



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 21-013
Date Opened: 05/17/2021
Investigator: Sean Hays
Approver: Stephen Ridella
Subject: Loss of Motive Power
Date Closed: 12/23/2021
Reviewer: Tanya Topka

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Porsche Cars North America, Inc.
Products: 2020-2021 Porsche Taycan
Population: 12,146 (Estimated)
Problem Description: Loss of motive power while in motion at any speed.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	53	48	88**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	17	Confidential	Confidential

*Description of Other: Field Reports

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: Close Preliminary Evaluation PE21-013. See NHTSA Recall 21V-486.

Summary:

In May 2021, the Office of Defects Investigation (ODI) opened a Preliminary Evaluation (PE) of complaints received alleging a loss of motive power while in motion at any speed with no prior warning to the driver in the 2020-2021 model year (MY) Porsche Taycan electric vehicles. ODI had received 9 Vehicle Owner Questionnaires (VOQs) and several field reports. All complaints alleged that a loss of motive power occurred without warning and error messages about a battery fault displayed during or after the vehicle stalled.

In the subject vehicles, a pulse-controlled inverter is mounted on each of the two drive modules on the front and rear axles. The software designed to continuously monitor end-to-end communication between the safety-related electronic control units (ECUs) in the vehicle can, in certain instances, incorrectly and sporadically detect a potentially faulty communication, set an error memory entry, and trigger a shutdown of the power train, resulting in loss of motive power. If this occurs, the affected vehicles display the warning message "Motor control error. Stop vehicle in a safe place" in the instrument cluster.

Porsche has corrected the software malfunction in production. Further, Porsche is conducting a safety recall (21V-486) to upgrade the software on vehicles already in the field. In view of the recall action, this Preliminary Evaluation is closed. The agency reserves the right to take additional action if warranted by new circumstances.

The ODI reports cited above can be reviewed online at nhtsa.gov under the following identification numbers:
 11435775, 11433960, 11431568, 11429897, 11427688, 11426921, 11426902, 11424618, 11424613, 11424296,
 11424175, 11424015, 11423458, 11423311, 11422549, 11422463, 11421593, 11421575, 11421494, 11421347,
 11420845, 11420788, 11420734, 11420572, 11419756, 11419735, 11419730, 11419721, 11419422, 11418975,

11418935, 11418793, 11418705, 11418692, 11418593, 11418476, 11418405, 11418381, 11418245, 11418237,
11418153, 11418142, 11418132, 11418106, 11415110, 11414731, 11414486, 11404336, 11386164, 11383427,
11377898, 11377875, 11364083