gordon Lewis/US/GM/GMC@GM  
Subject: U-van trailing arm

Hello, Gordon -

It's been awhile since we've talked, I hope all is well with you. As I stated in my VME to you, GM has been contacted by NHTSA regarding several cases of rear suspension arm failures in the field. I have reviewed each of the "Vehicle Owner's Questionnaires" that have been generated and, based on the comments, we are presuming the failures occurred at or near the center of the trailing arms. Steve Esselink and I have retained a great deal of data that has been collected over the past 4+ years pertaining to this issue and we have been asked to provide this data to Paul Blust, GM Product Investigations by January 13, 2003.

Per the attached document, Dave Vestrand (Suspension TIE) and I are currently reviewing and compiling the information as requested:



GM634 Instruction Letter.doc

In question # 8, we are being asked to document all "modifications / changes to the component, including in the quality control area, which may related to the alleged defect". We have been instructed to include only those changes made from the start of production until the present time. I am requesting that PMFD review any data which may be pertinent to this investigation, summarize and provide back to me by Friday, January 10, 2003. My apologies for the late notice - we were only given this assignment very recently. We can request a few extra days if necessary, but GM Legal usually needs 1 1/2 to 2 weeks to review our data and needs to provide their report to NHTSA by January 27, 2003.

Any help that you can provide would be appreciated.

**Lana M. Dugan**

Epsilon Front Suspension DE

☎ (886) 575-1600 fax (886) 947-9916  
☎ pager 1-800-769-7243 pin 222-2313  
💻 lana.m.dugan@gm.com  
📍 30001 Van Dyle  
Warren, MI 48090

Lana M. Dugan  
07/21/2003 07:14 AM

To: Gordon Lewis/US/GM/GMC@GM  
Subject: Instruction letter for GM-634A NHTSA IR EA03-005

Hello, Gordon -

Regarding the GM200 rear twist axle Preliminary Evaluation that you and I discussed earlier this year, NHTSA has elevated this issue to an "Engineering Analysis". As shown in the attached pdf file, question 12, we are being asked to document several items related to the damaged trailing arms that were discovered in the assembly plant. Does PFMD have records which would list the number of damaged parts returned from Doraville?

As was the case in the first inquiry, we have not been granted an extensive length of time in which to provide this data. I have been asked to have all information available by July 31st for a review with our management.

Any help would be appreciated.

Lana M. Dugan

Epsilon Front Suspension DE

(886) 575-1605 fax (886) 947-9916  
pager 1-800-769-7243 pin 222-2313  
lana.m.dugan@gm.com  
30001 Van Dyke  
Warren, MI 48090  
MC 480-210-035

----- Forwarded by Lana M. Dugan/US/GM/GMC on 07/21/2003 07:07 AM -----

Mark Deacon  
07/17/2003 08:28 AM

To: Howard A. Silverman/US/GM/GMC@GM, Kimberly M. Nothnagle/US/GM/GMC@GM, Beatrice Schmidt/US/GM/GMC@GM, Craig E. Linenger/US/GM/GMC, Jenny Lin/US/GM/GMC@GM, Gregory J. O'Slokey/US/GM/GMC@GM, William J. Kremer/US/GM/GMC@GM, Loren Fusk/US/GM/GMC@GM, Annie K. Chit/US/GM/GMC@GM, Louie Rosenmund/US/GM/GMC@GM, Tim P. Kethner/US/GM/GMC@GM, Kathy Macko/US/GM/GMC@GM, Joe Bepko/US/GM/GMC@GM, Jeff O'Neal/US/GM/GMC@GM, Jack Pantaleo/US/GM/GMC@GM, Tom Reygaert/US/GM/GMC@GM, Sheila D. Summers/C/US/GM/GMC@GM, Stephanie Lipinski/C/US/GM/GMC@GM, Bob Hornak/US/GM/GMC@GM, Lana M. Dugan/US/GM/GMC@GM, Dave Veeland/US/GM/GMC@GM  
cc: Rick Fox/US/GM/GMC@GM, Maureen Foley-Gardner/US/GM/GMC@GM, Keith S. Schultz/US/GM/GMC@GM, Keith D. Wilson/US/GM/GMC@GM, Lyndon Lie/US/GM/GMC@GM, Christopher Winn/US/GM/GMC@GM, Mike Malberry/US/GM/GMC@GM  
Subject: Instruction letter for GM-634A NHTSA IR EA03-005

Attached please find for your review and action the instruction letter for GM-634A and an attached PDF file of the actual IR from NHTSA.





Instruction letter GM-834A.doc GM834A.pdf

If you have questions please contact me.

**Mark R. Deacon**

**General Motors Product Investigations**

**Pontiac Centerpoint Campus**

**248-753-5439**

**8-238-5439**

**fax 248-753-4543**

**MC 483-512-836**

Lana M. Dugan  
01/06/2003 11:33 AM

To: Gordon Lewis/US/GM/GMC@GM  
Subject: U-van trailing arm

Hello, Gordon -

It's been awhile since we've talked, I hope all is well with you. As I stated in my VME to you, GM has been contacted by NHTSA regarding several cases of rear suspension arm failures in the field. I have reviewed each of the "Vehicle Owner's Questionnaires" that have been generated and, based on the comments, we are presuming the failures occurred at or near the center of the trailing arms. Steve Esselink and I have retained a great deal of data that has been collected over the past 4+ years pertaining to this issue and we have been asked to provide this data to Paul Blust, GM Product Investigations by January 13, 2003.

Per the attached document, Dave Vestrand (Suspension TIE) and I are currently reviewing and compiling the information as requested:



GM834 Instruction Letter.do

In question # 8, we are being asked to document all "modifications / changes to the component, including in the quality control area, which may related to the alleged defect". We have been instructed to include only those changes made from the start of production until the present time. I am requesting that PMFD review any data which may be pertinent to this investigation, summarize and provide back to me by Friday, January 10, 2003. My apologies for the late notice - we were only given this assignment very recently. We can request a few extra days if necessary, but GM Legal usually needs 1 1/2 to 2 weeks to review our data and needs to provide their report to NHTSA by January 27, 2003.

Any help that you can provide would be appreciated.

**Lana M. Dugan**

Epsilon Front Suspension DE

☎ (586) 575-1605 fax (586) 947-9916

☎ pager 1-800-769-7243 pin 222-2313

💻 lana.m.dugan@gm.com

🏠 30001 Van Dyke  
Warren, MI 48090

Lana M. Dugan  
07/21/2003 07:14 AM

To: Gordon Lawie/US/GM/GMC@GM  
Subject: Instruction letter for GM-634A NHTSA IR EA03-005

Hello, Gordon -

Regarding the GM200 rear twist axle Preliminary Evaluation that you and I discussed earlier this year, NHTSA has elevated this issue to an "Engineering Analysis". As shown in the attached pdf file, question 12, we are being asked to document several items related to the damaged trailing arms that were discovered in the assembly plant. Does PFMD have records which would list the number of damaged parts returned from Doraville?

As was the case in the first inquiry, we have not been granted an extensive length of time in which to provide this data. I have been asked to have all information available by July 31st for a review with our management.

Any help would be appreciated,

**Lana M. Dugan**

Epsilon Front Suspension DE

(586) 878-1605 fax (586) 947-9916

pager 1-800-769-7243 pin 222-2313

lana.m.dugan@gm.com

30001 Van Dyke  
Warren, MI 48090  
MC 480-210-035

— Forwarded by Lana M. Dugan/US/GM/GMC on 07/21/2003 07:07 AM —

**Mark Deacon**  
07/17/2003 08:28 AM

To: Howard A. Silverman/US/GM/GMC@GM, Kimberly M. Nothnagle/US/GM/GMC@GM, Beatrice Schmidt/US/GM/GMC@GM, Craig E. Linenger/US/GM/GMC, Jenny Lin/US/GM/GMC@GM, Gregory J. O'Sickey/US/GM/GMC@GM, William J. Kremen/US/GM/GMC@GM, Loren Rusk/US/GM/GMC@GM, Annie K. Chi/US/GM/GMC@GM, Louis Rosenmund/US/GM/GMC@GM, Tim P. Ketrner/US/GM/GMC@GM, Kathy Macko/US/GM/GMC@GM, Joe Sepco/US/GM/GMC@GM, Jeff O'Neal/US/GM/GMC@GM, Jack Pantaleo/US/GM/GMC@GM, Tom Reygaert/US/GM/GMC@GM, Sheila D. Summers/C/US/GM/GMC@GM, Stephanie Lipinski/C/US/GM/GMC@GM, Bob Horak/US/GM/GMC@GM, Lana M. Dugan/US/GM/GMC@GM, Dave Vestrand/US/GM/GMC@GM  
cc: Rick Fox/US/GM/GMC@GM, Maureen Foley-Gardner/US/GM/GMC@GM, Keith S. Schwartz/US/GM/GMC@GM, Keith D. Wilson/US/GM/GMC@GM, Lyndon Lie/US/GM/GMC@GM, Christopher Winn/US/GM/GMC@GM, Mike Melcer/US/GM/GMC@GM  
Subject: Instruction letter for GM-634A NHTSA IR EA03-005

Attached please find for your review and action the instruction letter for GM-634A and an attached PDF file of the actual IR from NHTSA.



Instruction letter GM-834A.doc GM834A.pdf

If you have questions please contact me.

**Mark R. Deacon**

**General Motors Product Investigations**

**Pontiac Centerpoint Campus**

**248-753-5439**

**8-238-5439**

**fax 248-753-4543**

**MC 483-512-816**

Jerome W. Hunter  
08/06/2003 03:12 PM

To: Mark Deacon/US/GM/GMC  
Subject: Pontiac MFD PRRs 20030220-112234 and 20030220-111638

— Forwarded by Jerome W. Hunter/US/GM/GMC on 08/06/2003 03:12 PM —

Eric E. Long  
08/06/2003 03:04 PM

To: Jerome W. Hunter/US/GM/GMC  
cc:  
Subject: Pontiac MFD PRRs 20030220-112234 and 20030220-111638

Jerome,

The only records I have on Pontiac MFD are the 2 attached PRRs. One is for a dimensional concern (20030220-111638) that made it hard for our operators to install the rear axle and the other was a followup PRR (20030220-112234) for not answering the first PRR quickly enough. Both are attached here.

Eric

### Problem Report and Resolution

PRR Number: 20030220-112234  
Issuing Plant: Doraville Assembly  
Status: Approved (01-APR-2003)  
)

<b>Supplier:</b> 144331493 GM METAL FAB-PONTIAC 220 E COLUMBIA AVE  PONTIAC MI 483402657	<b>Contact:</b> Theresa Dushens Reliability Engineer  248-5-867-0511
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<b>Customer:</b> David Wansel 770 455 5449  <b>Internal Dest:</b>	<b>Issue Date:</b> 20-FEB-2003 <b>Time:</b> 11:22:34  <b>PRR Type:</b> Customer Satisfaction <b>Primary NC:</b> Timeliness / Deadline Issues <b>Secondary NC:</b> Other
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<b>Phase:</b> Select a category	<b>Major Disruption:</b> Not Applicable
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## Problem Information

Material Identification										
Location Code	Line Item Date	Part Number	DLS PLS	Part Description	Mdl Yr	Usage	Misc 1	Misc 2	Shipment ID#	Carrier Code
01DO	20-FEB-2003	10409073		AXLE ASM-RR			25-09			

Quantity Detail								
Location Code	Line Item Date	Part Number	DLS PLS	Date Shipped	Quantity Suspect	Quantity Checked	Quantity N/C	Est Qty N/C
01DO	20-FEB-2003	10409073		20-FEB-2003	10000	10000	1	1

<b>Problem Description</b> 02-20-03 - Photos, information & Request for help was sent on 2/14/03. It is now 02-20-03. We have serious ergonomic problems and no root cause OR containment.  <b>Previous PRR TEXT:</b> 02-20-03 Twisted Right Rear trailing arm is causing assembly plant ergonomic assembly issue. See Digital photos sent to Patricia Matthews, Theresa Duhamel, & Tony Garcia. Please contact Reliability Manager - Eric Long - (mobile) 404-379-2944.  Need immediate root cause and containment.  3/10/03: Part number is 10491744.
---

## Initial Response

<b>Material Disposition</b>	
<b>In house:</b> Hold for Review	<b>In Transit:</b> Not Applicable

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<b>Measurement method to assure compliance</b>
All in house material was contained 2/20/03

<b>Containment action and material identification method</b>
Control arms were all re-certified as ok.

## Problem Identification

<b>Root cause that allowed problem to occur and the method(s) used to determine that the proper root cause has been identified</b>
Axle was not monitored for condition noted. Final assembly gage did not include check for twist. Gage only checks for toe/camber and major machine line characteristics. Needed further clarification of problem at Asm. Plant.

<b>Corrective action alternatives available to correct the problem, the action selected, and why this alternative was the best selection</b>
Added checks for ID readability, width of arms, and arm height, started making corrections 2-20-03 to height and 2-24-03 to width. Started width gaging 03/03/03.

<b>Completed Documentation Updated By:</b>	
<b>FMEA:</b>	<b>Process Control Plan: 31-JAN-2003</b>

<b>Corrected Material</b>	
<b>Identification:</b>	<b>Date:</b> 21-FEB-2003

## Implementation

<b>Elements of the Implementation process for corrective action alternative selected</b>
Added checks for ID readability, width of arms, and arm height, started making corrections 2-20-03 to height and 2-24-03 to width. Started width gaging 03/03/03.

<b>Measurement tools and processes that will be used to evaluate whether the implementation alternative was successful</b>
Reacted to observations of Crimmins at Assembly plant on both 2-20-03 and 2-24-03. Crimmins helped uncover the root cause of problem and add gage details.

<b>Description of how this solution is being institutionalized at your facility</b>
NA

## Cost Recovery Information

<b>Cost Recovery Detail</b>					
<b>Location Code</b>	<b>Line Item Date</b>	<b>Man-hours Requested</b>	<b>Downtime Minutes</b>	<b>Number of Units Impacted</b>	<b>Additional Costs</b>

<b>Cost Recovery Disposition</b>					



Location Code	Line Item Date	Total Cost Requested	Supplier Disposition	Final Cost for Collection	Approved by
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Reason for Cost Recovery

Supplier Response to Cost Recovery

## Customer Comments

Comments
3/31/03: Approved, dlw.

## Problem Report and Resolution

PRR Number: 20030220-111638

Issuing Plant: Doraville Assembly

Status: Approved (01-APR-2003)  
)

<b>Supplier:</b> 144331493 GM METAL FAB-PONTIAC 220 E COLUMBIA AVE  PONTIAC MI 483402857	<b>Contact:</b> Theresa Dushane Reliability Engineer  248-857-0811
---	--

<b>Customer:</b> David Wisniski 770 455 5449  <b>Internal Desk:</b>  <b>Phase:</b> Select a category	<b>Issue Date:</b> 20-FEB-2003 <b>Time:</b> 11:16:38  <b>PRR Type:</b> Quality <b>Primary NC:</b> Fabrication Discrepancy <b>Secondary NC:</b> Bent  <b>Major Disruption:</b> Not Applicable
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## Problem Information

Material Identification										
Location Code	Line Item Date	Part Number	DLS PLS	Part Description	Mdl Yr	Usage	Misc 1	Misc 2	Shipment ID#	Carrier Code
01DO	20-FEB-2003	10408073		AXLE ASM-RR			25-09			

Quantity Detail								
Location Code	Line Item Date	Part Number	DLS PLS	Date Shipped	Quantity Suspect	Quantity Checked	Quantity N/C	Est Qty N/C
01DO	20-FEB-2003	10408073		20-FEB-2003	10000	10000	5	5

Problem Description
02-20-03 Twisted Right Rear trailing arm is causing assembly plant ergonomic assembly issue. See Digital photos sent to Patricia Matthews, Theresa Dushain, & Tony Garcia. Please contact Reliability Manager - Eric Long - (mobile) 404-379-2944.  Need immediate root cause and containment.  3/10/03: Part number is 10431744. djw

## Initial Response

Material Disposition			
In house:	Hold for Review	In Transit:	Not Applicable

Measurement method to assure compliance
All in house material was contained 2-20-03

Containment action and material identification method
Control arms were all re-certified as ok.

## Problem Identification

Root cause that allowed problem to occur and the method(s) used to determine that the proper root cause has been identified
Axe was not monitored for condition note. Final assembly gage did not include check for twist. Gage only checks for toe/camber and major machine line characteristics. Needed further clarification of problem at Aam. Plant.

Corrective action alternatives available to correct the problem, the action selected, and why this alternative was the best selection
Added checks for ID readability, width of arms, and arm height, started making corrections 2-20-03 to height and 2-24-03 to width started width gaging 03/03/03

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<b>Completed Documentation Updated By:</b>	
<b>FMEA:</b>	<b>Process Control Plan: 12-MAR-2003</b>

<b>Corrected Material</b>	
<b>Identification:</b>	<b>Date: 21-FEB-2003</b>

## Implementation

<b>Elements of the implementation process for corrective action alternative selected</b>
Added checks for ID readability, width of arms, and arm height, started making corrections 2-20-03 to height and 2-24-03 to width started width gaging 03/03/03

<b>Measurement tools and processes that will be used to evaluate whether the implementation alternative was successful</b>
Reacted to observations of Crimmins at assembly plant on both 2-20-03 and 02-24-03. Crimmins helped uncover the root cause of problem and add gage detail

<b>Description of how this solution is being institutionalized at your facility</b>
NA

## Cost Recovery Information

<b>Cost Recovery Detail</b>					
<b>Location</b>	<b>Line Item</b>	<b>Man-hours</b>	<b>Downtime</b>	<b>Number of Units</b>	<b>Additional</b>

Code	Date	Requested	Minutes	Impacted	Costs
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Cost Recovery Disposition					
Location Code	Line Item Date	Total Cost Requested	Supplier Disposition	Final Cost for Collection	Approved by

Reason for Cost Recovery

Supplier Response to Cost Recovery

## Customer Comments

Comments
3/31/03, Approved, djw.