

1 2 2

Mr. Brian Winning
Transportation Director
Galín Transportation, Inc.
RD 5
Stanhope, NJ 07874

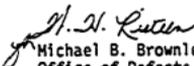
NEF-121rbp
EA88-007

Dear Mr. Winning:

As you are aware, the National Highway Traffic Safety Administration has been conducting an investigation of General Motors concerning cracks forming in the left front lower control arm on certain GM 30 series vehicles. On July 6, 1988, GM notified this agency that a safety recall would be conducted on 1985 through 1986 P3 model trucks with gas and diesel engines, and G3 vans with 6.2 diesel engines. A copy of its correspondence has been included for your information. Although the investigation is still ongoing for other models and engine combinations, it appears that vehicles in your fleet are covered by the safety recall mentioned above.

We wish to thank you for notifying us of this matter and providing the necessary information and sample parts needed to pursue the investigation. Should you have any questions concerning this issue or any other safety related matter, please contact Mr. Richard Boyd of my staff at (202) 366-5194.

Sincerely,



Michael B. Brownlee, Director
Office of Defects Investigation
Enforcement

Enclosure

DOC-251

RECEIVED



Current Product
Engineering

General Motors Corporation

1988 JUL -6 PM 4:18

July 6, 1988

Mr. Michael B. Brownlee ^{OFFICE DEFECTS INVESTIGATION}
Director
Office of Defects Investigation Enforcement
National Highway Traffic Safety Administration
Washington, D.C. 20590

Dear Mr. Brownlee:

The following information is submitted pursuant to the requirements of 49 CFR 573.5 as it applies to a determination by General Motors of a defect related to motor vehicle safety involving certain 1985 and 1986 "G-30" and "P-30" light duty truck models.

573.5(c)(1). GM Truck & Bus and Chevrolet Motor Divisions of General Motors Corporation.

573.5(c)(2)(3)(4). This information is shown on the attached sheet.

573.5(c)(5). General Motors has determined that a defect which relates to motor vehicle safety exists in some 1985-86 P3 and G3 model trucks. The left-hand lower control arm can crack starting at the rear flange and progress to the ball joint mounting hole and eventually cause the lower ball joint to separate from the control arm. If this happens, a loss of vehicle steering control can occur which could result in a vehicle crash without prior warning.

573.5(c)(6). The first field report was received by General Motors in March 1986. Control arms used in production were revised in July 1986. An investigation to review the condition of vehicles produced before that date was initiated in October 1987.

573.5(c)(8). This information is set forth in the dealer bulletin.

573.5(c)(9). Representative copies of the owner notification letter and dealer bulletin are attached.

Very truly yours,

C. Thomas Terry
C. Thomas Terry
Manager

Product Investigations

000252

attachment
CAMP.20/cm

VEHICLES POTENTIALLY AFFECTED BY MAKE, MODEL, AND MODEL YEAR
PLUS INCLUSIVE DATES OF MANUFACTURE

<u>MAKE</u>	<u>MODEL SERIES</u>	<u>MODEL YEAR</u>	<u>NUMBER INVOLVED</u>	<u>MANUFACTURING DATES (FROM)</u>	<u>INCLUSIVE MANUFACTURING DATES (TO)</u>	<u>DESCRIPTIVE INFO. TO PROPERLY IDENT. VEH.</u>	<u>EST. NO. W/CONDITION</u>
GMC	P3	1985	2,702	08/84	10/85		Unknown*
	G3	1985	242	09/84	07/85		
GMC	P3	1986	1,318	10/85	08/86		Unknown*
	G3	1986	613	08/85	07/86		
		GMC Total	4,875				
Chev.	P3	1985	8,071	08/84	10/85		Unknown*
	G3	1985	412	08/84	08/85		
Chev.	P3	1986	5,223	10/85	08/86		Unknown*
	G3	1986	2,904	08/85	07/86		
		Chev. Total	16,610				
		GM TOTAL	21,485				

* All affected vehicles
will be corrected

000253

Dear General Motors Truck Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has determined that a defect which relates to motor vehicle safety exists in some 1985-1986 P3 and G3 model trucks. The left hand lower control arm can crack starting at the rear flange and progress to the ball joint mounting hole and eventually cause the lower ball joint to separate from the control arm. If this happens, a loss of vehicle steering control can occur which could result in a vehicle crash without prior warning.

To prevent this condition from occurring it will be necessary to repair or replace the lower left control arm on your vehicle. This service will be completed for you at no charge.

Instructions for performing this service have been sent to your GMC truck dealer. Please contact your dealer to arrange a service date. The labor time necessary to perform this correction will be approximately one hour. Please ask your dealer how much additional time will be needed to process your vehicle. Parts will be available approximately _____ 1988.

Your GMC Truck dealer is best equipped to obtain parts and provide service to ensure your vehicle is inspected and/or corrected as promptly as possible. However, if you take your vehicle to your dealer on the agreed service date and they do not service this condition on that date or within five days, we recommend you contact your nearest GMC Truck Zone Office by telephone. The Zone Office will assist you and your dealer in getting your vehicle serviced. The locations and telephone numbers of GMC Truck Zone Offices have been attached for your convenience.

After contacting your dealer and the Zone Office, if you are still not satisfied that we have done our best to remedy this condition without charge within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590, or call 800-424-9393 (Washington, D.C. residents use 366-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction to your vehicle in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid owner reply card and returning it to us.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

GMC TRUCK DIVISION
GENERAL MOTORS CORPORATION

000254

NUMBER:
GROUP: 3C Front Suspension
DATE: _____ 1988

SUBJECT: LH Lower Control Arm Cracking
MODELS: 1985-86 P3 Model Trucks with Gas and Diesel Engines
and G3 Vans with 5.2 L Diesel Engines (LL4)

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type must be adequately repaired within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within 60 days after tender of a vehicle is prima facie evidence of a failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owner may be entitled to an identical or reasonably equivalent vehicle at no charge, or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule appointments with owners and to repair their vehicles as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owner is being instructed to contact the nearest GMC Zone-Office if the dealer does not remedy the condition within five days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed now to contact the National Highway Traffic Safety Administration.

DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in some 1985-86 P3 and G3 model trucks. The left-hand lower control arm can crack starting at the rear flange and progress to the ball joint mounting hole and eventually cause the lower ball joint to separate from the control arm. If this happens, a loss of vehicle steering control can occur which could result in a vehicle crash without prior warning.

To prevent this condition from occurring at this time, it will be necessary to install a new left-hand lower control arm on all involved vehicles.

000255

VEHICLES INVOLVED

Involved are certain P3 model trucks with gas and diesel engines and G3 vans equipped with 4.2 L Diesel engines (RPO LL4) only built within the following VIN breakpoints:

MODEL YEAR	MODEL	ASSEMBLY PLANT	FROM	THROUGH
1985	P3	Detroit	F3500001	F3510494
	G3	Scarborough	F4500663	F4525796
1986	P3	Detroit	G3500001	G3504509
	G3	Scarborough	G4500456	G4529600

The specific vehicles involved in this campaign have been identified by Vehicle Identification Number Computer Listings. These listings are furnished to all involved dealers with the campaign bulletin.

DEALER CAMPAIGN RESPONSIBILITY

Dealers are to perform the required service described under Service Procedure for all vehicles subject to this campaign at no charge to owners, regardless of mileage, age of vehicle, or ownership, from this time forward.

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to ensure the campaign correction has been made before reselling or releasing the vehicle.

Owners of vehicles recently sold from your new vehicle inventory are to be contacted by the dealer and arrangements made to make the required correction according to instructions contained in this bulletin.

If no owner's name and address were available to GMC Truck Division at the time of campaign initiation, the dealer will determine the owner's name and address from the dealership sales records. Please provide this information directly on the second copy of the listing next to the applicable VIN so that our records may be updated and the appropriate notification mailed to the owner. This second copy should then be submitted to the address listed below in the previously supplied yellow campaign envelopes.

GMC Truck Division
General Motors Corporation
101 Union Street
Plymouth, Michigan 48170

COU-255

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by GMC Truck Division (see copy of owner letter included with this bulletin). A listing of owner names and addresses has been furnished to the involved dealers to enable dealers to follow up with owners involved in this campaign. This listing may contain owner names and addresses obtained from state motor vehicle registration records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to this campaign.

SERVICE INFORMATION

G3,P3 LOWER CONTROL ARM REPLACEMENT

TOOLS REQUIRED:

- J 23028-02 Spring Remover and Installer
- J 23742 Ball Joint Remover

REMOVAL

1. Remove 2/3 of the brake fluid from the master cylinder.
2. Raise the vehicle and support it with suitable safety stands.
3. Mark the relationship of the wheel to the hub.
4. Remove the wheel and tire assembly.
5. Remove the brake caliper. Position a C-clamp around the outer pad and caliper. Tighten the C-clamp until the piston bottoms in its bore (figure 1) Remove the caliper mounting bolts (figure 2) Lift out the caliper. Suspend the caliper so that the flexible hose is not strained (figure 3)
6. Disconnect the shock absorber at the lower end and move it aside (figure 4)
7. Remove the stabilizer bar retaining nuts, bolts, and clamps at the lower control arm (figure 5)
8. Remove the stabilizer bar from the lower control arm.
9. Remove the grease fittings from the ends of the pivot bar.
10. Secure J 23028-02 to a suitable floor jack.

CAUTION: Failure to secure J 23028-02 to a suitable floor jack could result in personal injury.

006-257

11. Place J 23028-02 under the lower control arm shaft (figure 6)
12. Install a chain around the coil spring and through the lower control arm as a safety precaution.
13. Raise the jack to remove the tension from the lower control arm shaft.
14. Remove the U-bolt's retaining nuts and washers.
15. Remove the U-bolts.
16. Lower the control arm by slowly releasing the jack until the spring can be removed.
17. Remove the spring and the safety chain only after all compression force has been removed from the spring.
18. Continue to support the inboard end of the lower control arm with a jack and J 23028-02.
19. Remove the lower ball joint cotter pin. Throw it away.
20. Loosen the lower ball joint retaining nut one turn.
21. Install J 23742, with the large cup end over the upper ball joint retaining nut (figure 7)
22. Extend the threaded end of J 23742 until the lower ball joint stud loosens from the steering knuckle.
23. Remove J 23742.
24. Remove the nut.
25. Remove the lower control arm assembly.
26. Remove the rubber bumper from the lower control arm.
 On G van models the bumper is retained by a "tree". The bumper is pried free.
 On P models the bumper is retained by a nut. Remove the nut and then remove the bumper.

INSTALLATION

1. Install the lower control arm ball joint stud into the steering knuckle.
2. Install the balljoint retaining nut on the stud. Snug the nut down but do not tighten.

000258

3. Secure J 23028-02 to a suitable floor jack.

CAUTION: Failure to secure J 23028⁴² to a suitable floor jack could result in personal injury.

4. Support the inboard end of the lower control arm with J 23028-02.
5. Install the spring on the lower control arm. Secure the spring to the lower control arm with a chain.
6. Position the spring on its mount.
7. Slowly raise the lower control arm into position.
8. Line up the front indexing hole in the pivot shaft with the crossmember attaching stud (Figure 8)
9. Install the U-bolts, washers, and nuts.
10. Tighten the U-bolt nuts to 115 N·m (85 $\text{ft}\cdot\text{lbs}$.)
11. Tighten the ball joint nut to 122 N·m (90 $\text{ft}\cdot\text{lbs}$.)
12. Install the new cotter pin in the ball joint stud. The nut may be tightened to a maximum of 176 N·m (130 $\text{ft}\cdot\text{lbs}$.) in order to align the cotter pin holes.
13. Lower the floor jack and remove J 23028-02.
14. Install the stabilizer bar to the lower control arm.
15. Install the stabilizer bracket, bolts, washers and nuts.
16. Tighten the nuts to 33 N·m (24 $\text{ft}\cdot\text{lbs}$.)
17. Install the lower end of the shock absorber to the lower control arm.
18. Install the bolt, washer, and nut.
19. For the G3 vehicle, tighten the nut to 103 N·m (80 $\text{ft}\cdot\text{lbs}$.)
For the P3 vehicle, tighten the nut to 80 N·m (59 $\text{ft}\cdot\text{lbs}$.)
20. Remove the caliper from its hanger.
21. Install the caliper assembly on the brake.
22. Install the caliper support bolts. Tighten the bolts to 50 N·m (37 $\text{ft}\cdot\text{lbs}$.)
23. Install the wheel and tire. Make sure the alignment marks match.

000259

- 24. Install the wheel nuts.
- 25. Tighten the nuts to 160 N·m (120 (ft. lbs.))
- 26. Lower the vehicle.
- 27. Pump the brake pedal several times to make sure that the brake pedal is firm before moving the vehicle.
- 28. Check the brake fluid level in the master cylinder and fill to the proper level.

PARTS INFORMATION

Parts are to be obtained from General Motors Service Parts Operation (GMSPD). To ensure that these parts will be obtained as soon as possible, they should be ordered from GMSPD on a C.I.O. order with no special instruction code, but order on an advise code (2)

PART NUMBER	DESCRIPTION	QUANTITY
15594133	LH Lower Control Arm Assembly P3 model with R05 dual rear wheels	1
14026581	LH Lower Control Arm Assembly P3 model without R05 dual rear wheels	1
14026585	LH Lower Control Arm Assembly G3 Van model	1

WARRANTY INFORMATION

Dealers should submit a warranty claim on each vehicle completed under this campaign.

LABOR OPERATION NUMBER	DESCRIPTION	*TIME ALLOWANCE	TROUBLE CODE
V 4220	Replace Lower Left Control Arm	0.9 Hr.	96

*For dealer to receive Administrative Time Allowance associated with this campaign, add 0.1 hour to the Labor Operation Time Allowance.

000260

CAMPAIGN IDENTIFICATION LABEL

Each vehicle corrected in accordance with the instructions outlined in this product campaign bulletin will require a Campaign Identification Label. Each label provides a space to include the five (5) digit dealer code of the dealer performing the campaign service. This information may be inserted with a typewriter or ball point pen.

Each Campaign Identification Label is to be located on the radiator core support in an area which will be visible when the vehicle is brought in for periodic servicing by the owner.

Apply Campaign Identification Label only on a clean dry surface.

ADMINISTRATIVE PROCEDURE

Procedures covering this campaign are outlined in Section V of your dealership's GMC Truck Claims Processing Manual GP 8719.

GMC Truck bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GMC Truck dealer for information on whether your vehicle may benefit from the information.

000251

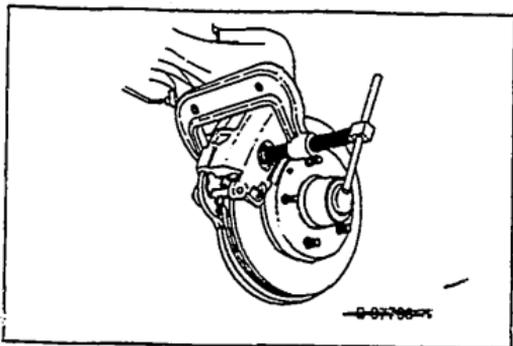


Figure No. 1

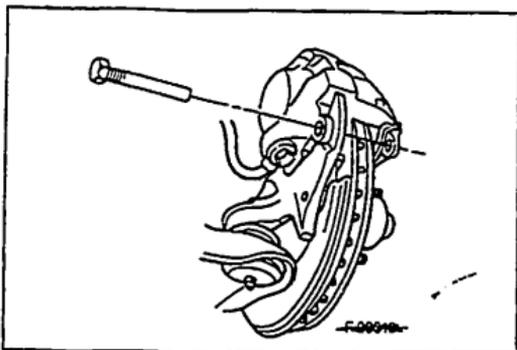
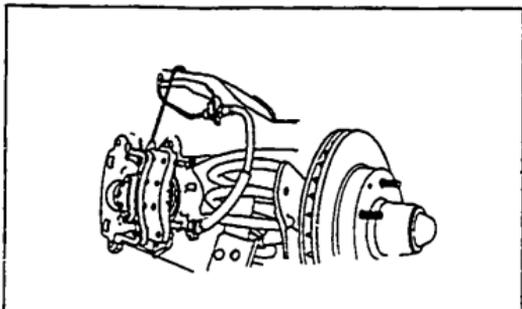


Figure No. 2



000262

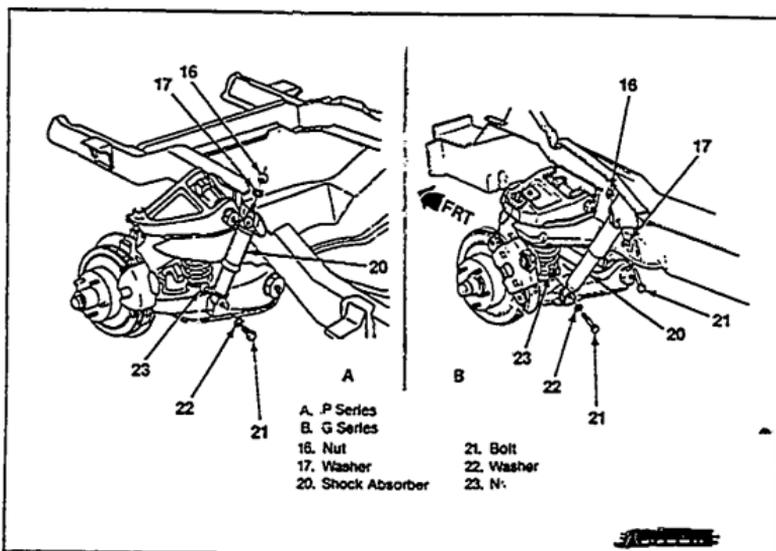
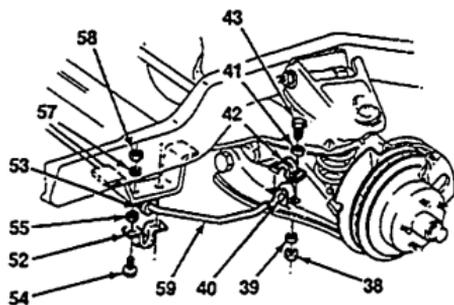


Figure No. 4

38. Nut
39. Washer
40. Bushing
41. Washer
42. Clamp
43. Bolt
52. Clamp
53. Bushing
54. Bolt
55. Washer
57. Washer
58. Nut
59. Stabilizer Bar



5
JUL 26 1955

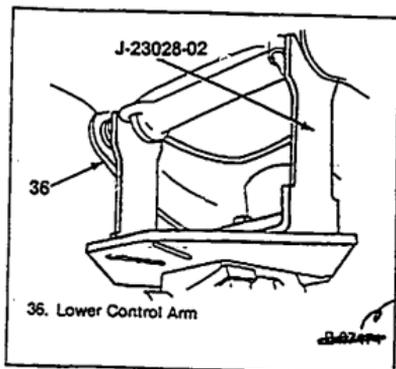


Figure No. 6

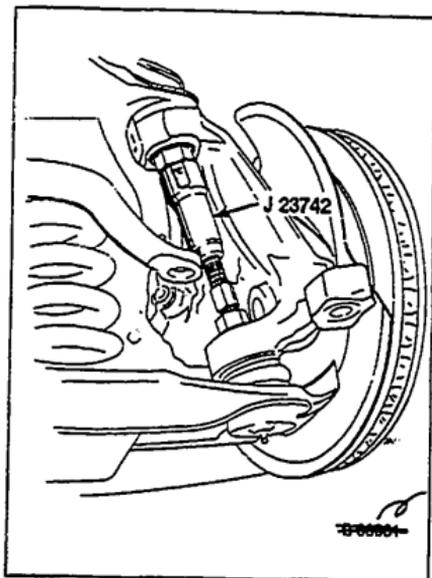


Figure No. 7

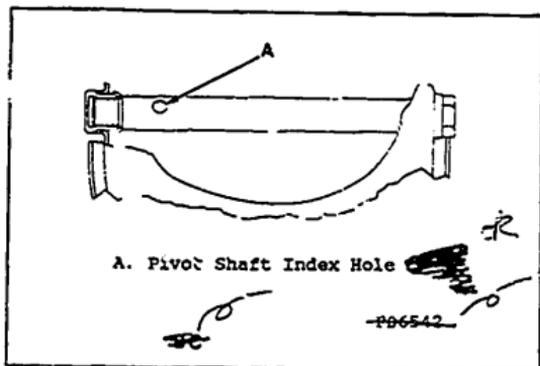


Figure No. 8



September 20, 1988

GM-278E

Mr. Michael B. Brownlee
Director
Office of Defects Investigation Enforcement
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

NEF-121rbp
EAS8-007

Dear Mr. Brownlee:

This is in response to your letter of July 26, 1988 pertaining to left lower control arm cracking on 1985 and 1986 G-30 and P-30 light trucks. Your numbered requests and our corresponding responses follow.

1. Identify the number of vehicles GM has sold by make, model, and model year, and built with the irregularly formed control arms described in Response 4 of your October 22, 1987 letter to this office (GM278) which concerns the alleged defect.

Left front lower control arm assemblies which were manufactured from blanks which may have less than the specified radius in the 6263891 control arm stamping were used on the vehicles detailed in the sales data provided in Attachment "A". The final control arm configuration used on these vehicles varies on vehicles using heavy duty suspensions as reinforcements are added to the control arm during manufacture of the assembly. In addition, the front suspension configurations vary for the models listed.

2. Explain GM's rationale for recalling some, but not all, vehicles equipped with the irregularly formed control arms referenced in Question 1.

Incidents of left front lower control arm cracking were occurring on a limited population of vehicles which were assembled using the control arms in question. GM's investigation of this condition indicated that the vehicle configuration, loads, use history and aftermarket modifications (if any) could have a significant affect on the control arm durability. Comparisons of the reports to the usage of the various control arm assembly and suspension configurations and examination of vehicles in the field revealed that incidents were primarily confined to certain vehicles using the base front suspension and control arm at

3190

000205

certain GVWR ranges. These included G-30 cutaway commercial vans having diesel engines and GVWR's of 8600 lbs. to 10,000 lbs. G-30 panel vans equipped with diesel engines and ordered for school bus usage and P-30 commercial chassis from 7600 lbs. to 10,000 lbs. GVWR. A small number of incidents were reported outside this vehicle population. Some of these incidents involved either aftermarket modifications or lack of suspension maintenance which affected the control arm durability. Reports pertaining to vehicles outside the recall population are being monitored to determine if any trends develop relative to these vehicles.

Copies of documents summarizing this rationale and used in the identification of the vehicle models subject to recall are provided in Attachment "B".

3. GM's response to Question 21 of the National Highway Traffic Safety Administration (NHTSA) November 19, 1987 Information Request on this subject was incomplete. Therefore, furnish GM's opinion of the alleged defect in the subject vehicles. Please include an assessment of the following:
 - a. the causal or contributory factors which may result in the alleged defect;
 - b. the failure mode;
 - c. the risk to motor vehicle safety created by the alleged defect; and
 - d. any warning of the alleged defect.
- a. The blank used for the base control arm stamping incorporated a less than specified radius at the transition area from the rear flange to the ball joint pad.
- b. The vehicle dynamic loads in service may initiate cracks at the improper transition area. Continued load cycling could cause the crack to propagate across the ball joint pad. If the crack was not detected during vehicle maintenance and was allowed to progress, separation of the ball joint or the ball joint end of the control arm could occur.
- c. Separation of the ball joint or ball joint end of the control arm would result in the lower control arm dropping to the road surface. This condition could result in loss of vehicle control.

001.206

- d. The cracks in the control arm are readily visible in a visual inspection during routine vehicle maintenance such as front suspension lubrication.
4. GM's letter of March 31, 1988, to NHTSA stated ". the investigation of G-30 vehicles equipped with gasoline engines and the investigation of C-30 and K-30 vehicles is still in process." Identify the current status of this investigation, the results and recommendations, or projected date of completion, if still ongoing.

The initial investigations of these vehicles indicated that incidents of control arm cracking or separation were isolated incidents related to either aftermarket suspension alterations, severe service conditions at very high mileage or lack of maintenance. Thus the recommendation was that reports be monitored to confirm that these vehicles were not experiencing the condition under normal loading and service conditions.

The investigation of two reports of control arm failures in G-30 vehicles equipped with gasoline engines revealed that the vehicles were equipped with air bag front suspensions in which the air bags were not inflated. This condition resulted in loads which were not representative for the suspension system of that class of vehicles.

Reports and complaints on these vehicles are continuing to be monitored to confirm the assessment that no field action is required concerning these vehicles.

5. Furnish a copy of all documents not specifically requested which GM believes are relevant or were used in formulating its assessment of the alleged defect.

The documents provided in response to item 2 above are responsive to this item. Copies of additional documents identified in response to this item are provided in Attachment "C".

6. Furnish any new information of which GM is aware concerning any report, document, or information which may have been previously provided by GM. Also, furnish any additional information of which GM is aware concerning the reports provided by NHTSA on this matter.

No new information other than that provided in response to item 5 above has been identified relative to documents previously provided or reports provided by NHTSA on this matter.

000-207

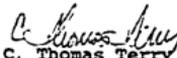
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This reply is based upon a search of records at those locations within General Motors where documents pertaining to vehicles subject to Federal motor vehicle safety standards and of the type that appear to be called for by your request reasonably can be expected to be found, including such records at Chevrolet-Pontiac-Canada and GM Truck and Bus Groups and Product Improvements' central file and field investigation activities. In effecting these searches, of course, interpretations of the requests were required. Once these searches were completed, documents were forwarded for review and responsive documents provide the basis for the responses contained in this reply.

The searches that were conducted did not include field offices or other offices where some of the information requested by your inquiry is received initially. Such a search would be unlikely to produce any significant additional information, because in the ordinary course of business, information of this type is required to be transmitted to the locations which have been searched. In addition, such a search could be extremely time-consuming and expensive.

Additionally, the searches described above were conducted subsequent to receipt of your letter and should have resulted in the identification of information received or generated up to that time by the General Motors units that conducted the searches, except information received initially by field or other offices as referenced above. However, it is possible that additional responsive information may have been received or generated by General Motors between the time the searches were completed and the date of this response. Any such information has not been included. Please advise if you require more specific information about the nature or the scope of the searches made.

Very truly yours,


C. Thomas Terry
Manager

Product Investigations

Attachments

000-208

GM-278B

ATTACHMENT "A"

001-203

1985 AND 1986 LIGHT DUTY TRUCKS
LOWER CONTROL ARMS
JITH 6263891 BLANKS
VEHICLE SALES DATA

<u>MODEL YEAR</u>	<u>MODEL</u>	<u>CHEVROLET</u>	<u>GMC</u>	<u>TOTAL</u>
1985	C20	67,264	19,436	86,700
	C30	35,826	12,929	48,755
	G30	38,059	10,775	48,834
	P20	590	69	659
	P30	42,729	7,829	50,558
1986	C20	58,007	17,176	75,183
	C30	40,814	16,807	57,621
	G30	30,114	9,049	39,163
	P20	269	58	327
	P30	30,856	2,571	<u>33,427</u>
		TOTAL		441,227

000-210

GM-278B

ATTACHMENT "B"

000211

LCA USAGE CHART (1985, 6)
(C-20 & 30 MODELS)

05H768
PAGE 1

EPH 35854
E. L. PAULY

JAPN ASH	TYPE	BEAR WHEEL	MODELS	RESTRICTIONS	SUSPENSION ASH	AIR BAG	FGAIR BAG	GVWR (LB)
14076581	HR	SINGLE	C20003 C20903 C20906 C20903, 06 C20003, 06	& LB1/LE9/LS9 & JB7 F60 & LB1/LE9/LS9 & JB7 & F60 & LT9/L25 & JB7 & LT9 & JB7 & 7B7 & LE8 & JB7 & LH6/LL4 & JB7 & JB7 NONE & LB1/LE9/LS9 & JB6 F60 & LB1/LE9/LS9 & JB6 & F60 & LH6 & JB6	1403461 1403462 1403463 1403464 14064636 14064639 14064654	NO - - - - - - -	3900 - - - - - - -	8600 - - - - - - -
14026581	HR	SINGLE	C30003 C30003 C30943	& LT9/L25 R05 & LE8/LL4 R05 R05 & R05 F42 & R05 & LE8/LL4/LT9 & R05 F42	14024512 14024513 14024514 - -	- - - - -	4000 4000 3800 3800	9000 9000 9000, 9600 10000 -
14026591	R	DUAL DUAL	C310,14 (03) C310,14 (03) C39043 C310,14 (03)	& L25 & R05 F42 & F42	14024515 14032908	- YES	4000 4000	10500 -

ABBREVIATIONS: HR=HIGH REINFORCED; R=REINFORCED.
 C 200 CODES: LB1 = 4.3L CABR V8; LE9 = 5.0L CABR V8; LS9 = 105-7L CABR V8; LT9 = 1105-7L CABR V8; L25 = 4.1L CABR LINE 6; LH6 = LD6-2L DIESEL V8; LL4 = HD 6.2L DIESEL V8; LE8 = 7-4L CABR V6; JB6, JB7 = VACUUM BRAKES; JB7, JB8 = HYDRABOOST BRAKES; R05 = DUAL REAR WHEELS; R06 = HD FRONT SPRINGS; F42 = HD FRONT SUSPENSION.
 C 310 & R.D. Fri. Suspension
 o No reported failures.
 o Air Bags & Reinforced H/C/L.

C 310
 o Very low number of failures coupled with extremely severe usage and/or high mileage.
 C 300
 o No reported failures on unmodified vehicles.
 o Brake not likely to produce high CG loading.

001212

LCA USAGE CHART (1985, 6)
G-30 MODELS

EPN 35854
E. L. PAULY

ARB ASH	TYPE	REAR WHEEL	MODELS	RESTRICTIONS	SUSPENSION ASH	AIR BAG	FEAR (LB)	GIRR (LB)
14066885	NR	SINGLE	G31303 G31305, 06	§ L19 & J87 F60 § L81	15597830	NO	3400	7400 7100
	-		G31305	§ 784	15522295	.	3900	8600
	-		G31303	§ L19 & F60 & J87	15597832	.	3900	7400, 8600
	-		G31305, 06	§ LS9/L19				7400, 8600
	-		G31332	§ L19 & J87				8600
	-		G31305	§ 784				
	-		G31303	§ LL4 & J87 F60	15557833	.	3400	7400
	-		G31305, 06	§ LL4			3900	8600
	-		G31303	§ LL4 & J87 & F60	15597834	.	3900	7400, 8600
	-		G31332	§ LL4 & J87				8600
	-	DUAL	G31303, 32 G31332	§ L19 & G15/HIC4 & J88 § L19 & G15 & J88 & 6V6	15597831	.		8900
	-		G31603	§ L19 & G15/HIC4	15597835	.		8900
	-		G31632	§ LP9/L19		.		10000
	-		G31332	§ L19 & 9A2		.		
	-		G31332	§ L19 & G15 & J88 & 6V6		.		
	-		G31303	§ LL4 & G15 & J88	15597936*	.		8900
	-		G31332	§ LL4 & J88		.		
	-		G31603	§ LL4 & G15		.		
	-		G31632	§ LL4 & G15		.		10000
	-		G31632	§ LL4 & 9A2		.		

000213

LCA USAGE CHART (1985, 6)
G-30 MODELS (CONT'D)

OSN768
PAGE 3

EPN 35854
E. L. PAULY

ARM ASM	TYPE	REAR WHEEL	MODELS	RESTRICTIONS	SUSPENSION ASM	AIR BAG (LB)	FRONT (LB)	GWR (LB)
14066885	HR	DUAL	631603 631303 531603 531603	& J84 & L19 & G18/HF7 & J88 & LP9/L19 & G18/HF7 F42 & 784	15522157 15597837 " 15597838	YES YES YES YES	3900	10500 " " "
15598369	R	DUAL	331603 331632 331603 331632	& LL4 & G18 & J88 & LL4 & G18 F42 & LP9/L19 & F42 & L19 & 9A2 & LL4 & F42 & LL4 & 9A2	15598362 15598363 " "	YES YES YLS YES	3900	10500 11000 10500 11000

1970 CODES: LB1 = 4.3L CARB V6; L59 = L05.7L CARB V8; L19 = HD 5.7L CARB V8; LP9 = 5.7L PROPANE V8; LL4 = HD 6.2L DIESEL V8; G15, G18 = 4.10 AXLE RATIO; -CA, HF7 = 4.56 AXLE RATIO; J87 = VACUUM BRAKES; J87, J88 = HYDROBOOST; -CR, -CS; F42 = HD FRONT SUSPENSION.

SED CODES: 784 = 'RIDER' FRONT SUSP; 6V6 = REC VEIL CHASSIS MOD; 9A2 = REC VEIL CHASSIS MOD FOR 11000 GWR.

ABBREVIATIONS: NR = NONREINFORCED; R = REINFORCED.

G 300 (33) Motor Home
o No reported failures.
o Loading tends to be distributed towards rear axle.

G 313 (86) Passenger Van
o No reported failures.
o Usage not likely to produce high CG loading.

G 300 (81) Gas Engine
o Four low frequency (2 reports).
o Both cases involved lack of recommended maintenance.
o Gas engine is 25HP (lighter than diesel).

G 316 (83) Diesel Engine
o No reported failures.
o Longer M/B distributor load towards rear axle.

G 313 (83) Diesel Engine & 7,4000 GVW
o No reported failures.
o Usage not likely to produce sufficient loading to cause failure.

G 313 (85) Diesel Engine & Non-School Bus
o No reported failures.
o Usage not likely to produce high CG loading.

G 300 (80) > 10,000 GVW
o No reported failures.
o Air Bags & Reinforced 1/4".

000021A

LCA USAGE CHART (1985, 6)

P-20 & 30 MODELS

EPH 35854
E. L. PAULY

ARM ASH	TYPE	BEAR WHEEL	MMR'L S	RESTRICTIONS	SUSPENSION ASH	AIR BAG	FGMR	GMVR
14067155	HR	SINGLE	P200 (00) P200 (00) & P308, 10, 14 (42)	& JB6/J06 & JB7/J07	14067153 14067154 14067157	NO " "	3600 4000 3880 4000	6000 68, 75, 8000 7600, 8200 76, 82, 9000
15599301	"	"	P308, 10, 14 (42)	& JB8 FS3/R05 & JB8-6-781-FS3/R05	14057158	"	3880	9000, 10000
15599301	"	DUAL	P308, 10, 14 (42) P31842	& JB8 & R05 FS3 & JB8 FS3 & JB8-6-781-FS3 & JB8-6-781-FS3 & JB8-6-781-FS3	"	"	"	"
14067147	R	DUAL	P311 (00) P308, 14 (32)	& F66 FS3	14067144	YES	4880	11000, 12300
14067149	R	"	P31432 P31832	& JF9 FS3 -FS3	14067145	"	5000	14500
14067151	R	"	P30832 P311 (00) P31432	-FS3/F66 -FS3/F66 & JB8 FS3/F66	14067146	"	4300	10500, 11800
15599355	R R R	SINGLE DUAL "	P308, 10, 14 (42) P308, 10, 14 (42) P31842	& 781 R05 & 781 & R05 & 781	15599352	"	3880	9000 10000

RPO CODES: J06, J07 = VACUUM BRAKES; J06, J07, J08 = HYDRABOOST BRAKES; JF9 = HYDRABOOST & REAR WHEEL DISK BRAKES; FS3 = I-BEAM FRONT AXLE; R05 = DUAL REAR WHEELS; F66 = HD FRONT SUSPENSION.

SEO CODES: 781 HD FRONT SUSPENSION.

ABBREVIATIONS: HR = NONREINFORCED; R = REINFORCED.

P 109

- o No reported failures.
- o Weight not likely to product sufficient loading to cause failure.

P 109 (32) Motor Base

- o No reported failures.
- o Air Bags & Reinforced L/C/A
- o Loading tends to be distributed towards rear axle.

P 109 (42) & W.D. Frt. Suspension

- o No reported failures.
- o Air Bags & Reinforced L/C/A.

00C-215

LH LOWER CONTROL ARM CRACKING
1985-86 C/G/P 300

-- Rationale For No Involvement --

C Models

- C 200
 - o No reported failures on unmodified vehicles.
 - o Usage not likely to produce high CG loading.
- C 300
 - o Very low number of failures coupled with extremely severe usage and/or high mileage.
- C 300 & H.D. Frt. Suspension
 - o No reported failures.
 - o Air Bags & Reinforced L/C/A.

P Models

- P 200
 - o No reported failures.
 - o Usage not likely to produce sufficient loading to cause failure.
- P 300 (32) Motor Home
 - o No reported failures.
 - o Air Bags & Reinforced L/C/A.
 - o Loading tends to be distributed towards rear axle.
- P 300 (42) & H.D. Fr. Suspension
 - o No reported failures.
 - o Air Bags & Reinforced L/C/A.

000216

LH LOWER CONTROL ARM CRACKING
1985-86 C/G/P 300

-- Rationale For No Involvement --

-2-

G Models

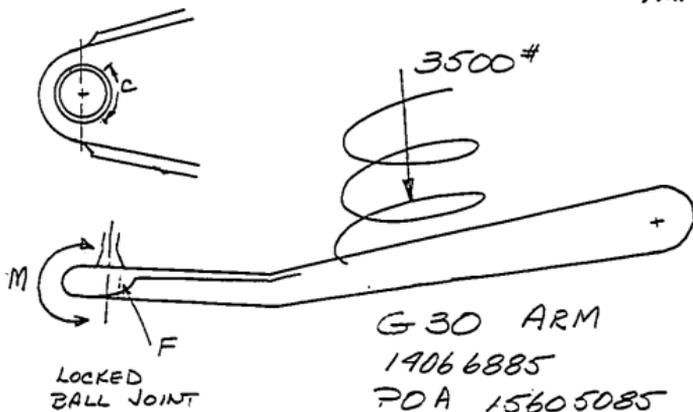
- G 300 (32) Motor Home
 - o No reported failures.
 - o Loading tends to be distributed towards rear axle.
- G 313 (06) Passenger Van
 - o No reported failures.
 - o Usage not likely to produce high CG loading
- G 300 (00) Gas Engine
 - o Very low frequency (2 reports)
 - o Both cases involved lack of recommended maintenance.
 - o Gas engine is 250# lighter than diesel
- G 316 (03) Diesel Engine
 - o No reported failures.
 - o Longer W/B distributes load towards rear axle.
- G 313 (03) Diesel Engine & 7,400# GVW
 - o No reported failures.
 - o Usage not likely to produce sufficient loading to cause failure.
- G 313 (05) Diesel Engine & Non-School Bus
 - o No reported failures.
 - o Usage not likely to produce high CG loading
- G 300 (00) > 10,000# GVW
 - o No reported failures.
 - o Air Bags & Reinforced L/C/A.

Note: Field reports and 1241's will continue to be monitored for failures on these vehicles.

JLF
Relia. Engrg
6/1/88

000217

9MR 88



NVL TEST SUMMARY TO DATE

<u>SAMPLE #</u>	<u>DESCRIPTION</u>	<u>LOAD (M, PF)</u>	<u>COUNT</u>	<u>CRACK</u>
1	TO PRINT	300 LB FT	300K	} 2" CRACK AT C NO FLAM. CRACK
		450 LB FT	300K	
		500 LB FT	100K	
2, 3, 4, 5	SIMULATED NOTCH FRONT & REAR FLANGES	450 LB FT	20K	2" @ C
			60-70K	CRACK AT F. REAR
			90-100K	CRACK AT F. FRONT

crack thru's happen more on loaded P's & G's than C's
 crack thru may begin the cracking normal loading but continues the process

F42 air bag suspension
 F66 also gets reinforced arm

no reported incidents to date GOR 218

MILITARY EQUIPMENT CHART FOR 1989 G30 CHITAWAY VAUS

(RATINGS IN LBS.)

MODEL	W/D	FRONT TIRES	TIRE RATING (2)	REAR TIRES	TIRE RATING (2/4)	FRONT AXLE	FRONT SPRINGS	REAR AXLE	REAR STRINGS	BRAKE SYSTEM	FRONT GAWR	REAR GAWR	GVWR	HOLES
G31303	125	8-75-16-5D	4700	8-75-16-5D	4700	3900	3400	5100	6000	J17	3400	4270	7400	LL
		8-75-16-5D	4700	8-75-16-5D	4700	3900	3400	5100(1B)	6000	J17	3400	4270	7400	LL
		8-75-16-5E	5360	8-75-16-5E	5360	3900	3400	5100(1F60)	6000(1G50)	J17	3400	4270	7400	CL
		8-75-16-5E	3860	8-75-16-5E	3860	3900	3900(1F60)	7500(1H)	6000(1G50)	J17	3900	5160	8600	CL
		8-75-16-5E	3860	8-75-16-5E	3860	3900	3400	7200	6000	J18	3400	6000	8900	CL
		8-00-16-5C	3460	8-00-16-5C	3460	3900	3400	7500(1H)	6000	J18	3400	6000	8900	CL
		8-00-16-5D	4090	8-00-16-5D	4090	3900	3900	7500(1H)	7200	J18	3900	7200	10090	CL
		8-00-16-5D	4090	8-00-16-5D	4090	3900	3900	7500(1H)	7200	J18	3900	7200	10090	CL
G31603	146	8-00-16-5C	3460	8-00-16-5C	6080 DUAL	3900	3900	6200	7200	J18	3460	6080	8900	C
		8-00-16-5C	3460	8-00-16-5C	6080 DUAL	3900	3900	7500(1H)	7200	J18	3460	6080	8900	CL
		8-00-16-5D	4090	8-00-16-5D	6080 DUAL	3900	3900	7500	7200	J18	3900	7200	10000	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	7200	J18	3900	7200	10000	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	7200	J18	3900	7200	10000	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	7200	J18	3900	7200	10000	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	7200	J18	3900	7200	10000	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	7200	J18	3900	7200	10000	CL
G31332	125	8-75-16-5E	5360	8-75-16-5E	5360	3900	3900	5100	6000	J17	3900	5160	8600	CL
		8-75-16-5E	5360	8-75-16-5E	5360	3900	3900	6200(1B)	6000	J17	3900	5160	8600	CL
		8-00-16-5C	3460	8-00-16-5C	6080 DUAL	3900	3900	6200(1B)	6000	J18	3460	6000	8900	C
		8-00-16-5C	3460	8-00-16-5C	6080 DUAL	3900	3900	7500(1H)	6000	J18	3460	6000	8900	CL
		8-00-16-5D	4090	8-00-16-5D	6080 DUAL	3900	3900	7500(1H)	6000	J18	3460	6000	8900	CL
		8-00-16-5D	4090	8-00-16-5D	6080 DUAL	3900	3900	7500(1H)	6000	J18	3460	6000	8900	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	6000	J18	3460	6000	8900	CL
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900	7500(1H)	6000	J18	3460	6000	8900	CL
G31637	146	8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900(1F47)	7500	7200	J18	3900	7200	10500	ACTK
		8-00-16-5D	4090	8-00-16-5D	7200 DUAL	3900	3900(1F47)	7500	7200	J18	3900	7200	10500	ACTK

NOTES:

- REQUIRES LOS 15, 7L V8 WITH (H3) (MISSIONS) OR LL4 (6.2 L DIESEL) ENGINE.
- NO V8 AVAILABLE
- PRO 550 STABILIZER BAR REQUIRED (STANDARD ON 37 MODEL AND 31603).
- REQUIRED RPO B3D.
- NOT AVAILABLE IN CALIFORNIA.
- REQUIRES RPO 1E7 OR G18.
- REQUIRES RPO 201 CHASSIS EQUIPMENT.
- LL4 6.2L DIESEL ENGINE REQUIRES 2ND BRAKE SYSTEM.
- REQUIRES F42.
- REQUIRES F45 SQUARE FEET FLOOR AREA OR EXCEED 6000 LB. CURB WT.
- REQUIRES L19 (1-AL) ENGINE, 17500 (H8) AXLE IS DANA 10.5" SERIES TO 10 DUAL WHEEL.
- REQUIRES L05 (5-7L 101 V8) OR LL4 (6.2L DIESEL) ENGINE.
- REQUIRES RPO G14 OR G18.

MODELS Excluded F42 REMFORCED ARMS

000220

E. A. BIRD (1992-8)
 W. A. BIRD (1989-8)
 11/27/87 (641-3117)
 11/27/87 (641-3117)

1989 B/V KUBOTA MAINTORY EQUIPMENT CHART
HEAVY DUTY TRUCKS, CARS & BUSES, TRAILERS

IN	MODEL	GVW	GVW	GVW	TIRE	TIRE	INFLATION	THEIR	FRONT	FRONT	REAR	REAR	REAR	FRAME	FRAME	REQUIRED
		CAP	TYPE	TYPE	SIZE	PRESSURE		CAPACITY	AXLE	SPRINGS	AXLE	SPRINGS	AXLE	STEEL	HAKE	OFFERS
20	0-100013	6000	60P	1P235/65R/168	45/60			2030/3012	*3000	*3000	7500	*6000	6000	JIB	10500	10500
	P R11003	9000	60P	1P235/65R/168	45/60			2030/3012*	*3000	*3000	7500	*6000	6000	JIB	10500	10500
	Q R11403	10000	60P	1P215/65R/168	50/60			1940/1765	*3000	*3000	7500	*6000	6000	JIB	10500	10500
	0-100013	10000	60P	1P215/65R/168	50/60			1940/1765	*3000	*3000	7500	*6000	6000	JIB	10500	10500
	U R00913	9000	60P	1P215/65R/168	55/60			2030/3012*	*4000	*4000	7500	*7500	7500	JIB	10500	10500
	V R00913	9600	60P	1P215/65R/168	45/60			2030/3012*	*4000	*4000	7500	*7500	7500	JIB	10500	10500
	Y R00913	10000	60P	1P215/65R/168	55/60			2030/3012*	*4000	*4000	7500	*7500	7500	JIB	10500	10500
	Z V11003	9300	60P	1P235/65R/168	55/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	Y V11003	10000	60P	1P235/65R/168	65/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	AA V11003	10000	60P	1P215/65R/168	65/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	AB V11403	10000	60P	1P215/65R/168	65/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	AC V11003	11000	60P	1P215/65R/168	65/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	AD V00913	9300	60P	1P235/65R/168	55/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	AE V00913	10000	60P	1P235/65R/168	65/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500
	AF V00913	11000	60P	1P215/65R/168	65/60			2335/1995	*4500	*4500	7500	*7500	7500	JIB	10500	10500

1 SIGHTLY LIMITING COMPONENT WHICH IS THE DISTRIBUTING FACTOR FOR FRONT OR REAR AXLE.
 2 SIZE REAR SPRING RATING 10,000 LBS. N.A. REQ. (THIS DOES NOT INCREASE REAR GVW.)
 3 ALL TRUCKS IN JIB; TIRE PRESSURES IN PSI.
 4 GVW (MAX. G.C. & C.T. (10500 LB & 11000 LB) AVAILABLE FOR EXACT WITH IRO VBI/WTI.
 5 MAX TIRE CARB. 1P235/65R/168 3042 LB @ 60 PSI
 6 1P215/65R/168 2335 LB @ 65 PSI

270
 R.L. PAULY
 ISSUED INITIAL ISSUE

EXCLUDED MODEL F42 REINFORCED ARM

60122A

R-G-P 30 FLCA MODEL SUMMARY

MODEL CODES OF VEH WITH REPORTED FAILURES.

<u>FLEET QTY</u>	<u>USE</u>	<u>MODEL</u>	<u>RR WHL</u>	<u>ENG</u>	<u>GNR</u>	<u>FLOOR</u>	<u>FRT SUP</u>	<u>LCA</u>
GALIN 9	Scrub	631305	56L	LLA	8600	3900	15597833	14066888
VIMONT 2	AMBUL	631303	56L	LL9	8600	3900	15597833	14066888
WST UNIF 12	LUNDBY	P31403	ROS	LT9	10000	3880	14067158	15599301
ROTALA 4	BAKERY	P31803	ROS	LL9	10000	3880	14067158	15599301
AMERICAN 2	BAKERY	P31403	ROS	LL9	10000	3880	14067158	15599301
PECHTOLD 1	BAKERY	P31403	ROS	LT9	10000	3880	14067158	15599301
McDONNELL 1	MAIL	P31403	ROS	?	10000	3880	14067158	15599301

NOTES
 ROS = DUAL WHEELS
 LL9 = HD 6.2 L DIESEL ENG
 LT9 = 5.7 L GAS V8 ENG.

LCA NOTES

14066888 G-300 USAGE ONLY (+/- RO)
 NON-REINFORCED
 ONLY N-R ARM ON G-300

15599301 P-300 & ROS USAGE ONLY
 NON-REINFORCED

14067155 P-200/300 - ROS USAGE ONLY
 NON-REINFORCED

600:223 27 Feb

24 MAR 88

R-G-P 30 FLCA AIR BAG / REINF ARM SUMMARY

IN ALL CASES REINFORCED ARMS USE AIR BAGS, AND SUSPENSIONS WITH AIR BAGS HAVE REINFORCED ARMS.

<u>MODEL</u>	<u>RPA</u>	<u>LCA</u>	<u>SUSPENSION</u>	<u>AIR BAG</u>
C 30043	F42	14026591	14032908	367762
C 310, 319 00	"			
G 31603	F42	15598369	15598362	"
G 31632	(9A2)			
G 31603	F42, LL4	15598369	15598363	"
G 31632	(9A2)			
P308, 31432 311(00)	F66	14067147	14067144	"
P314, 31832	-	14067149	14067145	"
P308 32	-F53/F66	14067151	14067146	"
P311 (00)	(?)			
P308, 10, 14 42	781 -R05	14026589	15599352	"
P308, 10, H 42	781 ± R05	14026589	15599353	"

REINFORCED / NON REINFORCED ARM SUMMARY

	<u>NON REINF</u>	<u>REINF</u>
C TRUCK	1	1
G TRUCK	1	1
P TRUCK	2	4

CGC 224

LH LOWER CONTROL ARM CRACKING
1985-86 C/G/P 300

Field/Customer Reports

<u>Model</u>	<u>G/W</u>	<u>Engine</u>	<u>Cases</u>	<u>Estimated Population</u>	<u>Failures per 10,000 Veh.</u>	<u>Comments</u>
C 300	9,000#	Gas	3	19,183	1.5639	Assignable cause of overload due to after market installation of special equipment & unique application (railroad) beyond the vehicle design intent. Or, very severe fleet operation on 'Belgian' block like roads.
P 31_42	10,000#	Gas & Diesel	31	15,547	19.9395	No unique assignable cause found after vehicle were inspected.
G 31303	8,600#	Diesel		2,242	4.4603	Ambulance; no loading information available.
	10,000#	Diesel	3	1,805	16,6205	School Buses with aftermarket front helper leaf spring attached to the control arms because of wear out of idler arms at 3,000 4,000 miles and tires at 8,000 miles.
		Gas	2	21,797	0.9176	Vending company truck and school bus. Both had gas springs which were not inflated.
G 31305	8,600#	Diesel	8	3,038	26.3331	All are from one school bus fleet. Bodies have been modified by raising the roof.

JLF
Relia. Engr'g
5/2/88

000-225

GM-278B

ATTACHMENT "C"

GDC226

R-G-P 30 FLCA SUMMARY

MODEL 1985 P31442 DUAL 205
QTY 1 44 G 2. L Diesel

OWNER MC DONNELL DOUGLAS Mill. Del. 1987
MISSOURI

GVWR 10000[±]

FGAWR. 3880[±]

RGAWR 7056[±]

<u>LOADING</u>	<u>EMPTY</u>	<u>LOADED</u>
FRONT	1670	NA
REAR	1650	
TOTAL	6640	

MILES TO REPL.

AVG NA

RANGE

ARM PN 15599301 NR

COMMENTS

- NO MODIFICATIONS TO SUSP
- BUMPERS POLISHED.

00C227

Truck & Bus Group



27JA88

PRODUCT SERVICE

'88 MAR 15 A6:13

GENERAL VEHIC

Customer and,

Year & Vehic:

Mileage when

Review maintenance records for front or rear suspension repairs/adjustments or wheel and tire repairs. (List or attach copies)

Vehicle Configuration (i.e. Van Body, School Bus, Pickup Box, Custom Body, etc.)

Is the vehicle configured the same as when the LH lower control arm cracked? YES

What is the vehicle used for? PICK UP MAIL AND LIGHT FREIGHT

Has the vehicle had any other uses? NO

Describe the road surfaces this vehicle is regularly driven on: CITY/SHWY.

What is the maximum speed this vehicle is driven? SPEED LIMIT

What are the average number of miles per day? VARIES FROM DAY TO DAY

Is this vehicle driven over rough railroad crossings, curbs, etc.? SOMETIME WHEN ON MAJOR ROADS

Number of vehicles in Fleet with same configuration: 20 VANS

TIRES & WHEELS

Tire Size, Type, & Manufacturer: 215 85r16

Wheel Size: 16'

Have tires/wheels been replaced (Same as Factory equipment or increased)? YES 2 TIMES

REAR SUSPENSION

Is the rear suspension Production or modified for extra load? NO

3 15. 88

Ed Parley

Another question

response.

JF Brown

321ef3507399

GOC-228

300 SERIES TRUCK
CRACKED LEFT HAND LOWER CONTROL ARM
EVALUATION DATA
-2-

FRONT SUSPENSION

Have there been any modifications to the Front Suspension (Air Lifts, Transverse Leaf Springs, Coil Springs added to Front Shocks, etc.)?

Using a vernier caliper or micrometer, measure the wire diameter on (3) coils of the front coil spring and average the readings:

RH .875 LH .875

Has LH lower control arm been modified? NO REPLACED

What is the condition of the jounce bumper? OK REPLACED

Has the jounce bumper been modified (Compare with attached illustrations)?

What is the metal to metal jounce bumper condition (Rusted, Polished, Bent, etc.)? ALL BUMPER'S AND STOPS THE METAL CONDITION WERE ALL WELL POLISHED

HEIGHTS

What are the vehicle weights at each wheel

LH Front Unloaded	<u>1720</u>	RH Front Unloaded	<u>1620</u>
LH Rear Unloaded	<u>1760</u>	RH Rear Unloaded	<u>1540</u>
LH Front Loaded	<u> </u>	RH Front Loaded	<u> </u>
LH Rear Loaded	<u> </u>	RH Rear Loaded	<u> </u>

Center of Gravity Heights (If possible)

PICTURES

Take pictures from several angles (Overall Vehicle, Front Suspension, LH Lower Control Arm)

GENERAL COMMENTS: TRUCK APPEARED TO BE WELL MAINTAINED AS FAR AS BEING GREASED. TRUCK DID SHOW SIGNS THAT THE FT. END WAS OUT OF ALING AND THA THE STABILIZER BAR BUSHING'S WERE IN NEED OF REPLACEMENT.

90C-229

R-G-P 30 FLCA SUMMARY

MODEL 1996 P31A42 DUAL RDS

QTY 1 5.7 GAS

OWNER PECHTERS BAKERY
HARRISON, NJ

GVWR 10000 #

FGAWR 3880 #

RGAWR 7036 #

LOADING

EMPTY

LOADED

FRONT

NA

NA

REAR

TOTAL

MILES TO REPL.

AVG

46000

RANGE

—

ARM PN PROB 15599301 NR

COMMENTS

• No MODIFICATIONS TO SUSPENSIONS

000230

TRUCK
REAR CONTROL ARM: 27JAB8

300 SERIES TRUCK
CRACKED LEFT HAND LOWER CONTROL ARM
EVALUATION DATA

PRODD
57 ICE
FEB 23

GENERAL VEHICLE INFORMATION

Customer and/or Fleet Name:

Year & Vehicle Model: 1986 P3500 VIN: 1G-DHP32M3G3502666

Mileage when crack in LH lower control arm was noted: 46,000

Review maintenance records for frequent or any front or rear suspension repairs/adjustments or wheel and tire repairs. (List or attach copies) NONE

Vehicle Configuration i.e. Van Body. School Bus. Pickup Box, Custom Body, etc.) STEP

Is the vehicle configured the same as when the LH lower control arm cracked? YES

What is the vehicle used for? BREAD DELIVERY

Has the vehicle had any other uses? No

Describe the road surfaces this vehicle is regularly driven on: HIGHWAY

What is the maximum speed this vehicle is driven? 55 M.P.H.
TO TRENTON N.J. THEN CITY DELIVERY

What are the average number of miles per day? N/A

Is this vehicle driven over rough railroad crossings, curbs, etc.? NO

Number of vehicles in Fleet with same configuration: 150

TIRES & WHEELS

Tire Size, Type, & Manufacturer: 7.50 X 16 - 8 PLY TUBELESS - B.F. GOODRICH

Wheel Size:

Have tires/wheels been replaced (Same as Factory equipment or increased)? NO

REAR SUSPENSION

Is the rear suspension Production or modified for extra load? Production

DDC-231

300 SERIES TRUCK
CRACKED LEFT HAND LOWER CONTROL ARM
EVALUATIO: DATA

-2-

FRONT SUSPENSION

Have there been any modifications to the Front Suspension (Air Lifts, Transverse Leaf Springs, Coil Springs added to Front Shocks, etc.)? *No*

Using a vernier caliper or micrometer, measure the wire diameter on (3) coils of the front coil spring and average the readings:

RH 22.5 mm

LH 22.5 mm

Has LH lower control arm been modified? *No*

What is the condition of the jounce bumper? *Good*

Has the jounce bumper been modified (Compare with attached illustrations)? *No - RE. PHOTOS*

What is the metal to metal jounce bumper condition (Rusted, Polished, Bent, etc.)? *BUMPERS ARE RUBBER*

WEIGHTS

What are the vehicle weights at each wheel?

LH Front Unloaded _____ RH Front Unloaded _____

LH Rear Unloaded _____ RH Rear Unloaded _____

LH Front Loaded _____ RH Front Loaded _____

LH Rear Loaded _____ RH Rear Loaded _____

Center of Gravity Heights (If possible) *UNABLE TO SECURE WEIGHTS*
VEHICLE LOADED - UNLOADED + OPERATED WHEN SCALES ARE
PICTURES UNAVAILABLE (BREAD)

Take pictures from several angles (Overall Vehicle, Front Suspension, LH Lower Control Arm)

GENERAL COMMENTS:

000232

R-G-P 30 FLCA SUMMARY

MODEL ^{1485 (7)}
1986 (2) 631305 (School Bus) DUAL No
QTY 9 6.2 L Diesel ILLA SGL WHL

OWNER GALEN TRANSPORTATION INC
^{MARSHFIELD MISSOURI} ILL

GVWR ~~8600~~ #

FGAWR. 3900 #

RGAWR 6000 #

<u>LOADING</u>	<u>EMPTY</u>	<u>LOADED</u>
FRONT CNR	1530	—
REAR CNR	1450	—
TOTAL	5950	EST. 16 PAS @ 14 + DVR @ 200 = 2440 ~ 8400 #

MILES TO REPL.

AVG 60900

RANGE 52600 TO 69600

ARM PN 14066885, NR

COMMENTS

- NO LOADED WGTs PROVIDED, EST 8400#
FULLY LOADED, WITHIN 8600# GVWR & PROB
WITHIN 3900# FGAWR
- ALL BUMP STOPS POLISHED

001233

2.24 Salvo Transportation

Inspect ⑧ 1985 unit for evaluation of cracked left lower control arm.

- ① All units had ^{Hoodyear} 8.75 P.M. 5LT tires on the front
(either G159 on Wrangler.

all rear tires were Hoodyear G133 - 8.75R16.5LT

- ② All units had 8 leaf rear suspension, no modifications
③ All units were production front suspension, no modifications
④ Range of front coil spring wire diameter was 885" min to 893" max on ⑧ units
⑤ Lower control arms had not been modified on any unit
⑥ Joamer bumpers were all in good condition and original unmodified design except for No. 45L left frame bumper was missing and No. 46C on which the left lower control arm had been replaced with a used part and had the old design cone bumper installed
⑦ On all units metal to metal contact was either polished or some paint remaining, none were bent or damaged
⑧ Unit 45L (2GBG9355F4147021) was weighed at the nearest certified scale the account could locate; Bureau of Debra Dr. Hochstetler (40 minute one way trip from the account.) Weights are: (vehicle empty)
Left front (truck No. 203583) 1560; right front (truck No. 203584) 150
right rear (truck No. 203585) 1370; left rear (truck No. 203586) 1520
All vehicles loading capacity is driven and 16 elementary through high school students.
⑨ Vehicle inspection: 2GBG93553F4139519(45A); 2GBG93555F4139554 not available (45B)
2GBG93553F414664(45E); 2GBG93553F414623(45F) 2GBG93553F414606(45J)
2GBG93553F4147021(45L) 2GBG93553F4143390(45M) 2GBG93555F414046(4

27JA88

300 SERIES TRUCK
CRACKED LEFT HAND LOWER CONTROL ARM
EVALUATION DATA

GENERAL VEHICLE INFORMATIONCustomer and/or Fleet Name: *Kaba Transportation Inc.*Year & Vehicle Model: *85 G Van* VIN: *2GBG635JF 4147021*Mileage when crack in LH lower control arm was noted: *53,000 miles*Review maintenance records for frequent or any front or rear suspension repairs/adjustments or wheel and tire repairs. (List or attach copies) *History not available at contact*Vehicle Configuration (i.e. Van Body, School Bus, Pickup Box, Custom Body, etc.) *modified by Van*Is the vehicle configured the same as when the LH lower control arm cracked? *yes*What is the vehicle used for? *school bus*Has the vehicle had any other uses? *no*Describe the road surfaces this vehicle is regularly driven on: *highway & rural dirt rd*What is the maximum speed this vehicle is driven? *55*What are the average number of miles per day? *100*Is this vehicle driven over rough railroad crossings, curbs, etc.? *no*

Number of vehicles in Fleet with same configuration:

TIRES & WHEELSTire Size, Type, & Manufacturer: *(F) Hoosier G159 - 8.25 R16 5LT 27+*
*R " G133 " " "*Wheel Size: *16.5*Have tires/wheels been replaced (Same as Factory equipment or increased)? *tires replaced check invoice for OE*REAR SUSPENSION*Production @ leaf - check invoice for OE*

300 SERIES TRUCK
CRACKED LEFT HAND LOWER CONTROL ARM
EVALUATION DATA

-2-

FRONT SUSPENSION

Have there been any modifications to the Front Suspension (Air Lifts, Transverse Leaf Springs, Coil Springs added to Front Shocks, etc.)? *no*

Using a vernier caliper or micrometer, measure the wire diameter on (3) coils of the front coil spring and average the readings:

RH 896 -

LH 888 -

Has LH lower control arm been modified? *no*

What is the condition of the jounce bumper? *good*

Has the jounce bumper been modified (Compare with attached illustrations)? *no*

What is the metal to metal jounce bumper condition (Rusted, Polished, Bent, etc.)? *polished right*

WEIGHTS *See attached weight tickets - passenger weight is one adult driver and 16 students*

What are the vehicle weights at each wheel?

LH Front Unloaded	<u>1560</u>	RH Front Unloaded	<u>1500</u>
LH Rear Unloaded	<u>1520</u>	RH Rear Unloaded	<u>1370</u>
LH Front Loaded	_____	RH Front Loaded	_____
Rear Loaded	_____	RH Rear Loaded	_____

Center of Gravity Heights (If possible):

PICTURES *2 photos attached*

Take pictures from several angles (Overall Vehicle, Front Suspension, LH Lower Control Arm)

FINAL COMMENTS:

000237

TICKET NUMBER	DATE	TIME IN	TIME OUT	GROSS WEIGHT
A 181167	02/24/88	00:00	16:13	0
NAME/ACCOUNT NUMBER	NO. OF PASSENGERS	DRIVER (N/D/F)		TARE WEIGHT
GALIN TRANS				1560
VEHICLE IDENTIFICATION	TRAILER ID	TRACTOR ID		NET WEIGHT
		45L		0
MATERIAL				UNIT PRICE
				0.00
SOURCE		DESTINATION		AMOUNT DUE
R		Left front		\$ 5.00

BT 01

COMMENTS

PUBLIC SCALE WEIGHING — REGULAR

203583

SCALE LOCATION: 109 MCKINLEY ST.

JMV

8 3/21

TICKET NUMBER	DATE	TIME IN	TIME OUT	GROSS WEIGHT
A 181168	02/24/88	00:00	16:13	0
NAME/ACCOUNT NUMBER	NO. OF PASSENGERS	DRIVER (N/D/F)		TARE WEIGHT
GALIN TRANS				1500
VEHICLE IDENTIFICATION	TRAILER ID	TRACTOR ID		NET WEIGHT
		45L		0
MATERIAL				UNIT PRICE
				0.00
SOURCE		DESTINATION		AMOUNT DUE
Front Right				\$ 5.00

BT 01

COMMENTS

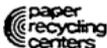
PUBLIC SCALE WEIGHING — REGULAR

203584

SCALE LOCATION: 109 MCKINLEY ST.

JMV

001-229



BRUNO & D'ELIA, INC.
HACKENSACK, NJ

Weight Ticket

TICKET NUMBER	DATE	TIME IN	TIME OUT	WGT
A 181169	02/24/88	00:00	16:15	0
NAME/ACCOUNT NUMBER	NO. OF PASSENGERS		TRUCK ORDER	TARE WEIGHT
GALIN TRANS				1370
VEHICLE IDENTIFICATION	MATERIAL			
			45L	0
				0.00
SOURCE				DESTINATION
Right Rear				
				AMOUNT DUE
				\$ 5.00

COMMENTS

PUBLIC SCALE WEIGHING -- REGULAR

203585

SCALE LOCATION: 109 MCKINLEY ST.

JMV

$\frac{94}{21}$



BRUNO & D'ELIA, INC.
HACKENSACK, NJ

Weight Ticket

TICKET NUMBER	DATE	TIME IN	TIME OUT	WGT
A 181170	02/24/88	00:00	16:16	0
NAME/ACCOUNT NUMBER	NO. OF PASSENGERS		TRUCK ORDER	TARE WEIGHT
GALIN TRANS				1520
VEHICLE IDENTIFICATION	MATERIAL			
			45L	0
				0.00
SOURCE				DESTINATION
Left Rear				
				AMOUNT DUE
				\$ 5.00

COMMENTS

PUBLIC SCALE WEIGHING -- REGULAR

203586

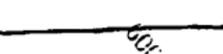
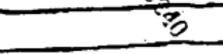
SCALE LOCATION: 109 MCKINLEY ST.

JMV

61-221

EABS-007

FORM APPROVED: OMB NO. 2187-0046

 U.S. Department of Transportation National Highway Traffic Safety Administration		VEHICLE OWNER'S QUESTIONNAIRE		The Privacy Act of 1974 - Public Law 93-579 This information is requested pursuant to authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your response may be used to assist the NHTSA in determining whether a manufacturer should take appropriate action to correct a defect. If the NHTSA proceeds with administrative enforcement or litigation against a manufacturer, your response, or a distilled summary thereof, may be used in support of the agency's action.	
FOR HQ USE ONLY					
ODI NO		HL NO.			
OWNER					
LAST NAME <i>BRYAN BUSLINE INC.</i>		FIRST NAME & MIDDLE INITIAL <i>GALW TRANSPORTATION INC (LEASE)</i>		TELEPHONE NO. (Area Code) Work - <i>201 984-1101</i> Home -	
STREET ADDRESS <i>R.D. 5</i>		CITY <i>WILEGIBLE</i>		STATE <i>N.J.</i>	ZIP CODE <i>07894</i>
VEHICLE INFORMATION					
VEHICLE MAKE & MODEL: <i>CHEV G30</i>		MODEL YEAR BODY STYLE <i>1985 VAN</i>		VEHICLE IDENTIFICATION NO. <i>2080655JFK4147021</i>	
ENGINE SIZE <i>1000CC 63</i>	MILEAGE <i>55,000</i>	DATE PURCHASED <i>6/20/85</i>	DEALER'S NAME AND ADDRESS <i>AYERS CHEVY</i> <i>2000 G ST</i> <i>BRYAN BUSLINE</i>		AIR CONDITIONED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<input type="checkbox"/> FUEL INJECTION <input type="checkbox"/> GAS DIESEL	<input checked="" type="checkbox"/> NEW <input type="checkbox"/> USED	POWER STEERING <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	BRAKES <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	TRANSMISSION <input type="checkbox"/> MANUAL (3spd) <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 6	<input checked="" type="checkbox"/> AUTOMATIC TYPE <i>P2050 400</i>
FAILED COMPONENT(S)/PART(S) INFORMATION					
COMPONENT PART NAME(S) <i>LEFT FRONT TIRE ASY</i> <i>GRIP BRAKE HOOKS</i>		LOCATION <input checked="" type="checkbox"/> Left <input type="checkbox"/> Right <input checked="" type="checkbox"/> Front <input type="checkbox"/> Rear		FAILED PART(S) <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> REPLACEMENT	MILEAGE(S) AT FAILURE(S) <i>53,000</i>
NO. OF FAILURE	<i>1</i>				
DATE(S) OF FAILURE(S) <i>10/30/84</i>	DESCRIPTION OF FAILURE(S) <i>LEFT FRONT TIRE ASY BRACKET AND BRAKE</i> <i>BY SEAL JUNK</i>				
FAILED TIRE INFORMATION					
MANUFACTURER		TIRE NAME		SIZE	TYPE FAILURE
CONSTRUCTION <input type="checkbox"/> Bias <input type="checkbox"/> Bias <input type="checkbox"/> Radial	FAILED TIRE <input type="checkbox"/> Original <input type="checkbox"/> Replacement	BELT MATERIAL <input type="checkbox"/> Steel <input type="checkbox"/> Fiberglass <input type="checkbox"/> Aramid <input type="checkbox"/> Rayon		LOCATION <input type="checkbox"/> Right Front <input type="checkbox"/> Right Rear <input type="checkbox"/> Left Front <input type="checkbox"/> Left Rear <input type="checkbox"/> Spare	DOT IDENTIFICATION NO. *
*The identification number consists of about ten letters and numbers following the letters DOT usually located near the rim flange on the side of the whitewall or on either side of a blackwall tire.					
APPLICABLE ACCIDENT INFORMATION					
ACCIDENT <input type="checkbox"/> YES <i>8</i> <input type="checkbox"/> NO		NO. INJURIES		NO. FATALITIES	
DESCRIPTION OF ACCIDENT					
					
					

600-240