



GENERAL MOTORS NORTH AMERICA
Structure & Safety Integration

September 10, 2003

Jeffrey L. Quandt, Chief
 Vehicle Control Division
 Office of Defects Investigation
 NHTSA Safety Assurance
 Room #5326
 400 Seventh Street, S.W.
 Washington, D.C. 20590

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GM-641

OFFICE OF DEFECTS
 INVESTIGATION

NVS-213phk
 PE03-028

Dear Mr. Quandt:

This letter is General Motors (GM) response to your information request (IR), dated July 7, 2003, regarding allegations of two piece steel wheels that develop weld cracks or splits on certain vehicles. The subject wheels are 8 bolt 16x6.5 full-face steel wheels, GM part numbers 9593915 (painted) and 9593150 (chrome clad). The subject GMT 800 vehicles include 1999-2003 Model Year (MY) Chevrolet Silverado and GMC Sierra pickup trucks, 2000-2003 MY Chevrolet Tahoe and Suburban and 2002-2003 MY GMC Yukon and Yukon XL sport utility vehicles.

Your questions and our corresponding replies are as follows:

1. State, by model, wheel type, and model year, the number of subject vehicles GM has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by GM, state the following:
 - a. Vehicle identification number (VIN);
 - b. Make;
 - c. Model;
 - d. Wheel type;
 - e. Model Year;
 - f. Date of manufacture;
 - g. Date warranty coverage commenced; and
 - h. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2000, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

General Motors produced 1,017,548 of the subject vehicles for sale or lease in the United States. An electronic summary of the production data is provided on the CD in Attachment 1; refer to the Microsoft Access 2000 file in the folder labeled "Response for Q1." The source of the vehicle production data, current as of August 1, 2003, is the GM Recall Information System (GMRIS). Table 1 below shows the number of subject vehicles produced by model and model year:

Product Investigations

Mail Code: 480-106-304 • 30500 Mound Road • Warren, MI 48090-9055
 Phone: (586) 986-8029 • Fax: (586) 847-2318
 GM 641 Response



MODEL	1999 MY	2000 MY	2001 MY	2002 MY	2003 MY	Totals
Chevrolet Silverado	112,414	182,919	160,805	159,361	181,607	797,126
Chevrolet Tahoe	N/A	1,232	2,600	3,411	2,666	10,129
Chevrolet Suburban	N/A	1,055	1,947	503	505	4,010
GMC Sierra	31,729	48,988	41,636	44,130	39,537	206,000
GMC Yukon	N/A	0	1	175	35	211
GMC Yukon XL	N/A	2	0	38	32	72
Total	144,143	234,176	207,189	207,638	224,402	1,017,548

Table 1

N/A – Not Applicable (not produced)

2. State the number of each of the following, received by GM, or of which GM are otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
- Consumer complaints, including those from fleet operators;
 - Field reports, including dealer field reports;
 - Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
 - Reports involving a fire, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
 - Property damage claims;
 - Third-party arbitration proceedings where GM is or was a party to the arbitration; and
 - Lawsuits, both pending and closed, in which GM is or was a defendant or codefendant.

For subparts "a" through "d, / e," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "d/e/f/g," provide a summary description of the alleged problem and causal and contributing factors and GM's assessment of the problem, with a summary of the significant underlying facts and evidence. For items f and g, identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Table 2-1 below summarizes the reports to GM that could relate to the subject condition.

Type of Report	Count (including duplicates)	GM Reports	GM Reports Corresponding to NHTSA Reports	Location of Reports (Attachment)	Number of Property Damage Reports	Number of Crash Incident Reports	Number of Reported Injuries or Fatalities
Owner Reports	12	12	0	2A	0	0	0
Field Reports and Technical Assistance System Reports	8	8	0	2B	0	0	0
Not-In-Suit Claims	0	0	0	N/A	0	0	0
Subrogation Claims	0	0	0	N/A	0	0	0
Third Party Arbitration Proceedings	0	0	0	N/A	0	0	0
Product Liability Lawsuits	0	0	0	N/A	0	0	0
Total (Including Duplicates)	20	20	0	N/A	0	0	0
Total (Excluding Duplicates)	18	18	0	N/A	0	0	0

Table 2-1

GM is not aware of any reports related to the subject condition involving a fire, that are responsive to request 2d.

The source of the requested information and the last date the information was gathered are tabulated in Table 2-2 below.

SOURCE SYSTEM	LAST DATE GATHERED
Corporate Central File	7/24/2003
Customer Assistance Center	7/28/2003
Technical Assistance Center	7/28/2003
Field Information Network Database (FIND)	7/17/2003
24HR Concern Detection Process (CDP)	8/06/2003
Company Vehicle Evaluation Program (CVEP)	7/22/2003
Early Quality Feedback (EQF)	8/07/2003
Legal / Employee Self Insured Services (ESIS)	8/08/2003

Table 2-2

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
- GM's file number or other identifier used;
 - The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
 - Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
 - Vehicle's VIN;
 - Vehicle's make, model and model year;
 - Vehicle's mileage at time of incident;
 - Incident date;
 - Report or claim date;
 - Whether a crash is alleged;
 - Whether property damage is alleged;
 - Number of alleged injuries, if any; and
 - Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table, which provides further details regarding this submission.

An electronic summary of the records included in Item 2 is provided on the CD in Attachment 1; Refer to the Microsoft Access 2000 file in the folder labeled "Response for Q3." GM has organized this summary by GM file number within each attachment.

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method GM used for organizing the documents.

Copies of the records identified in Item 2 are provided in the attachments listed in Table 2-1. GM has organized the records by the GM file number within each attachment.

5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by GM to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with the procedure specified in the subject bulletin (labor operation E0420).

Separately, for each such claim, state the following information:

- GM's claim number;
- Vehicle owner or fleet name (and fleet contact person) and telephone number;
- VIN;
- Repair date;
- Vehicle mileage at time of repair;
- Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- Labor operation number;
- Problem code;
- Replacement part number(s) and description(s);

- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table, which provides further details regarding this submission.

The 805 warranty claims for the subject vehicles that may be responsive to this request, are summarized by model and model year in Table 5 below:

MODEL	Wheel Finish	1999 MY	2000 MY	2001 MY	2002 MY	2003 MY	Totals
Chevrolet Silverado	Painted	30	88	66	70	15	269
	Chrome	57	144	106	60	40	407
Chevrolet Tahoe	Painted	N/A	0	2	1	0	3
	Chrome	N/A	0	0	0	0	0
Chevrolet Suburban	Painted	N/A	0	0	0	0	0
	Chrome	N/A	0	0	0	0	0
GMC Sierra	Painted	3	7	12	12	4	38
	Chrome	24	17	34	6	6	87
GMC Yukon	Painted	N/A	0	0	1	0	1
	Chrome	N/A	0	0	0	0	0
GMC Yukon XL	Painted	N/A	0	0	0	0	0
	Chrome	N/A	0	0	0	0	0
Total		114	258	220	160	65	805

Table 5

The 805 warranty claims that may relate to the subject condition on vehicles for sale or lease in the U.S. are provided on the CD in Attachment 1; refer to the Microsoft Access 2000 file in the folder labeled "Response for Q5". GM searched its Claims Analysis Retrieval Database (regular warranty database) on August 6, 2003. A search of extended warranty databases (MIC and Universal), produced no claims responsive to the subject condition.

GM's warranty database does not contain the following information: vehicle owner's name or telephone number, replacement part number description, or customer concern statement. GM is providing fields labeled "Customer Code", "Customer Code Description" and "Verbatim Text" in response to request 5j and 5k. The verbatim text is an optional field, not required to be completed for every warranty claim. It is for the dealer to enter any additional comments that may be applicable to the warranty claim.

The warranty data provided has limited analytical value in analyzing the field performance of a motor vehicle component. The warranty records do not contain sufficient information to establish the condition of the part at the time of the warranty correction; and service personnel may not consistently use the appropriate labor and trouble codes. Warranty numbers represent claims by our dealers for reimbursement for parts and labor costs incurred in performing warranty service for our customers.

- 6. Describe in detail the search criteria used by GM to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor

operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by GM on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) related to the alleged defect that GM offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

The warranty data was collected by searching the labor code E0420, Wheel - Replace, for the Trouble Codes as shown in Table 6 below:

TROUBLE CODE	DESCRIPTION	TOTAL
2K	IMPROPERLY SEALED	190
1K	CRACKED	165
3R	POROSITY	141
93	TECHNICAL SERVICE BULLETIN	111
4R	WELD BROKEN	68
1D	BROKEN	64
1B*	CASTING DEFECT	39
3Z	RUPTURED	18
4Q	WEAK	11
TOTAL		805

Table 6

*Note: Trouble Code "1B" (Casting Defect), was also selected as possibly related to the subject condition after a search of Customer Code "VN" (Leak/Leaks).

A list of warranty trouble codes and trouble code descriptions associated with the labor operations are provided on the CD in Attachment 1; refer to the Microsoft Excel 2000 file in the folder labeled "Response for Q6." Many of these trouble codes do not necessarily describe the alleged defect. The labor operation codes listed above may be applicable to the alleged defect, but are also related to other issues.

The subject vehicles are covered by a bumper-to-bumper new vehicle warranty for three years or 36,000 miles whichever occurs first. Many extended warranty options are available through GM dealerships. They are offered at different prices and for varying lengths of time, based on customer's preference, up to 7 years from the date of purchase or up to a total of 100,000 vehicle miles. The GM warranty system does not contain information on the number of vehicles that have extended warranty coverage.

The warranty data provided has limited analytical value in analyzing the field performance of a motor vehicle component. The warranty records do not contain sufficient information to establish the condition of the part at the time of the warranty correction; and service personnel may not consistently use the appropriate labor and trouble codes. Warranty numbers represent claims by our dealers for reimbursement for parts and labor costs incurred in performing warranty service for our customers.

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that GM has issued to any dealers,

regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that manufacturer's short name is planning to issue within the next 120 days.

The documents responsive to the subject condition are Technical Service Bulletins 03-03-10-001 (issued January 2003), and the supplement 03-03-10-001A (issued April 2003). Attachment 7 contains copies of these communications to the dealers.

General Motors is not planning to issue within the next 120 days any additional service, warranty or other technical document or communication to its dealers, regional offices, zone offices or other entities regarding the subject condition on the subject vehicles.

8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, GM. For each such action, provide the following information:
- a. Action title or identifier;
 - b. The actual or planned start date;
 - c. The actual or expected end date;
 - d. Brief summary of the subject and objective of the action;
 - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

Table 8 below summarizes the actions conducted by or on behalf of GM. The documents referenced in Table 8 are provided in Attachment 8. Note: Attachments 8A, 8C and 8E are marked as GM CONFIDENTIAL.

ACTION TITLE	START DATE	END DATE	SUBJECT / OBJECT OF ACTION	GROUP RESPONSIBLE	FINDING/CONCLUSION SUMMARY
Initial production part approval process (PPAP)	11/97	08/99	To gain approval of the subject wheels for use in vehicle production.	Hayes Lemmerz	The subject wheels met all performance requirements and were acceptable for use on production vehicles. Drawings of the subject wheels are included in Attachment 8A Confidential. Reference engineering source approval package included in Attachment 8A - Confidential.
Inspection of Field Return Samples	04/00	01/02	Returned wheels were inspected in order to determine potential causative factors for the reported cracks.	GM and Hayes Lemmerz Engineering	The returned wheels met requirements and did not exhibit any discrepancies that would cause the subject condition. Additionally, because the primary users reporting cracked wheels consisted of fleets in remote regions of Canada, questions were raised about potential abusive usage conditions in the field. Reference Attachment 8B
Laboratory radial fatigue testing	12/01	02/02	A series of 20 radial fatigue durability tests were conducted on the subject wheels in order to evaluate the effect of abusive use conditions (i.e. tire, tire pressure, loads) on the fatigue life of the wheel.	Hayes Lemmerz	Radial fatigue testing of the subject wheels under abusive conditions reduced the fatigue life to below specifications. Reference Attachment 8C - Confidential
Release and PPAP Approval of heavy-duty (HD) wheels	11/01	06/02	To make new HD wheels available for use in service applications	Hayes Lemmerz	HD wheels met all requirements and were approved for service release. Engineering 5 phase and release documentations included in Attachment 8D; drawings and source approval package of the HD wheels are included in Attachment 8E - Confidential.

Table 8

The preceding information was collected from GM and Hayes Lemmerz Engineering organizations. The data collection was completed on August 22, 2003.

9. Describe all modifications or changes made by, or on behalf of, GM in the design, material composition, manufacture, quality control, supply, or installation of the subject wheels, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

- a. The date or approximate date on which the modification or change was incorporated into vehicle production;
- b. A detailed description of the modification or change;
- c. The reason(s) for the modification or change;
- d. The part numbers (service and engineering) of the original component;
- e. The part number (service and engineering) of the modified component;
- f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g. When the modified component was made available as a service component; and
- h. Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that GM is aware of which may be incorporated into vehicle production within the next 120 days.

There were two modifications / changes made on the subject wheels that relate to the subject condition.

Modification / Change 1: Supplier manufacturing process change – wheel weld rate:

- a. Wheels incorporating the weld rate change were first delivered to GM assembly plants approximately May 1, 2002 for use on production vehicles.
- b. The wheel supplier, Hayes Lemmerz, changed the weld rate for the rim to disc weld operation from 64 (+0)(-2) inches per minute to 56 (+0)(-2) inches per minute. Additionally, the supplier added an inspection procedure for weld joint fill. Documents reflecting this change are included in Attachment 8 A - Confidential.
- c. The change was made as a product enhancement to extend the fatigue life of the subject wheel under abusive use conditions.
- d. The part numbers (service and engineering) of the original components are shown in Table 9-1 below:

PART NUMBERS ENGINEERING / PRODUCTION	PART NUMBERS SERVICE	DESCRIPTION 16X6.5 STEEL
9583915	SAME	PAINTED - ULTRA SILVER
9583150	SAME	CHROME CLAD
9594632	SAME	BLACK PRIMER (SPARE)

Table 9-1

- e. The part numbers (service and engineering) of the modified components are shown in Table 9-2 below:

PART NUMBERS ENGINEERING / PRODUCTION	PART NUMBERS SERVICE	DESCRIPTION 16X6.5 STEEL
9593915	SAME	PAINTED - ULTRA SILVER
9593150	SAME	CHROME CLAD
9594832	SAME	BLACK PRIMER (SPARE)

Table 9-2

The engineering part numbers were not changed with the manufacturing process change for wheel weld rate.

- f. The original component was not withdrawn from production and/or sale. The weld process change was implemented as a running change without obsolescence.
- g. The modified component was made available from the supplier as a service component approximately May 2001.
- h. The modified components are fully interchangeable with earlier production components.

Modification / Change 2: Release of new heavy-duty (HD) service-only wheels for light duty vehicles:

- a. Two new HD 16x6.5 6 lug steel wheels (9595245 - painted and 9595306 - chrome clad) were developed and released for service-only use on light duty vehicles, and were not used in vehicle production. Reference EWO AJCBH included in Attachment 8D.
- b. The new HD steel wheels consist of the production disc portion of the 1500 series (light duty) wheel with the heavier gage rim portion of the 2500 series base steel wheel (4.57mm v. 3.56mm for the production light duty rim). Drawings of the service-only wheels (painted & chrome clad) are provided on CD in Attachment 8E - GM CONFIDENTIAL.
- c. The new HD service only wheels for light duty vehicles were developed to handle abusive field use conditions.
- d. HD wheels for light duty vehicles were not previously available.
- e. The new HD wheels were released for service only, to be used as identified on Service Bulletin #03-03-10-001(A). As such, these wheels were not used in original production.

SERVICE PART NUMBER	MODIFIED COMPONENT 16X6.5 STEEL WHEEL	FOR USE ON MY VEHICLES
9595245	PAINTED - ULTRA SILVER	1999 / 2000 / 2001 / 2002
9595306	CHROME CLAD	1999 / 2000 / 2001 / 2002

Table 9-3

- f. The original design production and service wheels were not withdrawn from production or sale. The original design wheels are still available for sale as a service replacement for reasons other than identified in Service Bulletin # 03-03-10-001(A).

- g. The new HD wheels were made available for service from the supplier approximately September 2002.
- h. Service bulletin # 03-03-10-001 and #03-03-10-001(A) directs that the new HD wheels only be installed in vehicle sets of five.

GM is preparing to make the HD wheels, currently released for "service only", available as a Special Equipment Option (SEO) for fleet buyers for the 2004 model year (only). Change Request CR Number 301425 is included for reference in Attachment 9B.

GM is not aware of any other modification or change with the subject components that may be incorporated into vehicle production within the next 120 days.

The preceding information was collected from GM and Hayes Lemmerz Engineering organizations. The data collection was completed on August 22, 2003.

- 10. Produce a field return sample of a subject wheel with a crack in the outboard bead seat weld area that is representative of the most severe crack sizes that have resulted from the alleged defect condition.

A field return sample representative of the most severe weld crack size (from a Canadian customer) is being supplied as requested.

- 11. State the number of subject and replacement wheels that GM has sold by component name, part number (both service and engineering/production), the vehicle models and model years that use the part, and the month/year of sale. For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number).

An electronic summary of the part sales data is provided on the CD in Attachment 1; refer to the Microsoft Excel file in the folder labeled "Response for Q11."

PART NUMBER / DESCRIPTION (16x6.5 J/31)	SUPPLIER INFORMATION
9594832 (production and service - spare)	Hayes Wheels International INC. Sedalia, Missouri Division 15300 Centennial Drive Northville, MI 48187 Cara Faunce Ph) (734) 737-5620
9593915 (production and service) - painted	
9593150 (production and service) - chrome clad	
9595245 (service only) - painted	
9595308 (service only) - chrome clad	

Table 11

This information was supplied by GM Service and Parts Operation on August 12, 2003.

- 12. Furnish GM's assessment of the alleged defect in the subject vehicle, including:
 - a. The causal or contributory factor(s);
 - b. The failure mechanism(s);
 - c. The failure mode(s);
 - d. The risk to motor vehicle safety that it poses;

- e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have of the alleged defect condition; and
 - f. The reports included with this inquiry.
- a. The cause of the subject condition is operation of the vehicle under conditions that exceed the wheel and vehicle design specifications. Some causal and contributory factors may include any combination of the following:
 - Primary vehicle usage consisting of extreme rough road, or off-road conditions.
 - Loading of the vehicle in excess of the GVWR.
 - Use of a tire type not originally released for the vehicle.
 - Multiple exposures to severe road impact(s) (may lead to acceleration in the initial development of the subject condition.)
 - b. The failure mechanism resulting from the abusive conditions identified in 12.a is overstressing the rim to disc weld, which results in a reduction in the fatigue life of the wheel.
 - c. The failure modes are excessive wheel vibration and tires going flat.
 - d. GM does not believe the subject condition poses a risk to motor vehicle safety for the following reasons:
 - There have been no reports of accidents or injuries with the subject condition.
 - There have been no reports of rapid or immediate loss of air with the subject condition.
 - The risk of having a flat tire is inherent in operating any motor vehicle. This condition does not result in rapid air loss. Accordingly, an operator would either have sufficient notice that service is required or, if air loss occurs during driving, ability to bring the vehicle to a safe stop. The absence of a single accident attributable to the condition is consistent with this analysis.
 - The incident rate per thousand vehicles (IPTV) is 0.017 (based on the reported population, Table 1, and number of reports potentially related to the subject condition, Table 2-1).
 - e. During onset of the subject condition, the vehicle operator may notice wheel vibration while operating the vehicle. Depending on the degree that the crack has developed, and the vehicle operating condition (road surface / speed), the vibration may be excessive. If the subject condition progresses, the tire bead would be unable to cover the developing crack at the rim weld, and air would leak from the tire causing the tire to go flat.
 - f. GM's assessment of the two reports included in this inquiry is as follows:
 - Report Reference Number 751760: GM's assessment of this report is that there is no apparent connection to the subject condition as stated in the inquiry. GM's records of VIN 3GNFK16T8YG211987 indicate the vehicle was manufactured with RPO QC3 - Aluminum Wheels - not the subject steel wheels. Additionally, although the vehicle claim history records include multiple claims throughout the vehicle life (up to vehicle mileage of 89,089 miles in April 2003), there is no record of any E0420 Wheel-Replace claim being performed by a GM dealer at the 49,900 miles indicated on the VOQ, or at any other time on this vehicle.

- Report Reference Number 8016643: GM's assessment of this report is that there is inadequate information (no VIN, minimal text) to determine if this report is, or is not related to the subject condition as stated in the inquiry.

* * *

General Motors requests that the documents stamped "GM Confidential" included in Attachment 8A, 8C, 8E, and 9A be afforded confidential treatment by the NHTSA. This information is not customarily made public by General Motors and contains trade secrets and commercial information which is privileged or confidential under 5 U.S.C. Section 552(b)(4), 49 CFR Part 512 and 49 U.S.C. Section 30167(a).

Attachments 8A, 8C, 8E and 9A contains engineering drawings and / or engineering test data having commercial value that can only be obtained independently at considerable cost. This information can be used by competitors to identify quality and performance problems or differences, thereby enabling them to improve their own products, without the expenditures associated with the evaluation of products, all at the expense of General Motors. Attachment 8 contains commercial information the disclosure of which would likely result in substantial competitive harm.

General Motors treats the above material as confidential proprietary information available only to authorized General Motors personnel and not otherwise available to the public. The document is maintained under a record-keeping system which is intended to control dissemination of this material within General Motors, and to assure that it is not disseminated outside the Corporation, except as described in the attached certification made pursuant to 49 CFR Part 512.4(e).

To the best of our knowledge, no prior determinations of the confidentiality of these documents have been made by the NHTSA, other Federal Agencies, or the Federal Courts. Documents such as the ones contained in Attachment 8, however, have, to the best of our knowledge, normally been granted confidential treatment by the NHTSA in the past. The drawings in Attachment 8 are of a type for which a class determination of confidentiality has been made under 49 CFR Part 512, Appendix B.

The documents subject to this request for confidentiality has been clearly stamped "GM CONFIDENTIAL". If a request for disclosure of any or all of this information is received by the NHTSA, General Motors requests notification of receipt of each such request and, if necessary, an opportunity to further explain the reasons why such material is trade secret and commercial information which should not be disclosed under the applicable statutes and regulations.

GM claims that certain information, in documents that are part of claims files maintained by the GM Legal Staff, is attorney work product and/or privileged. That information includes notes, memos, reports, photographs, and evaluations by attorneys (and by claims analysts, investigators, and engineers working at the request of attorneys). GM is producing responsive documents from claims files that are neither attorney work product nor privileged and withholding those that are attorney work product and/or privileged.

This response is based on searches of General Motors Corporation (GM) locations where documents determined to be responsive to your request would ordinarily be found. As a result, the scope of this search did not include, nor could it reasonably include, "all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of GM (including all business units and persons previously referred to), who are or, in or

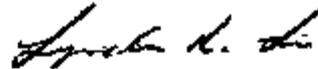
after 1998 were involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
- b. Testing, assessment or evaluation;
- c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
- d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers."

This response was compiled and prepared by this office upon review of the documents produced by various GM locations, and does not include documents generated or received at those GM locations subsequent to their searches.

Please contact me if you require further information about this response or the nature or scope of our searches.

Sincerely,



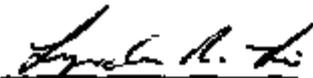
Lyndon R. Lie
Director
Product Investigations

Attachments

CERTIFICATE IN SUPPORT OF REQUEST FOR CONFIDENTIALITY

I, Lyndon R. Lie, pursuant to the provisions of 49 CFR Part 512 state as follows:

- (1) I am the Director of Product Investigations, and I am authorized by General Motors Corporation (GM) to execute documents on its behalf;
- (2) The information stamped "GM Confidential" contained in Attachment 8A, 8C, 8E and 9A to this document is confidential and proprietary data and is being submitted with the claim that it is entitled to confidential treatment of 5 USC §552(b)(4), 49 U.S.C. Section 30167(a) and implemented in 49 CFR Part 512;
- (3) I, or members of my staff, have personally inquired of the responsible GM personnel who have authority in the normal course of business to release the information for which a claim of confidentiality has been made to ascertain whether such information has ever been released outside GM;
- (4) Based upon such inquiries to the best of my knowledge, information and belief, the information for which GM has claimed confidential treatment has never been released or become available outside GM, except as hereinafter specified: None.
- (5) I make no representations beyond those contained in this certificate and in particular, I make no representations as to whether this information may become available outside GM because of unauthorized or inadvertent disclosure except as stated in Paragraph 4; and,
- (6) I certify under penalty of perjury that the foregoing is true and correct. Executed on this the tenth day of September 2003.



Lyndon R. Lie
Director
Product Investigations