

August 27, 2017

SEP 27 2017

Mill Valley, CA

Mark Rosekind, Ph.D., Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Sudden Unexpected Acceleration - 2005 Toyota Camry

Dear Mr. Rosekind,

On August 21, 2017 my wife & I became the latest victims of an SUA event. This incident occurred while backing our 2005 Toyota Camry XLE into our driveway to park it in front of the garage, a routine maneuver that is performed approximately 2 times per day by my wife. On this occasion, however, it was anything but ordinary. With me in the passenger seat as a witness, she slowly brought the vehicle to a complete stop after aligning the front seat with a railing post that serves as a reference point and is readily visible outside the passenger seat side window. We both witnessed the car being brought to a complete stop validated by both of us seeing the rail post at a complete standstill relative to the car position. It should be noted that the idle speed of our Camry is set high enough to propel the car to move into the final desired parking position and that it is necessary to have a foot depressed on the brake to bring the car to a standstill once it slowly moves into the desired position in alignment with the rail post. In the split second following the stop, and while the gear shift lever was still set in reverse, the car engine suddenly revved to a high RPM and the vehicle lunged backward approx. 7 feet, jumped a 6" concrete step and plowed into our garage door. I am thankful that this incident only caused \$5,000 property damage to my garage door and \$4,000 property damage to the vehicle. Certainly under different circumstances this type of SUA has every potential to give rise to far more serious personal injury and property damage.

In an effort to seek all possible explanations for the cause of this incident and the unexplained erratic engine behavior, we have come across numerous reports, studies, investigations and responses from NHTSA and Toyota Motor Co. that dispute any possibility that the cause is related to an electronic

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malfunction or fault in the ECM or electronic throttle system. This assertion is made despite several forensic studies and investigations that have identified the presence of tin whiskers in sensitive electronic sensor components that control throttle and fuel injection systems on the vehicle. Several of these studies included specific investigation using APPS devices that are presently used in our 2005 Toyota Camry. It is my understanding that all incidents of SUA investigated by NHTSA have concluded that their cause was attributed to faulty mats, sticking accelerator pedals and driver error. I am completely amazed that NHTSA has reached this conclusion and has not taken a more proactive and cautionary stance on preventing SUA. Clearly tin whiskers have the potential, albeit a very low incidence, of shorting out APPS systems used in many automobiles on the road today and of generating unintended or erroneous electronic signals to the throttle system. Whether you want to believe that or not, tin whiskers have been a known hazard since 1959 and have caused well documented failures in space, communications and electronic instrumentation found in nuclear power plants. Clearly there are now standards that have been put in place that specify different coatings and soldering material less prone to developing tin whiskers in sensitive electronic control devices. I can only imagine that autonomous vehicles will introduce even more possibilities of life threatening electronic failures as automobiles become even more dependent upon sensors and electronic signals to control basic operation of vehicles. To me NHTSA should implement and enforce standards that promote the highest level of safety that involve sensitive control equipment on motor vehicles. I am urging NHTSA to develop standards that prohibit use of pure tin soldering and coatings in sensitive electronic control systems used on vehicles and to further require dual sensors where possible that detect any inconsistency in signals should one receive or generate a false signal. These are simple cost effective safeguards that should be the norm. The accelerator system used in millions of Toyota cars and vehicles of other manufacturers that are operating on the nation's roads today fail to incorporate these simple safeguards. In addition to incurring \$9,000 damage, I am replacing our Toyota OEM - Accelerator Pedal Travel Position Sensor, Part # 7801033010 at my own personal expense of \$440 in an abundance of caution that tin whiskers present in our existing pedal caused this SUA. Even though the incidence is very low, I find no other plausible explanation for the erratic behavior of our Camry on August 21st. I hope that you draw the same conclusions and direct NHTSA to take action to implement standards that remove this threat to life and property present in many vehicles on the road today.

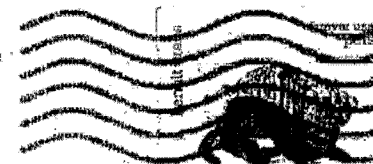
Regards,



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