



## DEPARTMENT OF TRANSPORTATION

### National Highway Traffic Safety Administration

[Docket No. NHTSA-2020-0071]

#### Denial of Motor Vehicle Defect Petition, DP20-002

**AGENCY:** National Highway Traffic Safety Administration, (NHTSA), Department of Transportation.

**ACTION:** Denial of a petition for a defect investigation.

**SUMMARY:** This notice sets forth the reasons for the denial of a defect petition, DP20-002, submitted by Mr. V.T. Wakefield (the Petitioner) to NHTSA (the Agency) by a letter dated December 12, 2019. The petition requested that the Agency initiate a safety defect investigation of passenger compartment fires attributed to HVAC blower motor connectors overheating in Model Year (MY) 2006-2010 Pontiac Solstice and Saturn Sky vehicles (the “subject vehicles”). After conducting a technical review of: 1) consumer complaints identified by the petitioner; 2) consumer complaint information in NHTSA’s databases; and 3) information provided by General Motors (GM) in response to the Agency’s information request regarding vehicle fires and complaints received by GM, NHTSA’s Office of Defect Investigations (ODI) has concluded that the issues raised by the petition do not warrant a defect investigation. Accordingly, the Agency has denied the petition.

**FOR FURTHER INFORMATION CONTACT:** Mr. Alexander Argant, Vehicle Defect Division A, Office of Defects Investigation, NHTSA 1200 New Jersey Avenue, SE, Washington, DC 20590. Telephone: 202-366-8787. E-mail: [alexander.argant@dot.gov](mailto:alexander.argant@dot.gov).

## **SUPPLEMENTARY INFORMATION:**

### **INTRODUCTION**

Interested persons may petition NHTSA requesting that the Agency initiate an investigation to determine whether a motor vehicle or an item of replacement equipment does not comply with an applicable motor vehicle safety standard or contains a defect that relates to motor vehicle safety. 49 U.S.C. 30162(a)(2); 49 CFR 552.1. Upon receipt of a properly filed petition, the Agency conducts a technical review of the petition, material submitted with the petition and any additional information. 49 U.S.C. § 30162(a)(2); 49 CFR 552.6. The technical review may consist solely of a review of information already in the possession of the Agency or it may include the collection of information from the motor vehicle manufacturer and/or other sources. After conducting the technical review and considering appropriate factors, which may include, but are not limited to, the nature of the complaint, allocation of Agency resources, Agency priorities, the likelihood of uncovering sufficient evidence to establish the existence of a defect and the likelihood of success in any necessary enforcement litigation, the Agency will grant or deny the petition. *See* 49 U.S.C. 30162(a)(2); 49 CFR 552.8.

### **BACKGROUND INFORMATION**

In a letter dated December 12, 2019, the petitioner, Mr. V.T. Wakefield, requested that NHTSA initiate an investigation into passenger compartment fires in Model Years (MY) 2006-2010 Saturn Sky and Pontiac Solstice vehicles. The petitioner alleged the fires were caused by the overheating of the HVAC blower motor connector. The petitioner further alleged that Saturn Sky and Pontiac Solstice vehicles experience the same electrical problem (overheating HVAC blower resistor) addressed by NHTSA Safety Recall 15V-421, which involved MY2006-2010 Hummer H3 and 2009-2010 Hummer H3T vehicles. The petitioner's complaint reported that the affected parts in the Sky and Solstice vehicles are identical to those covered by Recall 15V-421.

NHTSA has based its decision on a review of the material cited by the petitioner in his complaint and petition, information submitted by GM in response to the Agency's information request letter, and other pertinent information in NHTSA's databases.

#### SUMMARY OF THE PETITION

The petitioner alleges that MY2006-2010 Saturn Sky and Pontiac Solstice vehicles can pose a fire risk due to the overheating of the HVAC blower motor connectors. The petitioner cites the fact the Sky and Solstice vehicles use the same blower motor parts as the Hummer H3 and H3T vehicles that were recalled under Safety Recall 15V-421 for a potential fire risk.

GM filed Safety Recall 15V-421 on June 15, 2015 to remedy the connector module that controls the blower motor speed in the HVAC system of MY2006-2010 Hummer H3 and 2009-2010 Hummer H3T vehicles. The module may overheat under extended operational periods at high and medium-high blower speeds in those vehicles. The recall followed eleven (11) related fires affecting a fleet of 165,000 vehicles with five to ten years of time in service.

#### OFFICE OF DEFECTS INVESTIGATION ANALYSIS

An analysis of General Motors (GM) complaint data and information in NHTSA's databases identified thirteen unique vehicle identification numbers (VINs) with reported incidents that could pertain to blower motor overheating, smoking, or melting in the 90,938 MY2006-2010 Saturn Sky and Pontiac Solstice vehicles produced. Two of the thirteen cited incidents reported smoke and thermal damage that may be attributed to the HVAC blower motor although neither incident was confirmed through vehicle inspection. One incident was with a MY2008 Saturn Sky that had substantial field exposure including a frontal crash that occurred one month prior to the August 2017 thermal incident. The Saturn Sky thermal incident was reported as plastic dripping from the dash and a fire in the carpet. A root cause could not be identified for this thermal event.

The other incident was with a MY2007 Pontiac Solstice. The owner did not inform the manufacturer nor take their vehicle to a dealer for evaluation after reporting an electrical smell

and observing smoke in the glove box in December 2016. No inspection of the vehicle was conducted.

Most of the 13 incidents reported an overheated or discolored connector with attendant loss of HVAC blower fan function. GM reported 354 warranty claims with the subject components for the Sky and Solstice, none of which included a report of fire and only one report of smoke. Over a period of ten to fourteen years in service, there are two reports of smoke or thermal damage.

While the subject Sky and Solstice vehicles and the recalled Hummer H3 and H3T vehicles do share common components, the Sky and Solstice vehicles have demonstrated very different behavior and the HVAC system has a lower power draw than the recalled Hummer H3 and H3T vehicles. The recalled H3 and H3T vehicles generate over triple the failure rate of the Sky and Solstice vehicles. GM suggested in its response to the Agency's information request that this difference was due to the larger interior volume of a recalled Hummer vehicle imposing a heavier electrical load and duty cycle on its HVAC blower. The duty cycle is defined as how long it takes for the vehicle to cool down enough before the HVAC blower motor fan speed is lowered or turned off completely.

Additionally, due to the size differential between the Sky and Solstice vehicles and the recalled Hummer H3 and H3T vehicles, the parts have a different power draw. The Sky and Solstice vehicles, due to their smaller size, draw less wattage, which reduces the likelihood of a thermal event. This condition in the Sky and Solstice vehicles typically leads to an inoperable HVAC blower motor as opposed to a thermal event.

Despite the commonality of parts in the Sky and Solstice vehicles with those that were the basis of a safety recall, the subject vehicles have not demonstrated a safety defect trend that would likely lead to a safety recall or merit further investigation by the Agency. The subject vehicles have a low rate of reported thermal events over the ten to fourteen years they have been

in service with the most recent occurring in 2017. The HVAC blower motor was not confirmed to be the root cause for either thermal event cited above.

After thoroughly assessing the material submitted by the petitioner, information already in NHTSA's possession, information submitted by GM in response to an information request, and the potential risks to safety implicated by the petitioner's allegation, NHTSA does not believe that the petition warrants a formal investigation at this time. Consequently, the petition is denied. As with all potential motor vehicle safety risks, NHTSA will continue to review any new information or incidents as they are submitted to the Agency. The denial of this petition does not foreclose the Agency from taking further action if warranted or making a future finding that a safety-related defect exists based on additional information the Agency may receive.

*Authority:* 49 U.S.C. 30162(d); delegations of authority at CFR1.95 and 501.8

**Anne L. Collins,**

*Associate Administrator for Enforcement.*

[FR Doc. 2022-22394 Filed: 10/13/2022 8:45 am; Publication Date: 10/14/2022]