



GENERAL MOTORS LLC  
Global Vehicle Safety

March 25, 2020

Greg Magno, Chief  
Vehicle Defects Division – A  
Office of Defects Investigation  
National Highway Traffic Safety Administration  
1200 New Jersey Ave., SE  
Room W48-334  
Washington, DC 20590

*VIA EMAIL*  
G229717  
NEF-101aa  
DP20-002

**Re: General Motors LLC's Responses to NHTSA's February 19, 2020 Information Request  
In Defect Petition 20-002.**

Dear Mr. Magno:

This letter contains General Motors LLC's ("GM") responses (the "**Responses**") to the information requests in your February 19, 2020 letter (the "**Requests**") relating to National Highway Traffic Safety Administration ("NHTSA") Defect Petition 20-002, which is a NHTSA review of a defect petition alleging "HVAC Blower Motor Connector Module Overheating in certain model year (MY) 2007-2010 Saturn Sky and 2006-2010 Pontiac Solstice vehicles." Unless otherwise defined herein, GM's Responses rely on the defined terms in the Requests.

### **PRELIMINARY STATEMENT**

GM prepared its Responses by: (i) identifying, in consultation with the appropriate GM business personnel, the primary electronic databases and document repositories in GM's custody and control that store potentially responsive documents and information in the ordinary course of business, as more fully identified in the Responses below; and (ii) conducting a reasonable search, as appropriate, of these databases and document repositories for responsive documents and information. GM objects to the definitions of "document" and "GM" in the Requests as overbroad, unreasonably burdensome, and not reasonably tailored to records that might be expected to bear relevant and responsive information. GM's document production does not contain: (i) attorney-client privileged information or information protected as attorney-work product; and (ii) documents generated or archived in these locations after the dates that GM conducted its final searches. GM construes the Requests as pertaining to vehicles manufactured for sale in the United States and its territories.

GM's document production is contained on the folder titled G229717\_1\_GM and will be transferred electronically via P2P. Some of the documents in GM's production contain personally identifiable information ("PII") (e.g., vehicle registration information or VIN, employee names, and customer/employee contact information). GM today submits documents with unredacted PII with the understanding that NHTSA (or GM, if NHTSA prefers) will redact any PII before disclosing these documents to the public.



**REQUESTS AND RESPONSES**

**REQUEST 1:**

State, by model 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. Model Year;
- e. Subject component part number(s) and design version(s);
- 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 2010, or a compatible format, entitled “PRODUCTION DATA.”

**GM RESPONSE:**

In response to your request that GM “[s]tate, by model and model year, the number of subject vehicles GM has manufactured for sale or lease in the United States,” GM provides the following table:

MAKE	MODEL	MODEL YEAR					TOTAL
		2006	2007	2008	2009	2010	
Pontiac	Solstice	18,721	21,300	14,084	4,202	19	58,326
Saturn	Sky	N/A	15,546	12,980	4,078	8	32,612
	<b>TOTAL</b>	18,721	36,846	27,064	8,280	27	90,938

**TABLE 1-1: SUBJECT VEHICLES**

The Subject Component, which includes the blower motor, the blower motor resistor, and the blower motor resistor harness (including connector), are part of the heater and blower assembly module. The production information requested in subpart (e) is provided in Table 1-2 below.

<b>MY</b>	<b>Heater and Blower Assembly Module PN (RPO C41)</b>	<b>Heater and A/C Evaporator and Blower Assembly Module PN (RPO C60)</b>	<b>Estimated Breakpoint<sup>1</sup></b>
2006	10345195	10345196	SOP
2006	15270781	15270782	1/21/2005
2006	15790962	15790961	3/10/2005
2006	15818058	15818059	4/27/2005
2006	15892688	15892689	11/30/2006
2006	15908255	15908256	1/20/2006
2007	25787710	25787711	6/27/2006
2007	25820726	25820727	10/19/2006
2007	25874790	25874787	4/12/2007
2008	25920249	25920247	9/6/2007
2008	25949872	25949871	2/8/2008
2009	20785783	20785784	6/24/2008
2009-10	20838986	20838987	1/23/2009

**TABLE 1-2: SUBJECT COMPONENT PART NUMBER BY MODEL YEAR**

GM has produced the information requested in subparts (a) through (h) on the G229717\_1\_GM folder in the subfolder labeled “Q\_01”. Refer to the Microsoft Access 2010 file labeled “Q\_01\_PRODUCTION\_DATA.”

**REQUEST 2:**

State the number of each of the following, received by GM, or of which GM is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:

- a. Consumer complaints, including those from fleet operators;
- b. Field reports, including dealer field reports;
- c. Reports involving a crash, injury or fatality;
- d. Reports involving a fire;
- e. Property damage claims;
- f. Third-party arbitration proceedings where GM is or was a party to the arbitration;

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<sup>1</sup> The Subject Component is not traceable, so the breakpoint is estimated based on the Engineering Work Order finish date.

- g. Lawsuits, both pending and closed, in which GM is or was a defendant or codefendant.

For subparts “a” through “g” 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 “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 “e” through “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.

**GM RESPONSE:**

In response to subparts (a) through (g) for the subject vehicles (as defined in the Requests, the “**Subject Vehicles**”), GM provides the following table, which GM prepared by conducting a reasonable keyword search for potentially responsive claims<sup>2</sup> in several databases<sup>3</sup>.

TYPE OF REPORT	GM REPORTS	SUBCATEGORIES				
		CORRESPONDING TO NHTSA REPORTS	NUMBER WITH PROPERTY DAMAGE	NUMBER WITH CRASH	NUMBER WITH FIRE	NUMBER WITH INJURIES/FATALITIES
Owner Reports	12	0	0	0	2	0/0
Field Reports	1	0	0	0	0	0/0
Not-In-Suit Claims	2	0	0	0	2	0/0
Third Party Arbitration Proceedings	0	0	0	0	0	0/0
Product Liability Lawsuits	0	0	0	0	0	0/0
Total Reports (Including Duplicates)	15	0	0	0	4	0/0
Total Vehicles with Reports (Unique VIN)	13	0	0	0	2	0/0

**TABLE 2-1: SUMMARY OF CLAIMS RESPONSIVE TO REQUEST 2A-2G FOR THE SUBJECT VEHICLES**

As summarized in Table 2-1, GM is aware of 13 unique claims involving the Subject Vehicles that may be responsive to Request 2. The Requests define the “Alleged Defect” (the “**Alleged Defect**”) as “HVAC blower motor connector may overheat and could cause a vehicle occupant compartment fire.” In determining the responsiveness of a claim, GM coded a claim

<sup>2</sup> Table 2-1 does not include NHTSA VOQs.

<sup>3</sup> These databases include: Customer Assistance Center, Product Assistance Center, Business Resource Center (BRC), Technical Assistance Center (TAC), Field Information Network Database (FIND), Company Vehicle Evaluation Program (CVEP), Captured Testing Fleet (CTF), COMPASS, Early Quality Feedback (EQF), Field Product Report Database (FPRD), Global Incident Management System (GIMS), and GM Legal records.

responsive if it contained allegations consistent with thermal damage—e.g., smoking, melting, burning, flame—to the HVAC blower motor connector or related components.<sup>4</sup> GM erred on the side of coding a claim responsive even if the evidence in GM’s possession linking the claim to the Alleged Defect was implausible, inconclusive, or circumstantial. Accordingly, the claim totals in Table 2-1 are conservative.

In response to subparts “c” and “e,” GM is not aware of any relevant incidents involving a crash, injury, fatality or property damage claims. In response to subparts “f” and “g,” GM is not aware of any third-party arbitration proceedings or lawsuits.

GM coded a claim as a potential fire if the customer verbatim associated with the claim expressly mentioned flame or fire.<sup>5</sup> A summary of each alleged fire listed in Table 2-1 is below. Additional information about the claims is available in the document production that GM is providing in response to Request 4, and GM’s assessment of the Alleged Defect is provided in its Response to Request 8.

**1. 2007 Pontiac Solstice – VIN 1G2MG35XX7Y** [REDACTED]

The vehicle owner called the GM Customer Assistance Center (CAC) on December 27, 2016, and claimed that, while driving the vehicle, he smelled electrical burning. The owner further claimed that, after stopping the vehicle, he opened the glove box and observed smoke, and that he was able to extinguish the fire.

The claim was sent to GM’s Product Assistance Center (PAC) for further review. PAC unsuccessfully attempted to contact the owner by phone on December 30, 2016, January 3, 2017, and January 10, 2017. After the owner failed to respond to GM’s inquiries, GM closed its investigation of the case on January 12, 2017 and mailed a notice informing the owner of the case closure. The root cause of the alleged fire is undetermined and may not be related to the Alleged Defect.

**2. 2008 Saturn Sky – VIN 1G8MC35B78Y** [REDACTED]

On August 28, 2017, the vehicle owner called CAC alleging that, on August 21, 2017, the vehicle’s passenger-side dashboard began emitting smoke while she was operating the vehicle. The owner further claimed that plastic dripped down from the dash and started a fire on the vehicle’s carpet, and that, once the fire was extinguished, the HVAC blower motor fell out of the dashboard.

The customer drove the vehicle to a GM dealer for an inspection. The GM dealer inspected the vehicle on August 31, 2017, and recorded an odometer reading of 75,107 miles at the time of inspection. Based on the inspection report and photos taken during the inspection, a PAC Technical Consultant (TC) determined that the fire was contained to the passenger side footwell

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<sup>4</sup> GM did not include generic claims of the heat or air conditioning being inoperative or intermittent without reference to overheating (smoke, melt, or burn).

<sup>5</sup> GM did not use the definition of fire from 49 CFR 579.4.

area; and that the fire may have originated in the interior compartment in the area of the blower motor. The TC could not definitively determine a root cause due to the damage from the fire.

The vehicle's condition, prior damage, or prior service may have been causal or contributing factors to the alleged fire. The dealer inspection report states that the vehicle interior was in fair condition and not up to date on maintenance (lack of oil changes). A Carfax report states that the vehicle had 5 owners, was involved in an accident on July 22, 2016 that caused unspecified frontal damage. The vehicle was serviced for an inoperative blower motor on or about July 10, 2010 when the odometer read 2,386 miles. The terminals were found to have poor contact and the connector was reconnected.

**REQUEST 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:

- a. GM's file number or other identifier used;
- b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
- c. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
- d. Vehicle's VIN;
- e. Vehicle's make, model and model year;
- f. Vehicle's mileage at time of incident;
- g. Incident date;
- h. Report or claim date;
- i. Whether a crash is alleged;
- j. Whether a fire is alleged;
- k. Whether property damage is alleged;
- l. Number of alleged injuries, if any; and
- m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

**GM RESPONSE:**

GM has produced the requested information for the Subject Vehicles on the G229717\_1\_GM folder in the subfolder labeled "Q\_03". Refer to the Microsoft Access 2010 file labeled "Q\_03\_REQUEST NUMBER TWO DATA."

**REQUEST 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. Describe in detail the search methods and search criteria used by GM to identify the items in response to Request No. 2.

**GM RESPONSE:**

With respect to Request 4, GM CAC, PAC and Legal records are GM's primary repositories of potentially responsive documents in the ordinary course of business. GM identified responsive documents by conducting a keyword search of these records for potentially responsive claims and reviewed the associated claim file to confirm the responsiveness of the claim. GM is producing the responsive, nonprivileged documents associated with responsive claims listed in Table 2-1 in the Microsoft Access file labeled "Q\_03\_REQUEST NUMBER TWO DATA" in the subfolder labeled "Q\_03" on the G229717\_1\_GM folder. GM has organized the records by the GM file number.

**REQUEST 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 a procedure specified in a technical service bulletin or customer satisfaction campaign.

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

- a. GM's claim number;
- b. Vehicle owner or fleet name (and fleet contact person), street address, email address and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;

- g. Labor operation number(s);
- h. Problem codes;
- i. Diagnostic trouble codes;
- j. Replacement part number(s) and description(s);
- k. Concern stated by customer;
- l. Cause as stated on the repair order;
- m. Correction as stated on the repair order; and
- n. Additional comments, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled “WARRANTY DATA.”

### **GM RESPONSE**

To collect warranty data responsive to this request, GM conducted a reasonable keyword search of the GM Global Analysis and Reporting Tool (“GART”), GM’s primary repository of potentially responsive warranty claim information in the ordinary course of business.

Table 5-1, below, summarizes the warranty claims<sup>6</sup> for the Subject Vehicles that may relate to the Alleged Defect.<sup>7</sup> GM is aware of a total of 354 warranty claims (321 unique VINs) that may be responsive,<sup>8</sup> which calculates to a rate of 3.76 Incidents Per Thousand Vehicles (IPTV) at 140 Months in Service (MIS) for all model years combined. There were no claims of fire<sup>9</sup> in the warranty data.<sup>10</sup> This total includes two claims that were also reported as a field report in Response 2.

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<sup>6</sup> These claims include 4 relevant MIC and UWC extended warranty claims from Ally.

<sup>7</sup> GART does not contain the vehicle owner’s name or telephone number. Additionally, some replacement part numbers, part descriptions and customer concern code descriptions are not included in the GM warranty database. In response to subpart (i), there are no diagnostic trouble codes (DTC) related to the Alleged Defect.

<sup>8</sup> GM identified responsive records based on the information supplied to GM by the servicing dealerships, which can contain material errors and omissions. Warranty records, for example, do not always accurately or completely describe the condition of the allegedly defective part at the time of the warranty correction, and service personnel may not consistently classify warranty repairs using the correct labor and trouble codes.

<sup>9</sup> See *supra*, at note 5.

<sup>10</sup> Only 1 warranty claim mentioned smoke.

MAKE	MODEL	MODEL YEAR					TOTAL
		2006	2007	2008	2009	2010	
Pontiac	Solstice	30	78	64	14	0	186
Saturn	Sky	N/A	82	57	29	0	168
	TOTAL	30	160	121	43	0	354

**TABLE 5-1: SUMMARY OF SUBJECT VEHICLE WARRANTY CLAIMS**

GM has produced the requested information in subparts (a) through (n) on the G229717\_1\_GM folder in the subfolder labeled “Q\_05”. Refer to the Microsoft Access 2010 file labeled “Q\_05\_WARRANTY\_DATA.” In response to subparts (l) and (m), GM has included in these records all available dealer-provided “verbatim text” in the GART database relating to the responsive claims that are currently in GM's possession<sup>11</sup>.

**REQUEST 6**

Describe in detail the search methods and search criteria used by GM to identify the claims in response to Request No. 5, including the labor operations, problem codes, diagnostic trouble 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, diagnostic trouble codes and diagnostic trouble code descriptions applicable to the alleged defect in the subject vehicles. State whether the diagnostic trouble codes are automatically reported to the warranty database electronically or manually entered into the warranty database by a claims administrator.

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) 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.

**GM RESPONSE:**

To populate Table 5-1, GM searched the GART warranty database for the labor codes that GM identified as potentially related to the Alleged Defect in the Subject Vehicles as well as by relevant part number. These labor codes are summarized in Table 6-1. Each warranty record may have up to five verbatim fields. All verbatim claim fields were read, and a claim was determined to be responsive if the verbatim indicated that the claim may have been related to the Alleged Defect in the subject component (as defined in the Requests, the “**Subject Component**”). There are no diagnostic trouble codes that are relevant to the Alleged Defect.

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<sup>11</sup> The verbatim text is provided to GM by the dealer that serviced the warranty claim, and reflects both dealer- and customer-provided comments relating to the claim. Before the 2010 model year, GM did not require the dealer to populate this field in the warranty system; for this reason, GM may not be in possession of this information for every responsive warranty claim.

<b>LABOR CODE</b>	<b>LABOR CODE DESCRIPTION</b>
4410220 (D1002)	Blower Motor Resistor Replacement
4410600	Blower Motor Replacement
4430310 (D0362)	Heater and Air Conditioning Control Replacement
5430860	Connector Kit Replacement
5430880	Connector with Leads Assembly Replacement
5430902	Wire-to-Wire Repair
5430940	Harness Replacement
D1322	Motor And/Or Fan, Blower – R&R Or Replace
N6607	Cooling System Wiring and/or Connector Repair or Replacement
N6620	Power and Grounds Distribution Wiring and/or Connector Repair or Replacement
N6642	HVAC System Wiring and/or Connector Repair or Replacement

**TABLE 6-1: LABOR CODES USED IN GART WARRANTY SEARCH**

Table 6-2 summarizes the part numbers related to the Subject Component in the Subject Vehicles:

<b>PART NUMBER</b>	<b>PART DESCRIPTION</b>
10397097	Blower Motor
10397098	Blower Motor Resistor
25949869	Blower Motor Resistor Harness
84014104	Blower Motor Resistor Harness
25867517	Blower Motor Resistor Harness
20839182	Blower Motor Resistor Harness
25797383	Blower Motor Resistor Harness

**TABLE 6-2: PART NUMBERS USED IN GART WARRANTY SEARCH**

Table 6-3 summarizes the terms of new vehicle warranty coverage offered by GM on the Subject Vehicles:

<b>MODEL YEAR</b>	<b>MAKE</b>	<b>WARRANTY TYPE</b>	<b>WARRANTY TERMS</b>
2006-2010	Pontiac	Limited Bumper-To-Bumper	3 year / 36,000 miles
2007-2010	Saturn	Limited Bumper-To-Bumper	3 year / 36,000 miles

**TABLE 6-3: NEW VEHICLE WARRANTY COVERAGE OFFERED BY GM ON SUBJECT VEHICLES**

Many different optional extended warranty plans were available for the Subject Vehicles through GM dealerships. These plans were offered at different prices and for varying lengths of time, based on a customer's preference.

## **REQUEST 7**

State the number of each of the following that GM has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales if applicable):

- a. Subject component;
- b. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which GM is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

**GM RESPONSE:**

The requested sales information for the Subject Component is provided on the G229717\_1\_GM folder in the subfolder labeled "Q\_7." There are two files: one for dealer-repair orders and one for customer-paid repairs. The dealer RO file summarizes the sale volume by make, model, and model year and date of sale. The customer-pay file does not include make, model, and model year since VIN information is not available. The files include part sales for the blower motor, the blower-motor resistor and the blower-motor resistor harness (which includes the connector).

This data has limited analytical value in analyzing the field performance of the Subject Component because the records do not contain sufficient information to establish the reason for the part sale, or whether, in the case of a dealer sale, whether the part was actually used to repair a customer vehicle or is being held as dealer stock. For example, a blower motor may also be replaced if fully or partially inoperative; for excessive noise, worn bearings, or other damage; or if it gets sucked into the drain housing. The blower-motor resistor harness may also be replaced if it is cut, damaged, or loose. The blower-motor connector may be replaced for bent pins, cracks, damage, or poor contact.

**REQUEST 8:**

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 that the alleged defect was occurring or subject component was malfunctioning;
- f. The petition document included with this inquiry.

**GM RESPONSE:**

**A. The Subject Component in the Subject Vehicles does not contain a safety-related defect**

GM investigated the performance of the Subject Component in the Subject Vehicles in connection with GM's 2015 product investigation (N-150042) that led to GM's decision to voluntarily recall the Subject Component in 2006-2010 model year Hummer H3/H3T vehicles, and again in 2019 (N19-228517). In 2015, GM excluded the Subject Vehicles from its recall decision because, at that time, GM was not aware of any fires attributable to the Alleged Defect in the Subject Vehicles.

GM's field and warranty-data review continues to support GM's original determination that the Subject Vehicles do not contain a safety-related defect. Although GM's warranty-data analysis indicates that the Subject Component can sometimes experience a heat-related failure, such failures are rare. GM is aware of only 321 unique warranty claims in the Subject Vehicle population for a heat-related failure in the Subject Component, which calculates to an averaged rate of 3.76 IPTV at 140 MIS for all model years in the Subject Vehicle population.

GM believes that these failures are attributable to fretting corrosion at the interface between the resistor-module blades and wiring-connector terminals, due to the low electrical conductivity of the module blades (tin-coated steel) and the connector terminals (tin-plated brass), which can cause heat buildup over time. Excessive blower-motor usage can exacerbate this phenomenon. If this occurs, the blower motor may become inoperative, intermittently inoperative, or functional only at certain speeds or settings. In rare instances, as stated above, the resulting heat may melt the plastic surrounding the connector.

But these failures, when they do occur, do not cause vehicle fires, and cannot cause an unattended fire because the vehicle's body control module (BCM) does not power the blower motor when the vehicle is off. Despite significant accumulated field exposure, GM is only aware of two alleged fires (see GM's Response to Request 2) that are even potentially attributable to a malfunction in the Subject Component out of a field population of 90,938 Subject Vehicles. Neither of these fire allegations claimed that the fire caused injury.

GM characterizes these claims as potentially related to the Alleged Defect because, in both cases, GM could not conclusively tie the damage to the Subject Component. With respect to the claim associated with VIN 1G2MG35XX7Y [REDACTED], the claimant did not allege a specific causal connection between the alleged event and the Subject Component, and did not respond to GM's requests or permit GM to inspect the vehicle to confirm the root cause. With respect to the claim associated with VIN 1G8MC35B78Y [REDACTED], fire damage prevented GM from confirming a root cause or precise origination point, and there are other factors—prior vehicle damage, poor vehicle condition, and prior service—that may have contributed to or caused the alleged event.

**B. The Subject Component performs differently in the Hummer vehicles that GM recalled in NHTSA Recall 15V421**

The Defect Petition’s core premise—that the Subject Component must be defective because GM conducted a safety recall on this component as installed in certain Hummer vehicles in NHTSA Recall 15V421—is fundamentally flawed. The Subject Vehicles have much smaller interior cabins which results in a lower required duty cycle than the recalled Hummers. Requiring less energy to heat and cool, the Subject Vehicles expose the Subject Component to lower electrical loads and, by extension, less electrically-generated heat.

Field data supports this conclusion. In November 2019, GM conducted a warranty analysis on the Subject Component in the Subject Vehicles as part of investigation N19-228517, and identified a total of just 634 warranty claims<sup>12</sup> on the Subject Component from all causes. GM conducted the same analysis on the Subject Component in June 2015, just before recalling the Hummer vehicles in NHTSA Recall 15V421, and found 13,131 warranty claims on the Subject Component in the Hummer vehicles.

The Subject Component, in other words, failed 20 times more often in the recalled Hummer vehicles than in in the Subject Vehicles—despite the fact that, when GM recalled the Subject Component in the Hummers, they had four years less field exposure:

<b>Vehicle</b>	<b>IPTV @ 65 MIS<sup>13</sup></b>	<b>IPTV @ 140 MIS</b>
2006-2010 Hummer H3	67.2	N/A – Recalled in 2015
Subject Vehicles	4.8	5.6

**TABLE 8-1: IPTV COMPARISON OF SUBJECT COMPONENT WARRANTY CLAIMS IN THE RECALLED HUMMER VEHICLES AND SUBJECT VEHICLES**

**C. GM’s assessment of the claims in the Defect Petition**

The Defect Petition lists 5 unique<sup>14</sup> VOQ numbers in petition CL-11299852-5506. None of the 5 VOQs allege that a fire occurred, none matched a relevant claim in response to either Request 2 or 5, and only two are even possibly related to the Alleged Defect.

1. VOQ 11258408 mentions that the Subject Component is the same in both the Saturn Sky and the Hummer, but does not allege a failure of the Subject Component and is therefore not relevant to the Alleged Defect.

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<sup>12</sup> This includes duplicate VINs and vehicles sold or leased outside the United States.

<sup>13</sup> This is the number of MIS at the time of investigation N-150042.

<sup>14</sup> VOQ 11258408 is listed twice.

2. VOQ 10735178 also mentions that the Subject Component is the same in both the Saturn Sky and the Hummer, but does not allege a failure of the Subject Component. The VOQ alleges only that the vehicle's "A/C is acting odd lately" and is therefore not relevant to the Alleged Defect.
3. VOQ 10876600 does not allege that a fire occurred; the VOQ alleges that the "blower motor resistor shorted out and melted and also melted the wiring harness."
4. VOQ 11019883 does not allege that a fire occurred; the VOQ alleges that the vehicle's blower motor fan did not work and, when it was removed, it had thermal damage.
5. VOQ 10531789 describes over heating of the radiator/condenser cooling fan assembly, which is different than the Subject Component and not relevant to the Alleged Defect.

### CONCLUSION

While GM will continue to monitor the performance of the Subject Component in the Subject Vehicles in the field, GM believes, based on current data, that the Subject Component in the Subject Vehicles does not contain a safety-related defect and the Defect Petition should be denied. GM's Responses are based upon its investigation to date and reflect its current information and belief. GM reserves the right to supplement or amend its Responses as appropriate.

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

Sincerely,



Regina Carto, Executive Director  
Global Safety and Field Investigations

cc: Mr. Chris Lash  
Mr. Alexander Argant  
ODI\_IRresponse@dot.gov

### Enclosures

G229717\_1\_GM – Public copy of GM's document production