



August 8, 2016

Jeffrey L. Quandt, Chief
Vehicle Control Division
Office of Defects Investigation
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington DC, 20590

RE: Tesla Motors Initial Response to PE16-007

Dear Mr. Quandt,

On behalf of Tesla Motors, Inc. ("Tesla" or "the Company"), this submission to the National Highway Traffic Safety Administration ("NHTSA" or the "Agency") responds to Questions 1 through 4, 8, and 11 a through c of the Agency's July 8, 2016 Preliminary Evaluation PE16-007 letter ("PE 16-007") requesting information about performance of the Automatic Emergency Braking (AEB) system and any other forward crash mitigation or forward crash avoidance systems in Tesla motor vehicles.

Answers to the Agency's questions are set forth below. As requested, Tesla has repeated the applicable request verbatim above each response. Tesla has provided responsive documents, data, and reports dated, up to and including, July 8, 2016. As we agreed, except where otherwise noted, the subject vehicles have been defined as all Tesla vehicles originally sold with Autopilot Convenience Features that have been manufactured for sale or lease in the United States and federalized territories.

Question 0: Provide a list of Vehicle Identification Numbers ("VINs") for all Tesla vehicles that have been manufactured for sale or lease in the United States and federalized territories that were not originally sold with Autopilot Convenience Features, but had Autopilot Convenience Features activated after original sale or lease for some period of time (e.g., by means of a free trial period or post-sale Autopilot Convenience Features activation).

Response 0: The requested information is provided in the folder titled, "Question 0", on the USB Flash Drive. This folder contains a Microsoft Excel spreadsheet titled, "Question 0.xlsx," which contains a list of the VINs of vehicles that were not originally sold with Autopilot Convenience Features but had Autopilot Convenience Features activated after original sale or lease either

because the features were purchased after delivery or via a free trial period. Please note that this list was gathered using current data on August 3, 2016. Therefore, it includes some vehicles that purchased or began a trial of Autopilot Convenience Features between July 8, 2016 and August 3, 2016.

Question 1: State the number of subject vehicles Tesla has manufactured for sale or lease in the United States and federalized territories. Separately, for each subject vehicle manufactured to date by Tesla, state the following:

- a. Vehicle identification number (VIN);
- b. Model;
- c. Model Year;
- d. Date of manufacture;
- e. Date warranty coverage commenced;
- f. The State in the United States, or the federalized territory, where the vehicle was originally sold or leased (or delivered for sale or lease);
- g. The date of the last data retrieval;
- h. The mileage of the vehicle at the last data retrieval;
- i. The date AEB software was installed on the vehicle;
- j. The mileage of the vehicle when AEB software was installed;
- k. The date Autosteer software was installed on the vehicle;
- l. The mileage Autosteer software was installed on the vehicle;
- m. The total number of "Hands on Wheel" Autosteer SLOWING warnings recorded;
- n. The total number of AEB events recorded before Autosteer was installed;
- o. The total number of AEB events recorded after Autosteer was installed;
- p. Whether the vehicle experienced any airbag deployments recorded before Autosteer was installed (YES/NO); and
- q. Whether the vehicle experienced any airbag deployments after Autosteer was installed (YES/NO).

Provide the table in Microsoft Access 2003, 2007, or a compatible format, entitled "PE16 007 PRODUCTION DATA."

Response 1: The requested information is provided in the folder titled, "Question 1", on the USB Flash Drive. This folder contains a Microsoft Access database titled "PE16 007 PRODUCTION DATA."



[REDACTED]

Question 2: State the number of each of the following, received by Tesla, or of which Tesla is otherwise aware, which relate to, or may relate to, the alleged defect in in the subject vehicles:

- a. Consumer complaints, including those from fleet operators;
- b. Field reports, including dealer field reports;
- c. Claims against the manufacturer involving a death or injury and other notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle;
- d. Property damage claims;
- e. Third-party arbitration proceedings where Tesla is or was a party to the arbitration; and
- f. Lawsuits, both pending and closed, in which Tesla is or was a defendant or codefendant.

For subparts "a" through "d," 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 "f," provide a detailed description of the alleged problem and causal and contributing factors and Tesla's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f," 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.

Response 2: The vehicle populations for both Responses 0 and 1 were searched for Tesla's Responses to 2, 3, and 4. The information sources for each requested category are summarized below. The sources of the data for subparts a through d are primarily the same as those used to submit data to NHTSA when reporting under the Transportation Recall Enhancement, Accountability and Documentation ("TREAD") Act pursuant to the requirements of 49 C.F.R. Part 579. We list below the sources of data searched for each of the enumerated categories.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

NHTSA has also requested a detailed description of the alleged problem and causal and contributing factors and Tesla's assessment of the problem, with a summary of the significant underlying facts and evidence for each incident enumerated in subparts (c) through (f). [REDACTED]

[REDACTED]

[REDACTED]

Question 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. Tesla'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), address, and telephone number;
- d. Vehicle's VIN;
- e. Vehicle's model and model year;
- f. Vehicle's mileage at time of incident;
- g. Incident date;
- h. Report or claim date;

Question 8: Provide the following information for the most recent 100 AEB events available experienced by the subject vehicles to date:

- a. The vehicle identification number of the subject vehicle;
- b. The date and time of the incident;
- c. Tesla's assessment of the crash type or object avoided.

Response 8: The requested information is provided in the folder titled, "Question 8", on the USB Flash Drive. This folder contains a Microsoft Excel spreadsheet titled "Question 8 a-c.xlsx," which contains a list of the most recent 100 AEB events including the VIN of the subject vehicle, the date and time of the incident, and Tesla's assessment of object detected. [REDACTED]

Question 8.1: Provide logs and images for examples of AEB events experienced by the subject vehicles involving avoidance or mitigation of a crash with vehicles crossing the path of the subject vehicle or avoidance or mitigation of a crash with other objects that are not the front or rear of a vehicle.

Response 8.1: [REDACTED]

Question 11a-c: Provide a spreadsheet list of all crashes occurring while operating with Autosteer activated or within 15 seconds of a transition/handoff from Autosteer to manual control. Crashes should include all events that include evidence that an impact may have occurred (e.g., airbag deployments, seat belt retractor signals, or other signals/alerts used by Tesla to indicate that a crash has occurred). Include a description of how Tesla identified crashes for this response and provide the following information for each such incident:

- a. The vehicle identification number of the subject vehicle;
- b. Whether the vehicle history included evidence of drive cycles with excessive "Hands on Wheel" warnings/alerts (include a definition of the criteria used to determine "excessive");
and
- c. Date of the crash;

Response 11a-c: The requested information is provided in the folder titled, "Question 11", on the USB Flash Drive. This folder contains a Microsoft Excel spreadsheet titled "Question 11.xlsx,"

[REDACTED]

[REDACTED]

* * *

If you have any questions regarding the information provided in this response, you may contact me at (650) 681-5590 or mschwall@tesla.com.

Sincerely,



Matthew Schwall, Ph.D.
Director, Field Performance Engineering