



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



May 28, 2024

VIA EMAIL

Eddie Gates
Director, Field Quality
Tesla, Inc.
45500 Fremont Blvd
Fremont, CA 94538

Subject: Information Request ID EA24001

Dear Mr. Gates,

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened an Engineering Analysis (EA24001) to investigate allegations of *loss of steering control* in certain model year (MY) 2023 *Tesla Model 3 and Model Y* vehicles manufactured by Tesla, Inc. (*Tesla*), and to request certain information.

This office has received 115 reports of *loss of steering control* in certain 2023 *Tesla Model 3 and Model Y* vehicles with the subject components listed below. These reports allege a loss of steering control. A report list will be provided to you electronically for your review and information.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** all 2023 *Tesla Model 3 and Model Y* manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.
- **Subject component:** Electronic Power steering rack and pinion assembly, electrical hardware and related electronic controls with part numbers: 1188832-00-A, 1044832-00-A, power steering racks bearing part number similar to those listed here, and any other power steering racks contained in subject and peer vehicles even if the part number is unknown.-
- **Peer Vehicles:** all 2024 *Tesla Model 3 and Model Y* manufactured for sale or lease in the United States, including, but not limited to, the District of Columbia, and current U.S. territories and possessions.

- **Alleged defect:** Any of the following symptoms or conditions:
 1. Steering becomes “stuck”, “locked”, or immovable;
 2. Steering requires high or increased effort;
 3. Power steering failures;
 4. “notchy” or “clicky” steering;
 5. Steering rack / gear failure; and
 6. Error messages / warnings related to the steering system.

- **Tesla:** Tesla, Inc., all of its past and present officers and employees, whether assigned to its principal offices or any of its field or other locations, including all of its divisions, subsidiaries (whether or not incorporated) and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of Tesla (including all business units and persons previously referred to), who are or were involved in any way as of January 1st 2017, with any of the following related to the alleged defect in the subject and peer vehicles:
 - a. Design, engineering, analysis, modification or production (e.g., quality control);
 - b. Testing, assessment or evaluation;
 - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, lawsuits or arbitrations; or
 - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.

- **Document:** “Document(s)” is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records

or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by *Tesla*, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production. In all cases where original and any non-identical copies are not available, “document(s)” also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by *Tesla* or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms “claim,” “consumer complaint,” “dealer field report,” “field report,” “fire,” “fleet,” “good will,” “make,” “model,” “model year,” “notice,” “property damage,” “property damage claim,” “rollover,” “type,” “warranty,” “warranty adjustment,” and “warranty claim,” whether used in singular or in plural form, have the same meaning as found in 49 C.F.R. § 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation. Graphical information shall contain axis labels and identifying units of measure.

Please repeat the applicable request verbatim above each response. After *Tesla*’s response to each request, identify the source of the information and indicate the last date the information was gathered.

The subject and peer vehicle population has changed since the information request for PE23-014. Responses to these questions should wholly reply to the request without referencing previously submitted documents.

1. State, by model and model year, the number of subject and peer vehicles *Tesla* has manufactured for sale or lease in the United States. Separately, for each subject and peer vehicle manufactured to date by *Tesla*, state the following:
 - a. Vehicle identification number (17-character VIN);
 - b. Model;
 - c. Model Year;

- d. Electronic power steering rack part number installed as original equipment;
- e. Date of manufacture (MM/DD/YYYY);
- f. Date warranty coverage commenced (MM/DD/YYYY); and
- g. The State in the United States where the vehicle was originally sold or leased, or delivered for sale or lease (postal abbreviation).

Provide the table in Microsoft Access 2010, or a compatible format, entitled “PRODUCTION DATA.”

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 the subject and peer vehicles built with the subject component:
 - a. Social media posts;
 - b. Consumer complaints, including those from fleet operators;
 - c. Field reports, including dealer field reports;
 - d. Reports involving a crash, injury or fatality;
 - e. Property damage claims; and
 - f. Third-party arbitration proceedings, both pending and closed, where Tesla is or was a party to the arbitration; and
 - g. Lawsuits, both pending and closed, in which Tesla 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 “d” through “g,” provide a description of the alleged problem and causal and contributing factors and Tesla’s assessment of the problem, with description of the significant underlying facts and evidence. For items “f” and “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.

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), email address and telephone number (please use distinct fields for each data type);
 - d. Vehicle owner or fleet city, state (postal abbreviation), and ZIP code (please use distinct fields for each data type);
 - e. Vehicle’s 17-character VIN;
 - f. Vehicle’s model and model year (please use distinct fields for each data type);
 - g. Vehicle’s mileage at time of incident (numeric data type);

- h. Vehicle firmware at time of incident;
- i. Incident date (MM/DD/YYYY);
- j. Report or claim date (MM/DD/YYYY);
- k. Repairing dealer's or facility's name, telephone number, city and state or ZIP code (please use distinct fields for each data type);
- l. Whether a crash is alleged;
- m. Whether property damage is alleged;
- n. Number of alleged injuries, if any; and
- o. Number of alleged fatalities, if any.

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

- 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 Tesla used for organizing the documents. Describe in detail the search methods and search criteria used by Tesla to identify the items in response to Request No. 2.
- 5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Tesla to date that relate to, or may relate to, the alleged defect in the subject and peer vehicles built with the subject component: 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. Tesla's claim number;
- b. Vehicle owner or fleet name (and fleet contact person), email address and telephone number (please use distinct fields for each data type);
- c. Vehicle owner or fleet city ZIP code;
- d. 17-character VIN;
- e. Repair date (MM/DD/YYYY);
- f. Vehicle mileage at time of repair (numeric data type);
- g. Vehicle firmware at time of incident;
- h. Repairing dealer's or facility's name, telephone number, city and state or ZIP code (please use distinct fields for each data type);
- i. Labor operation number(s);
- j. Problem code(s);
- k. Diagnostic trouble code(s);
- l. Replacement part number(s) and description(s);
- m. Concern stated by customer;
- n. Cause as stated on the repair order;
- o. Correction as stated on the repair order; and
- p. 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.”

6. Describe in detail the search methods and search criteria used by Tesla 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.
7. State the number of CAN logs which contain one or more alert(s) that relate to or may relate to the alleged defect, including but not limited to those listed in response to Request 7 of Tesla’s response to the PE23-014 IR, in subject and peer vehicles built with subject components.
8. Separately, for each CAN log within the response to Request No. 7, state the following information:
 - a. 17-character VIN;
 - b. CAN log identifier;
 - c. Date and time at start of CAN log;
 - d. Alerts related to Request No. 7;
 - e. Vehicle milage at start of CAN log (numeric data type);
 - f. Vehicle firmware at time of incident;
 - g. Subject component as installed as original equipment;
 - h. Whether any crash signals were present;
 - i. For vehicle with crash signals present:
 - i. Provide the time between the first alert of Request No. 7 and the crash signal;
 - ii. Whether any alerts within Request No. 7 were present prior to the crash signals;
 - j. Maximum recorded steering torque.

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

9. Produce copies of all CAN logs identified in response to Request No. 7 with the same formatting used by Tesla to furnish CAN logs responsive to NHTSA’s Standing General Order 2021-2 follow-up requests filed outside of this investigation. Include all documents associated with the CAN log including, but not limited to, Event Data Recorder (EDR) and any available imagery. Organize the documents by VIN and CAN log identifier.
10. Describe in detail the search methods and search criteria used by Tesla to identify the instances in response to Request No. 7, including but not limited to:
 - a. Alerts chosen as search criteria;
 - b. The reason(s) for the alerts chosen;
 - c. All search and system constraints;
 - d. Enabling criteria which would result in a CAN log being recorded and searchable by Tesla; and

- e. An estimate of the percent of CAN logs that are recorded and searchable by Tesla.
11. On the 15th calendar day following the issuance of this Information Request and every 15 days thereafter for a period not to exceed 240 calendar days, update your responses to Requests 2.b-d, 5 and 7 for peer and subject vehicles for any information not included in a previous submission. For each incident provided in response to this request include the information in requests 3-4 and 8-9.
 12. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject and peer vehicles built with the subject component, that Tesla has issued to any dealerships, service personnel, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Tesla is planning to issue within the next 120 days.
 13. Describe assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, “actions”) that relate to the subject component that have been conducted, are being conducted, are planned, or are being planned by, or for, *Tesla*. For each such action, provide the following information:
 - a. Action title or identifier;
 - b. The actual or planned start date;
 - c. The actual or expected end date;
 - d. Brief summary of the subject and objective of the action;
 - e. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - f. A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.

14. Describe and produce all documents on the modifications or changes made by, or on behalf of, *Tesla* in the design, material composition, firmware, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject and peer vehicles in the subject component. For each such modification or change, provide the following information:
 - a. The date or approximate date on which the modification or change was incorporated into vehicle production and/or field;
 - b. A detailed description of the modification or change;
 - c. The reason(s) for the modification or change;
 - d. The part number(s) (service and engineering) of the original component;
 - e. The part number(s) (service and engineering) of the modified component;
 - f. The prior firmware version;
 - g. The modified firmware version;

- h. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- i. When the modified component was made available as a service component; and
- j. Whether the modified component can be interchanged with earlier production components;
- k. Whether modified firmware versions were made to vehicles which are non-subject and non-peer vehicles, if so, state the MMY effected.

Also, provide the above information for any modification or change that *Tesla* is aware of which may be incorporated into vehicle production or deployed to the field within the next 120 days.

On a continuing basis, provide the above information for all modifications or changes made by, or on behalf of, Tesla after the submission of Tesla's response to this Information Request within 5 days of the modification or change incorporated into vehicle production or deployed to the field for a period not to exceed 240 calendar days.

15. Describe and produce all documents related to the creation, design, validation, and deployment for each firmware update in response to question 14 separately including but not limited to the following:
 - a. Analysis and information used in the decision to update the firmware;
 - b. Analysis and information used for the design of the modification;
 - c. Describe all assessments, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the modification in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Tesla. For each such action, provide the following information:
 - i. Action title or identifier;
 - ii. The actual or planned start date;
 - iii. The actual or expected end date;
 - iv. Brief summary of the subject and objective of the action;
 - v. Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - vi. A brief summary of the findings and/or conclusions resulting from the action.

Organize all responses and documents by firmware update.

16. Provide a description and all documentation regarding the process for identifying field issues, creating countermeasures, and validating countermeasures for both hardware and firmware related defects.
17. State the number of each of the following that *Tesla* has sold including those used in service and warranty repairs that may be used in the subject and peer 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:

- a. Subject component; and
- b. Any kits that have been released, or developed, by *Tesla* 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 *Tesla* is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

18. Furnish all communications with the supplier and related documents which are related to or may relate to the subject component, including but not limited to the following:
 - a. Design (initial and modifications);
 - b. Decision making regarding whether the failure of the subject component does or does not require the filing of a Part 573 Safety Recall Report;
 - c. Testing; and
 - d. Issue investigation.

Organize response documents in chronological order.

19. Furnish copies of all internal communications and documents which are related to or may relate to the subject component, including but not limited to the following:
 - a. Design (initial and modifications);
 - b. Decision making regarding whether the failure of the subject component does or does not require the filing of a Part 573 Safety Recall Report;
 - c. Testing; and
 - d. Issue investigation.

Organize response documents in chronological order.

20. Furnish *Tesla's* assessment of the alleged defect in the subject and peer vehicles built with the subject component, 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; *and*
 - 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; and
 - f. The reports included with this inquiry.

Legal Authority for This Request

This letter is being sent to *Tesla* pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports. It constitutes a new request for information.

Civil Penalties

Tesla's failure to respond promptly and fully to this letter could subject *Tesla* to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$27,168 per violation per day, with a maximum of \$135,828,178 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. *See* 49 C.F.R. § 578.6(a)(3). This includes failing to respond completely, accurately, or in a timely manner to ODI information requests.

If *Tesla* cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, *Tesla* does not submit one or more requested documents or items of information in response to this information request, *Tesla* must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

Confidential Business Information

If *Tesla's* response contains any information that you claim is confidential business information, *Tesla* must submit a request for confidential treatment directly to NHTSA's Office of the Chief Counsel by following the instructions in Enclosure 1, Information for Requests for Confidential Treatment.

In addition, you must request two secure electronic file transfer links from Alexa Ardron at alexa.ardron@dot.gov. One secure electronic file transfer link is for submitting a duplicate copy of your request for confidential treatment to ODI. The second secure electronic file transfer link is for your non-confidential response to this letter. Do not submit any confidential business information along with your non-confidential submission. Please refer to EA24-001 in *Tesla's* response to this letter and in a request for confidential treatment that *Tesla* may submit.

Due Date

Tesla's response to this letter must be submitted to this office by July 24, 2024. If *Tesla* finds that it is unable to provide all of the information requested within the time allotted, *Tesla* must request an extension from me at (202) 366-5226 no later than five business days before the response due date. If *Tesla* is unable to provide all of the information requested by the original

deadline, it must submit a partial response by the original deadline with whatever information *Tesla* then has available, even if an extension has been granted.

If you have any technical questions concerning this matter, please call Alexa Ardron of my staff at (202) 819-4554.

Sincerely,

Tanya Topka

Tanya Topka, Director
Office of Defects Investigation

Enclosure 1, Information for Requests for Confidential Treatment.

ENCLOSURE 1 – INFORMATION FOR REQUESTS FOR CONFIDENTIAL TREATMENT

If you believe that your response contains any material that you claim is confidential business information, submit these materials to NHTSA’s Office of the Chief Counsel in accordance with 49 C.F.R. Part 512. **All requests for confidential treatment must be submitted directly to the Office of the Chief Counsel.**

As a CBI Portal Pilot participant, you may submit your request and files containing CBI to NHTSA’s Office of the Chief Counsel via the Confidential Business Information Portal. If you are not currently registered for the CBI Portal, please send a registration request to cbi-helpdesk@dot.gov. Alternatively, if you do not want to use the CBI Portal for this specific IR response, upon request, ODI will provide you with a secure file transfer link for your submission to the Office of the Chief Counsel.

Requests for confidential treatment are governed by Part 512. A current version of this regulation is available on the internet at <http://www.ecfr.gov> by selecting Title 49 “Transportation,” selecting “Parts 500 – 599” and then selecting Part 512 “Confidential Business Information.”

How to request confidential treatment:

NHTSA is currently treating electronic submission as an acceptable method for submitting confidential business information to the agency under Part 512. If you claim that any of the information or documents provided in your response constitutes confidential business information within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, you must request a secure file transfer link from the ODI contact listed in your Information Request. ODI will copy a representative from the Office of the Chief Counsel on the secure file transfer link for your request for confidential treatment. You must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with Part 512, to the Office of the Chief Counsel. Do not send a hardcopy of a request for confidential treatment to NHTSA’s headquarters.

Your request must include a request letter that contains supporting information, pursuant to Part 512.8. Your request must also include a certificate, pursuant to Part 512.4(b) and Part 512, Appendix A.

You are required to submit one unredacted “confidential version” of the information for which you are seeking confidential treatment. Pursuant to Part 512.6, the words “ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION” or “CONFIDENTIAL BUSINESS INFORMATION CONTAINED WITHIN BRACKETS” (as applicable) must appear at the top of each page containing information claimed to be confidential. In the latter situation, where not all information on the page is claimed to be confidential, identify each item of information for which confidentiality is requested within brackets: “[].”

You are also required to submit one redacted “public version” of the information for which you are seeking confidential treatment. Pursuant to Part 512.5(a)(2), the redacted “public version” should include redactions of any information for which you are seeking confidential treatment

(i.e., the only information that should be unredacted is information for which you are **not** seeking confidential treatment).

For questions about a request for confidential treatment, please contact Dan Rabinovitz in the Office of the Chief Counsel at Daniel.Rabinovitz@dot.gov or (202)366-8534.