

Porsche Cars North America One Porsche Drive Atlanta, GA 30354 January 14, 2022

Dr. Steven Cliff
Acting Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

RE: Petition for Exemption from Notification and Remedy Provisions of Motor Vehicle Safety Act for Inconsequential Non-Compliance with Bulb Check Requirements of FMVSS No. 126, 135, and 138

Dear Dr. Cliff:

Porsche has determined that certain Porsche Panamera vehicles did not fully meet the bulb check requirements of FMVSS 126, 135 and 138. Specifically, the subject vehicles do not meet the following requirements:

S5.7.2, "Telltale bulb check," of Federal Motor Vehicle Safety Standard (FMVSS) § 571.126, "Electronic stability control systems for light vehicles."

S5.5.2, "Function check," of FMVSS § 571.135, "Light vehicle brake systems."

S4.3.3, which pertains to the check of lamp function, of FMVSS § 571.138, "Tire pressure monitoring systems."

Porsche accordingly notified the National Highway Traffic Safety Administration (NHTSA) of the noncompliance pursuant to 49 C.F.R. Part 573. This petition seeks exemption from the notice and remedy requirements of the Motor Vehicle Safety Act, pursuant to 49 U.S.C. §§ 30118(d) and 30120(h), and 49 C.F.R. Part 556, because the noncompliance is inconsequential to motor vehicle safety.

The subject vehicles are equipped with multi-function displays for several systems, including the electronic stability control (ESC) system, the brake system, and the tire pressure monitoring system (TPMS). The telltale displays for these systems do not utilize light bulbs or lamps; rather, the subject vehicle displays utilize Thin-film-transistor (TFT) LCD technology. Because the telltale displays in the subject vehicles do not use light bulbs or lamps, the bulb check or lamp check requirements of the cited FMVSS would not fulfill the safety purpose for which these requirements were originally written, and this noncompliance will have an inconsequential impact on motor vehicle safety for three reasons.

First, and most significantly, despite the absence of the "bulb check" there is no adverse effect on the function of the warning telltale itself in the intended (warning) cases for any of the FMVSS-required telltales. In other words, even without bulb-check these displays continue to function when needed to alert the driver of vehicle system malfunctions. Therefore there is no safety relevance because in case of malfunction of the system (e.g. ESC, TPMS or brake wear) the corresponding light comes on.

Second, the "bulb check" requirements were originally developed in 1969 for vehicles that used light bulbs with filaments as the light source for the warning malfunction indicator. Filament light bulbs were "wear out" items subject to periodic failure and replacement. The filaments in the bulbs had a limited life span and were expected to fail routinely during the life of the vehicle. The bulb check was necessary to alert the driver of these expected bulb outages. LCD displays do not use filaments and have an expected life span that far exceeds the expected useful life of the vehicle. In other words, LCDs are not expected to fail, so the bulb check function is superfluous to safety on the subject vehicles.



Third, even in the event of an illumination failure of the subject displays, the nature of the LCD cluster would make the failure obvious to the driver, eliminating the need for a bulb check. For the affected systems, if there is a system malfunction the entire LCD display would go dark, leaving a substantial, and obvious portion of the instrument cluster dark. This darkened screen display would immediately alert the driver that there is an issue with the relevant system. Porsche believes that this type of functionality would convey the same information as the bulb check or function check: that the system is not operating correctly. In effect, the fact that a large section of the normally illuminated instrument cluster is dark would make a malfunction obvious. NHTSA itself has stated that the objective of a bulb check requirement is to provide drivers with a signal that the bulb is not functioning correctly: "the purpose of the check of lamp function is to alert drivers to problems with the bulb or the electrical system." Letter from A. Cooke, Chief Counsel, NHTSA, to R. Clarke, President, Truck Manufacturers Association (March 5, 2007). Porsche believes that there is either no impact or an inconsequential impact on safety because this issue does not prevent the warnings from illuminating upon system failure, and that even an extremely unlikely failure of a display to illuminate would certainly fulfill the purpose, of alerting drivers to a problem with indicator warning lights.

NHTSA also has recognized that these types of multi-function displays would not be expected to have the same functionality as traditional telltales and therefore may meet bulb check requirements in different ways. For example, in the final rule establishing the FMVSS 126 telltale bulb check requirement, NHTSA responded to comments that bulb check requirements are not appropriate for vehicle message/information centers which do not use bulbs and are illuminated whenever the vehicle is operating. See 72 Fed. Reg. 17236, 17278 (April 6, 2007). The commenters noted that if there were a problem with the ESC system, it would be readily apparent because the entire message/information center would be blank. Id. NHTSA responded that it "agrees with the commenters that a bulb check is not relevant or necessary to the type of display technology utilized for information/message centers. Presumably, if an information/message center experiences a problem analogous to one which would be found by a telltale's bulb check, the entire message center would be non-operational, a situation likely to be rapidly discovered by the driver." Id. at 17278-79. This is precisely the situation presented by the Porsche vehicles' displays.

For all of these reasons, Porsche respectfully requests that NHTSA grant this petition in accordance with 49 C.F.R. Part 556 on the basis that the noncompliance described above is inconsequential to motor vehicle safety, and exempt Porsche from the notification and remedy provisions of the Motor Vehicle Safety Act.

Sincerely,

Jim Moore

Manager of In-Use Vehicle Conformity

Porsche Cars North America, Inc.

#### OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

## 21V-973

**Manufacturer Name:** Porsche Cars North America, Inc.

NHTSA Recall No.: 21V-973

Manufacturer Recall No.: AMC5



#### **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: 4,720 Estimated percentage with defect: 100 %

#### **Vehicle Information:**

Vehicle 1: 2020-2021 Porsche Panamera

Vehicle Type: LIGHT VEHICLES

Body Style : 4-DOOR Power Train : GAS

Descriptive Information: Vehicles included in this notification were identified based on software version for

the instrument cluster.

Production Dates: NOV 03, 2020 - DEC 08, 2021

VIN Range 1 : Begin : NR End : NR Not sequential

## **Description of Noncompliance:**

Description of the The subject vehicles are equipped with a digital instrument cluster equipped

Noncompliance: with warning telltales.

All warning telltales operate as designed and activate in the event of a malfunction in accordance with applicable FMVSS. However, due to an instrument cluster software error that has since been corrected, the digital telltales do not illuminate during the "lamp check function" when the ignition is

in the "ON" position.

FMVSS 1: 126 - Electronic stability control systems

FMVSS 2: 135 - Light vehicle brake systems

Description of the Safety Risk: All warning telltales operate as designed and activate in the event of a

malfunction in accordance with applicable FMVSS. However, due to an instrument cluster software error that has since been corrected, the digital telltales do not illuminate during the "lamp check function" when the ignition

is in the "ON" position. Porsche believes this noncompliance is

inconsequential.

Description of the Cause: Instrument cluster software programming error.

Identification of Any Warning N/A that can Occur :

## **Involved Components:**

Component Name 1: Instrument Cluster

Component Description: Display Instrument cluster for vehicles

Component Part Number: 971.920.9XX.AL

Component Name 2: Instrument Cluster

Component Description: Display Instrument cluster for vehicles

Component Part Number: 973.920.9XX.AL

## **Supplier Identification:**

#### **Component Manufacturer**

Name : Visteon Portuguesa Ltd. Address : Estrada Nacional 252

Km12 Palmela Foreign States 2951-503

Country: Portugal

#### **Chronology:**

In October 2021, Porsche became aware of an instrument cluster software error that affected the "bulb check" function but did not affect the operation of the warning telltale when it is designed to activate.

Upon identifying the issue, Porsche carefully analyzed if the absence of a bulb check was in conflict with the corresponding regulations. In parallel, Porsche investigated affected software versions, part numbers and vehicle populations.

On Dec. 8, 2021, Porsche determined that the subject vehicles do not comply with the "bulb check" requirements of FMVSS No. S5.3.4 of FMVSS 126; S5.5.2 of FMVSS No. 135; and S4.3.3 of FMVSS No. 138. Porsche intends to file a petition for inconsequential noncompliance.

## **Description of Remedy:**

Description of Remedy Program: Porsche plans to file a petition for inconsequential noncompliance (Part

556) within 30 days of this notice.

How Remedy Component Differs N/A

from Recalled Component:

Identify How/When Recall Condition Revised instrument cluster software incorporates appropriate "bulb

was Corrected in Production: check" function.

#### **Recall Schedule:**

Description of Recall Schedule: Porsche plans to file a petition for inconsequential noncompliance and

consequently is not planning owner notification.

Planned Dealer Notification Date : NR - NR Planned Owner Notification Date : NR - NR

<sup>\*</sup> NR - Not Reported