INFORMATION REDACTED PURSUANT TOTHE FREEDOM OF INFORMATION ACT (FOIA), 5 U.S.C.552(B)(6)

U.S. Department of Transportation
National Highway Traffic Safety Administration

DOT Auto Safety Hotline

Vehicle Owner's Questionnaire

To Report Vehicle Safety Defects
1-888-DASH-2-DOT
(1-888-327-4236)
INTERNET:www.nhtsa.dot.gov/hotline

FOR AGENCY USE ONLY 100148	
Date Received: 27-FEB-2018 APR 18 2018	Repository ☐
	Reference No. 11075212

OWNER INFORMATION (Type or Print)

Name [redacted]		Daytime Telephone Number [redacted]	E-mail Address [redacted]
Address [redacted]		Evening Telephone Number [redacted]	
City HOUSTON	**State** TX	**Zip Code** [redacted]	

The information you provide will be used to identify potential safety-related defects. We may share your information with the applicable vehicle manufacturer during an investigation or recall in accordance with the routine uses described in the agency's Privacy Act notice. See 49 FR 53971 (Sep. 3, 2004).

VEHICLE INFORMATION

17 digit Vehicle Identification Number Located at bottom of windshield on driver's side	Make	Model	Model Year
5YJSA1H41FF[redacted]	TESLA	MODEL S	2015

Date Purchased	Dealer's Name and Telephone Number			Engine: No: Cylinders	Fuel Type:
5/21/2015	NO Dealer - Purchase Direct			N/A	Electric
Original Owner ☑	Dealer's City —	State —	Zip Code —		

Transmission Type		Powertrain	Multiple Failure:	Incident Date(s)
NONE	☐ Antilock Brakes ☐ Cruise Control	Battery - Electric	—	13-JUL-2016

FAILED COMPONENT(S)/PART(S) INFORMATION

Vehicle Component Code: 100000 POWER TRAIN	Failure Mileage	Failure Speed
N/A - Design Issue	6000	

ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A TIRE FAILURE

Tire Make	Tire Model (Name or Number)	Tire Size (Example P215/65R15)
DOT No. (Example: DOTMAL9ABC036)	☐ Original Equipment ☐ Prior Repair	Failure Location:
Tire Component Code		Tire Failure Type:

ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A CHILD SEAT FAILURE

Make:	Date Manufactured:	Model No./Name:
Seat Type:	Installation System:	
Child Seat Component Code:	Failed Part:	

APPLICABLE INCIDENT INFORMATION

(Please describe in detail the incident(s), Failure(s), Crash(es), and injury (ies).)

Crash	Fire	Number of Persons Injured	Number of Deaths	Reported to Police
☐ Yes ☒ No	☐ Yes ☒ No			N

Narrative Description of Incident(S), Crash(es), and Injury(ies).
Please describe (1) events leading up to the failure, (2) failure and its consequences, and (3) what was done to correct the failure; i.e, parts repaired or replaced (and if old part is available).

TL* THE CONTACT OWNS A 2015 TESLA MODEL S. THE CONTACT STATED THAT THE VEHICLE EXPERIENCED UNINTENDED ACCELERATION AFTER MAKING CONTACT WITH A CURB. IT WAS DISCOVERED THAT THE AUTOMATIC TRANSMISSION FEATURE WAS TURNED OFF. THE CONTACT STATED THAT THE FAILURE OCCURRED WITHOUT WARNING. THE DEALER WAS NOT CONTACTED. THE MANUFACTURER WAS CONTACTED, BUT NO FURTHER COMMUNICATION WAS INITIATED. THE FAILURE MILEAGE WAS APPROXIMATELY 6,000.

(1) I KNEW THAT THE "CREEP" SETTING WAS OFF. WHEN "ON," CREEP CAUSES THE CAR TO SLOWLY MOVE FORWARD, LIKE AN AUTOMATIC TRANSMISSION CAR IN "DRIVE" BUT IDLING ENGINE SPEED. (2) THERE WAS NO DEALER BECAUSE TESLA SELLS DIRECT FROM CALIFORNIA

Include, if available: Police/Fire Department Report, Photos, and Repair Invoice. ATTACH ADDITIONAL SHEETS IF NECESSARY

Narrative Description of Incident(s), Failure(s), Crash(es), and Injury(ies)

Please see attached statement and emails to Tesla Motors dated October 25 and November 20, 2016

<< Please note that I have two addresses:
temporary where I do not receive mail: [redacted]
permanent, where I do receive mail: [redacted]
Both Houston, TX [redacted] >>

ATTACH ADDITIONAL SHEETS IF NECESSARY

U.S. Department of Transportation

National Highway Traffic Safety Administration

1200 New Jersey Avenue SE.
Washington, D.C. 20077-9382

Official Business
Penalty for Private Use $300

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL
FIRST CLASS MAIL PERMIT NO. 1888 WASHINGTON, DC

POSTAGE WILL BE PAID BY ADDRESSEE

US Department of Transportation
National Highway Traffic Safety Administration
Office of Defects Investigation, NEF-100
1200 New Jersey Avenue SE.
Washington, D.C. 20077-9382

Addendum to Vehicle Owner's Questionnaire

Owner: [redacted] Houston, TX [redacted]

NHTSA Reference No. 11075212

[redacted] VIN: 5YJSA1H41FF[redacted]

Two Sudden Unintended Acceleration Events

In 2016 I experienced two events of sudden unanticipated acceleration in the car referenced above. Neither event resulted in bodily injury or property damage. However, if anyone had been walking or standing within 10 or 15 feet in front of my car, the consequences could have been lethal. A similar result could have resulted had the events occurred near the outer wall of the upper level of a parking garage, because the car could have crashed through wall to the ground below. So I took these two events very seriously. Certainly they were frightening to me.

At first I thought the sudden acceleration might have resulted from having applied both the brake and accelerator at the same time. This theory is discussed in my email to Tesla Motors dated October 25, 2016. However, I couldn't replicate this effect, so I gave thought to other possible explanations. My second theory, *which I now believe supplies the correct answer,* is a case of "pedal error," within a special Tesla context.

Based on my reading and experience, pedal error—in which the driver unintentionally hits the accelerator instead of the brake—is the cause of very nearly all cases of unintended acceleration. This does not, however, end the inquiry. We must ask, why did I hit the accelerator instead of the brake? If it happened only once, I would have written it off as an isolated event. But two occurrences in the same year begins to sound like something more was involved.

After considering all of the facts and circumstances, I believe the problem originated in the Tesla "creep" setting. When creep is set to the "on" position, it simulates the behavior of an internal combustion car with an automatic transmission in "Drive": the car creeps forward slowly at parking garage speed, 4-5 mph, with no need to press the accelerator. Therefore, the *default right foot position is <u>on the brake pedal</u> while creeping in a parking garage.* This is true for an internal combustion car with automatic transmission in Drive, or a Tesla with creep in the "on" position.

With creep "off", it is necessary to press the accelerator to make the car creep forward in a parking garage. Otherwise the car won't move at all. *This means the default position of the right foot is <u>on the accelerator pedal</u> while creeping in a parking garage.*

The default position of the right foot sets the stage for what happens next. In both incidents, I suddenly hit a solid, but unseen and unsuspected object—a concrete curb located in the middle of the floor of a paved parking garage. Hitting something as solid as a curb triggered an instinctive reaction: to cram on the brakes. Unfortunately, with creep off, the default pedal under my right foot was the accelerator, not the brake. Cramming the accelerator can be a

calamity inside a parking garage, especially considering that my P85D Model S is equipped with the Tesla's dual high performance motors with the "ludicrous speed" upgrade. This package produces almost 600 horsepower and more than 700 foot-pounds of torque at low speeds. The acceleration is rocket-like, unlike any production gasoline car made, even high-performance sports cars.

In this context, whether creep is on or off determines the default pedal position of the driver's right foot at low speeds: creep off, default pedal: accelerator; creep on, default pedal: brake. When creep is disabled, you must maintain pressure on the accelerator to achieve any forward motion, even 3 or 4 mph. Therefore, you are poised for disaster if you are startled and respond with an instantaneous knee-jerk "brake application" by cramming whatever pedal is under your foot. Unfortunately, in these two cases, that pedal was the accelerator.

On the other hand, when driving with creep activated, my car will crawl along at 2-5 mph on its own, just like a regular car with an automatic transmission in "Drive". In this mode, the driver's foot would be touching the brake, ready to slow or stop the car. If the driver was startled by a sudden impact, his impulse would be to mash the pedal under his right foot, and the car would stop. This would happen with a conventional car with an automatic transmission or a Tesla in "creep" mode. The same result would follow driving a stick-shift car in a parking garage: the car would be in low gear, idle speed will move the car slowly so there would be no need to press the accelerator, and the driver's feet would be poised over the clutch and brake, poised to stop the car if necessary, and in the right position should something startling occur.

I should add that I have turned creep on in my car since these two events in mid-2016. I have experienced no further unexpected acceleration events since then.

The default pedal practice described here only describes how I drive a car at very low speeds in a parking garage. Perhaps other people drive differently. Also, at higher speeds, it is obvious that the right foot must normally rest on the accelerator and must always be moved to the brake when needed (except for the rare driver who always uses the left foot on the brake pedal). It is therefore unlikely that a sudden and startling event at higher speeds would cause the driver to accelerate.

I am calling this to the attention of the NHTSA only on the thought that the creep setting may play a part in other low-speed parking area Tesla pedal error cases. I expect that Tesla has or could compile statistics showing whether or not creep was engaged or disengaged in reported cases of this kind. Should it appear that the creep setting plays a part in causing pedal error in parking areas, Tesla could easily correct the problem through an over-the-air firmware change eliminating the no-creep option.

While I think there may be an unrecognized safety issue involved here, I intend no criticism of Tesla. In fact, my Model S is by far the best and safest car I have ever owned.

Gmail

Oct. 25, 2016

[redacted]

FIRST THEORY — I DON'T THINK THIS WAS CORRECT ANSWER

Email TO TESLA

Model S VIN 5YJSA1H41FF[redacted]--Sudden Acceleration events--

1 message

[redacted]

Tue, Oct 25, 2016 at 5:39 PM

To: bmenning@teslamotors.com

Cc: Tesla <Texas_Service@teslamotors.com>, Tesla Motors <servicehelpna@teslamotors.com>

I have experienced two accidental acceleration events this year in my car. There was no property damage or injury to anyone, but experiencing an accidental Ludicrous launch is scary to say the least. While the car is in for service, could you please look into anything that might help avoid another such occurrence?

Background: The two events occurred in parking garages, at about walking speed. My "creep" setting is off, and acceleration is always set at "Ludicrous." In both cases, I hit an unseen and unsuspected 6" curb located in a place few would expect to encounter a curb. In both cases I was startled, and my knee-jerk reaction to the startling impact was to cram on the brakes.

In both cases, however, I either hit only the accelerator, or (more likely) I hit the brake and the accelerator at about the same time. The car stopped within about 20 - 25 feet. It all happened so fast that I don't recall how or why the car stopped. Probably having the brake pedal pushed to the floor canceled the acceleration signals to the motors—but this would be speculation on my part.

Possibly relevant considerations:

- I was wearing wide footgear on both occasions; in the first case, size 13D New Balance 927 walking shoes, 4-¾" outside width; in the second case, Ecco sandals, 4-½" outside width. My right foot, without shoes, is about 4" wide. I am 6' 2" and drive with the seat almost fully back, low on the floor, and the seatback set in an upright position.

- When wearing wide footgear, it is very easy to press the accelerator and the brake at the same time. Prior to these events, I frequently got the "Both Pedals" alert on the instrument panel, and tried without success to eliminate the problem.

- When driving, I usually have my heel planted at one spot and pivot right or left to actuate the brake or accelerator as needed.

- The distance horizontally between brake and accelerator does not look very different than my other cars. The pedals actually look closer together on my 2001 BMW 3 series, which also has a manual clutch. However, I have never experienced a similar acceleration event in any of the other cars I have owned. Please examine the pedals, especially the distance the brake pedal travels before fully engaging the brakes, to see if there is anything in the pedal geometry of the car that might have contributed to these events.

- The one thing I did notice after the events is that, when fully depressed, the brake pedal passes the level of the accelerator pedal, which means that if the left side of a Size 13D shoe was planted halfway off the right edge of the brake pedal, the right side of the shoe would depress the left side of the accelerator pedal, possibly launching the vehicle forward. With maximum sudden brake pedal application, my guess is that the accidentally-pressed accelerator could move suddenly, through enough distance to trigger a strong surge forward. *This is my best guess about how these two events occurred.*

- Since the second event, I have driven without a shoe on the right foot to be sure there are no more sudden acceleration events. This is nothing more than a minor inconvenience for me, and the other authorized drivers of the car are women with much smaller feet than mine. However, I am concerned that another person driving the car in the future might not know or appreciate the possible problem.

Gmail

Email to Tesla [redacted] Nov. 20, 2016

Sudden Acceleration--Avoidable Pedal Error - Model S VIN 5YJSA1H41FF[redacted]- Sudden Acceleration causation

SECOND THEORY — I THINK THIS IS THE RIGHT ANSWER

1 message

[redacted] Sun, Nov 20, 2016 at 5:08 PM
To: "bmenning@teslamotors.com" <bmenning@teslamotors.com>
Cc: Tesla <Texas_Service@teslamotors.com>, Tesla Motors <servicehelpna@teslamotors.com>

On October 25 I wrote to discuss two events of unintended acceleration in my Model S. I speculated that both events resulted from simultaneous application of accelerator and brake.

SECOND THEORY

I now have another possibility to suggest, based on the fact that "creep" was disabled in both cases. Both times I was moving at parking garage speed - 4-5 mph -when I experienced an unanticipated sudden impact with an unseen, unsuspected object. Startled, and without reflection, my knee-jerk reaction was to cram on the brakes. Unfortunately (if this second theory is right) what I crammed was the pedal that just happened to be under my right foot: the accelerator, not the brake.

What does this have to do with creep? When creep is disabled, you must maintain pressure on the accelerator to achieve any forward motion, even 3 or 4 mph. Therefore you are poised for disaster if you are startled and make an instantaneous knee-jerk "brake application": chances are good you will mash whatever pedal is under your foot, namely the accelerator.

When driving with creep activated, my car will crawl along at 2-5 mph on its own, so the driver's foot would be on the brake. If startled, the foot would mash the correct pedal and the car would stop. The same would happen with a conventional car with an automatic transmission. If driving a stick-shift car in a parking garage, similar food/pedal alignment would tend to avoid a pedal error sudden acceleration: the car would be in low gear, idle speed will move the car slowly so there would be no need to press the accelerator, and the driver's feet would be poised over the clutch and brake, poised to stop the car should something startling occur.

If this is the cause of my sudden acceleration events, the solution might not be a welcome one to many Tesla owners: removing the no-creep option.

I would appreciate hearing from Tesla concerning this issue, because it may present design issues. In one case involving an acquaintance here in Houston, sudden acceleration drove his Tesla completely through his garage wall and into his neighbor's swimming pool, where he died, apparently by drowning. I don't know why his car accelerated, however.,

On Tuesday, October 25, 2016 [redacted] wrote:

> I have experienced two accidental acceleration events this year in my car. There was no property damage or injury to anyone, but experiencing an accidental Ludicrous launch is scary to say the least. While the car is in for service, could you please look into anything that might help avoid another such occurrence?
>
> Background: The two events occurred in parking garages, at about walking speed. My "creep" setting is off, and acceleration is always set at "Ludicrous." In both cases, I hit an unseen and unsuspected 6" curb located in a place few would expect to encounter a curb. In both cases I was startled, and my knee-jerk reaction to the startling impact was to cram on the brakes.
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[redacted]

[redacted] | HOUSTON TEXAS [redacted]