

Part 573 Safety Recall Report

21V-486

Manufacturer Name : Porsche Cars North America, Inc.**Submission Date :** JUN 29, 2021**NHTSA Recall No. :** 21V-486**Manufacturer Recall No. :** AMB5**Manufacturer Information :**

Manufacturer Name : Porsche Cars North America, Inc.

Address : One Porsche Drive

Atlanta GA 30354

Company phone : 1-800-767-7243

Population :

Number of potentially involved : 10,373

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2020-2020 Porsche Taycan Turbo

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. Production vehicles manufactured after June 25, 2021 are not affected. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : OCT 08, 2019 - OCT 07, 2020

VIN Range 1 : Begin : WP0AC2Y15LSA70111 End : WP0AC2Y16LSA73051 Not sequential

Vehicle 2 : 2020-2020 Porsche Taycan Turbo S

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : OCT 02, 2019 - OCT 17, 2020

VIN Range 1 : Begin : WP0ZZZY1ZLSA65780 End : WP0AC2Y17L Not sequentialVIN Range 2 : Begin : WP0ZZZY1ZLSA65780 End : WP0AC2Y17LSA73088 Not sequentialVIN Range 3 : Begin : WP0ZZZY1ZLSA65780 End : WP0AC2Y17LSA73088 Not sequential

Vehicle 3 : 2020-2020 Porsche Taycan 4S

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : JAN 23, 2020 - NOV 03, 2020

VIN Range 1 : Begin : WPOAB2Y19LSA50074 End : WPOAB2Y19LSA54464 Not sequential

Vehicle 4 : 2021-2021 Porsche Taycan Turbo S

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : SEP 29, 2020 - JUN 24, 2021

VIN Range 1 : Begin : WPOAC2Y18MSA62070 End : WPOAC2Y16MSA63878 Not sequential

Vehicle 5 : 2021-2021 Porsche Taycan Turbo

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : NOV 26, 2020 - DEC 16, 2020

VIN Range 1 : Begin : WPOAC2Y13MLA62035 End : WPOAC2Y15MLA62067 Not sequential

Vehicle 6 : 2021-2021 Porsche TAYCAN TURBO S CROSS TURISMO

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : MAY 19, 2021 - JUN 25, 2021

VIN Range 1 : Begin : WPOBC2Y10MSA88067 End : WPOBC2Y13MSA88080 Not sequential

Vehicle 7 : 2021-2021 Porsche Taycan

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : JUN 22, 2020 - JUN 25, 2021

VIN Range 1 : Begin : WPOAA2Y10MSA10065 End : WPOAA2Y15MSA18338 Not sequential

Vehicle 8 : 2021-2021 Porsche TAYCAN 4S

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : SEP 21, 2020 - JUN 25, 2021

VIN Range 1 : Begin : WPOAB2Y19MSA40064 End : WPOAB2Y16MSA45643 Not sequential

Vehicle 9 : 2021-2021 Porsche Taycan 4S

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : OCT 14, 2020 - DEC 18, 2020

VIN Range 1 : Begin : WPOAB2Y14MLA40001 End : WPOAB2Y19MLA40172 Not sequential

Vehicle 10 : 2021-2021 Porsche Taycan Cross Turismo

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : JUN 25, 2021 - JUN 25, 2021

VIN Range 1 : Begin : WPOBA2Y1XMSA71069 End : WPOBA2Y15MSA71075 Not sequential

Vehicle 11 : 2021-2021 Porsche TAYCAN 4S CROSS TURISMO

Vehicle Type : LIGHT VEHICLES

Body Style : 4-DOOR

Power Train : HYBRID ELECTRIC

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : MAY 18, 2021 - JUN 25, 2021

VIN Range 1 : Begin : WPOBB2Y13MSA81066 End : WPOBB2Y12MSA81088 Not sequential

Vehicle 12 : 2021-2021 Porsche TAYCAN TURBO CROSS TURISMO

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Porsche has VIN-specific data to identify affected vehicles by software version. MY2020 and MY2021 Porsche Taycan vehicles with pre-update software are affected and will be recalled. There is no choice for Battery Electric Powertrain so Hybrid Electric Powertrain was chosen.

Production Dates : MAY 11, 2021 - JUN 25, 2021

VIN Range 1 : Begin : WPOBC2Y12MSA88068 End : WPOBC2Y10MSA88084 Not sequential

Description of Defect :

Description of the Defect : On the subject vehicles, a pulse-controlled inverter is mounted on each of the two drive modules on the front and rear axles. Due to a software issue that has since been corrected, the software designed to continuously monitor end-to-end communication between the safety-related 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. The vehicle can be immediately restarted by pushing the On/Off button.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : A sporadic and sudden shutdown of the power train with loss of motive power at higher speed can increase a risk of a crash in certain traffic situations

Description of the Cause : Software error in the end-to-end communication monitoring of the affected components.

Identification of Any Warning : If a fault is detected, a warning message "Motor control error Stop vehicle in a safe place" is shown in the instrument cluster.

Involved Components :

Component Name 1 : Power Electronics

Component Description : Two pulse-controlled inverters mounted on each front and rear drive module (Power Electronics).

Component Part Number : NR

Supplier Identification :

Component Manufacturer

Name : Hitachi Astemo Europe GmbH

Address : Technopark IV, Lohstrasse 28
Schwaig-Oberding Foreign States 85445

Country : Germany

Chronology :

On March 22, 2021, Porsche launched a comprehensive software update for MY20 and MY21 Porsche Taycan vehicles. The update was made available to customers during dealer visits free of charge.

On May 05, 2021, after receiving initial reports of drivability issues on Taycan vehicle, Porsche revised its comprehensive software update to help eliminate the drivability concern. At time of this revision, Porsche did not believe that this presented a safety concern.

On May 17, 2021 NHTSA opened Preliminary Evaluation PE21-013. Porsche immediately began a review of available field information to better understand the performance of the vehicles in the field.

The review included field reports and warranty claims , which showed an increasing trend and the potential for loss of motive power in the subject vehicles.

Analysis of the related vehicle data revealed a potential loss of motive power, which could be caused by an internal software error in the Pulse-controlled inverter.

On June 23, 2021, Porsche determined a safety-related defect existed in the software of the Pulse-controlled inverter and decided to recall and reprogram the affected vehicles with a software update.

Description of Remedy :

Description of Remedy Program : Vehicle owners will be notified and asked to return their vehicle to an authorized Porsche dealer. The power electronics and the engine control unit will be reprogrammed with an updated software. The remedy will be performed at no cost to the owners.

Apart from this recall remedy, additional powertrain software will be updated to the latest specification.

We will not include a statement in the Part 577 owner notification concerning reimbursement for the cost of obtaining a pre-notification remedy as the subject vehicles are under warranty.

How Remedy Component Differs from Recalled Component : The power electronics and the engine control unit will be reprogrammed with an updated software.

Software-No.: 0012

Power electronics front axle 600A (Taycan Turbo and Turbo S):
9J1907123F

Power electronics front axle 300A: 9J1907124L (Predecessor
9J1907124P)

Power electronics rear axle: 9J1907123F

Identify How/When Recall Condition was Corrected in Production : Vehicles manufactured on or after June 25, 2021 are equipped with new software that helps prevent the subject condition from occurring.

Recall Schedule :

Description of Recall Schedule : Dealers and Owners will be notified on or before August 27, 2021

Planned Dealer Notification Date : AUG 27, 2021 - AUG 27, 2021

Planned Owner Notification Date : AUG 27, 2021 - AUG 27, 2021

* NR - Not Reported