

# Part 573 Safety Recall Report

# 22V-818

**Manufacturer Name :** Tesla, Inc.**Submission Date :** NOV 01, 2022**NHTSA Recall No. :** 22V-818**Manufacturer Recall No. :** SB-22-00-014**Manufacturer Information :**

Manufacturer Name : Tesla, Inc.

Address : 1 Tesla Road  
Austin TX 78725

Company phone : 6506815000

**Population :**

Number of potentially involved : 40,168

Estimated percentage with defect : 1 %

**Vehicle Information :**

Vehicle 1 : 2017-2021 Tesla Model S

Vehicle Type :

Body Style :

Power Train : NR

**Descriptive Information :** The subject population includes certain model year 2017-2021 Model S and Model X vehicles. Affected vehicles were identified based on vehicle manufacturing, service and firmware deployment records.

Production Dates : AUG 16, 2017 - DEC 28, 2020

VIN Range 1 : Begin : NR End : NR

 Not sequential

Vehicle 2 : 2017-2021 Tesla Model X

Vehicle Type :

Body Style :

Power Train : NR

**Descriptive Information :** The subject population includes certain model year 2017-2021 Model S and Model X vehicles. Affected vehicles were identified based on vehicle manufacturing, service and firmware deployment records.

Production Dates : AUG 20, 2017 - DEC 27, 2020

VIN Range 1 : Begin : NR End : NR

 Not sequential

**Description of Defect :**

Description of the Defect : Firmware release 2022.36 changed calibration values for the electronic power assist steering (EPAS) system. In rare cases on certain 2017-2021 Model S and Model X vehicles, the updated calibration values may result in reduced or lost power steering assist due to forces from external road dynamics (i.e., pot holes or bumps) being inadvertently classified as unexpected steering assist torque. Reduced or lost power steering assist does not affect steering control, but could require greater steering effort from the driver, particularly at low speeds.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : Reduced or lost power steering assist may require greater steering effort, especially at lower speeds, which may increase the risk of a crash.

Description of the Cause : NR

Identification of Any Warning that can Occur : Upon experiencing reduced or lost power steering assist, an audio alert will trigger and a visual alert will appear on the instrument cluster.

**Involved Components :**

Component Name 1 : Vehicle Firmware

Component Description : FW Rel. between 2022.36 (inc) and 2022.36.4 (inc)

Component Part Number : N/A

**Supplier Identification :****Component Manufacturer**

Name : Tesla, Inc.

Address : 1 Tesla Road  
Austin Texas 78725

Country : United States

**Chronology :**

- On October 11, 2022, Tesla began broadly rolling out firmware release 2022.36 to the vehicle fleet, which included updated calibration values for the electronic power assist steering (EPAS) system to better detect unexpected steering assist torque.

- Beginning on October 18, 2022, Tesla identified an increasing rate of alerts related to the updated EPAS calibration values on certain 2017-2021 Model S and Model X vehicles.
- On October 19, 2022, Tesla began deploying firmware release 2022.36.5 to the vehicle fleet, which reverted the calibration values for the EPAS to pre-2022.36 values, while Engineering assessed potential root causes and evaluated the condition
- From October 19, 2022, through October 24, 2022, Tesla investigated the alert occurrences and completed a risk assessment of the condition based on severity and rate of occurrence.
- On October 25, 2022, based on the risk assessment, Tesla made a determination to voluntarily recall the affected vehicles.
- As of November 1, 2022, Tesla identified 314 vehicle alerts for this condition among U.S. vehicles (received between October 11, 2022, and November 1, 2022) that are related to or may be related to this condition. Tesla is not aware of any injuries or deaths related to this condition.

## Description of Remedy :

**Description of Remedy Program :** Firmware release 2022.36.5 and later firmware releases revert the calibration values for the EPAS to pre-2022.36 values. As described above, firmware release 2022.36.5 began deploying to affected vehicles on October 19, 2022. As of November 1, 2022, more than 97% of the affected vehicles installed firmware release 2022.36.5 or a later firmware release. No further action is necessary from owners whose vehicles are equipped with firmware release 2022.36.5 or a later firmware release.

Tesla does not plan to include a statement in the Part 577 owner notification about pre-notice reimbursement to owners since all of the affected vehicles already received the remedy free of charge.

**How Remedy Component Differs from Recalled Component :** Firmware release 2022.36 includes calibration values that may result in reduced or lost power steering assist due to forces from external road dynamics (i.e. pot holes or bumps) being inadvertently classified as unexpected steering assist torque. Firmware release 2022.36.5 reverts the calibration values for the EPAS to pre-2022.36 values.

**Identify How/When Recall Condition was Corrected in Production :** Vehicles in production were not impacted. The condition only affected certain 2017-2021 Model S and Model X vehicles that installed firmware release 2022.36.

## Recall Schedule :

**Description of Recall Schedule :** All Tesla stores and service centers will be notified about this recall on or shortly after November 3, 2022. Owner notification letters will be mailed in accordance with 49 C.F.R. § 577.7.

**Planned Dealer Notification Date :** NOV 03, 2022 - NOV 03, 2022

Planned Owner Notification Date : DEC 31, 2022 - DEC 31, 2022

\* NR - Not Reported