

Technical Information

Service

34/16 ENU 9638

9

Eliminating Symptoms in Body Interior: Replacing Front Camera (Front Camera Functions Fail/SY3416)

General information

Model Line: Panamera (970)

Macan (95B) Cayenne (92A)

Model Year: As of 2012 up to 2017

Equipment: Panamera (970) with I-no.: 458, 631, 632 or 852

Macan (95B) with I-no.: 7YO, 7Y2, 7Y3, 8G0 or 8G2

Cayenne (92A) with I-no.: 7YO, 7Y6, 7Y7, 8G0, 8G1, 8G2, 9Q1 or 9Q6

Subject: Front camera

Information: The customer complains that certain functions of the front camera are not available at times:

Lane Change Assist not available

Porsche Dynamic Light System not available

• Traffic sign recognition not available

Cause: Image sensor fault in the front camera. Insufficient contrast causes certain functions to fail at times.

Date of Introduction:

As of July 20, 2016, the reworked front camera is installed during production.

Remedial Action:

Check front camera and replace it if necessary.

Tools: Flashlight

9900 - PIWIS Tester III

Work Procedure:



Information

The lense in the front camera area must be clean in order to perform the check described below. Heavy soiling must be removed before taking measurements.

Service

9638 ENU **34/16**

Technical Information

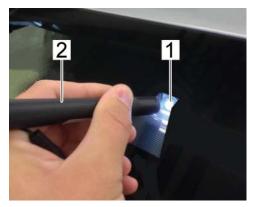
- 1 **9900 PIWIS Tester III** must be connected to the vehicle and then switched on.
- 2 Select "Front camera" control unit in the 'Control unit overview' menu and press •F12" to confirm your selection.
- 3 Select the "Camera information" function in the "Actual values/input signals" menu and press F12" to confirm your selection.



Information

The help of another person is required.

4 Shine the flashlight ⇒ Shining flashlight on front camera -2- directly at the lens on the front camera ⇒ Shining flashlight on front camera -1-.



Shining flashlight on front camera



Information

The value always switches between minimum and maximum, depending on the camera.

5 While the front camera is lit up, read off the image brightness value on the PIWIS Tester ⇒ Reading off brightness value.

34/16 ENU 9638



Reading off brightness value

- 6 Read off at least 10 values, write them down and work out the mean value.
 - If the mean brightness value is **less than 70**, the **front camera is OK**.
 - If the mean brightness value is **greater than 70**, the **front camera is faulty** and must be replaced. ⇒ *Workshop Manual '963819 Removing and installing front camera'*

Example:

	Front camera OK	Front camera not OK			
1st value	43	202			
2nd value	67	197			
3rd value	42	173			
4th value	43	180			
5th value	66	181			
6th value	42	164			
7th value	65	162			
8th value	66	170			
9th value	44	166			
10th value	42	177			
Mean value	52	177,2			

7 Switch off the PIWIS Tester and disconnect it from the vehicle.

Invoicing: The work involved – depending on which measure is performed – is invoiced under the labor operation:

APOS	Labor operation	I No.
96385500	Replacing front camera	
96380100	Checking front camera	

9

Service

9638 ENU **34/16**

Technical Information

For invoicing and documentation using PQIS, enter the following coding:

Location (FES5)	96380	Front camera
Damage type (SA4)	3025	Blind

References:	For replacing front camera	see → Workshon Manu	ial '963819 Removini	g and installing front camera
NOIGIGIOGS.	i di repiacing mont camera	, 300 - Workshop Manu	iai 7000 i 7 Noilloviili	q and mistaming none carriera

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safety. If a particular condition is described, do not assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your authorized Porsche Dealer for the latest information about whether a particular technical bulletin applies to your vehicle. Part numbers listed in these bulletins are for reference only. Always check with your authorized Porsche dealer to verify the current and correct part numbers. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

Dealership	Service Manager	 Shop Foreman	 Service Technician	 	
Distribution Routing	Asst. Manager	 Warranty Admin.	 Service Technician	 	

Dr. Ing. h.c. F. Porsche AG is the owner of numerous trademarks, both registered and unregistered, including without limitation the Porsche Crest®, Porsche®, Boxster®, Carrera®, Cayenne®, Cayman®, Macan®, Panamera®, Speedster®, Spyder®, 918 Spyder®, Tiptronic®, VarioCam®, PCM®, PDM®, 911®, RS®, 4S®, FOUR, UNCOMPROMISED®, and the model numbers and the distinctive shapes of the Porsche automobiles such as, the federally registered 911 and Boxster automobiles. The third party trademarks contained herein are the properties of their respective owners. Porsche Cars North America, Inc. believes the specifications to be correct at the time of printing. Specifications, performance standards, standard equipment, options, and other elements shown are subject to change without notice. Some options may be unavailable when a car is built. Some vehicles may be shown with non-U.S. equipment. The information contained herein is for internal authorized Porsche dealer use only and cannot be copied or distributed. Porsche recommends seat belt usage and observance of traffic laws at all times.

Dec 13, 2016 Page 4 of 4