

**Black LED Headlights incl. Porsche Dynamic Light System Plus (I-no. XEY)**

Concern: **Retrofitting**

Model Year: **As of 2017**

Restriction: **Only** for vehicles with LED headlights incl. Porsche Dynamic Light System Plus (I-no. 602).



Information: The operation and design of the black LED headlights is the same as that of the LED headlights including Porsche Dynamic Light System Plus. Inner components and paintwork are in dark chrome metallic.

Parts Info: **991.044.902.02** ⇒ LED headlights, USA, set

## Parts List:



Figure 2 RoW Version Shown

---	1 x	LED headlight, black, left, USA (XEY)
---	1 x	LED headlight, black, right, USA (XEY)

Tools: **9900 - PIWIS Tester 3**

## Work Procedure:

**Information**

Some of the repair illustrations show only one side of the vehicle. Naturally, some steps also have to be performed on the opposite side of the vehicle as well. These must be carried out as a mirror image of the steps shown.

## 1 Preparatory work

- 1.1 Connect a battery charger. ⇒ *Workshop Manual '2X00IN Battery trickle charging'*
- 1.2 Remove front apron. ⇒ *Workshop Manual '631519 Removing and installing front apron'*
- 1.3 Remove headlight. ⇒ *Workshop Manual '941519 Removing and installing headlights'*

**Information**

Always comply with the regulations for handling ESD-sensitive components!

- Assembly work must only be carried out if the technician is wearing Porsche approved work clothes and shoes.
- The new part must only be removed from the ESD (electrostatic discharge) protective packaging just before installation and at the position at which the part is to be installed.
- Never touch the electric pins and plug contacts.

2 Convert headlights.

2.1 Remove light adjustment control unit ⇒ *Figure 3-2-* from the standard headlight and install it on the new headlight. ⇒ *Workshop Manual '945719 Removing and installing control unit for light adjustment'*

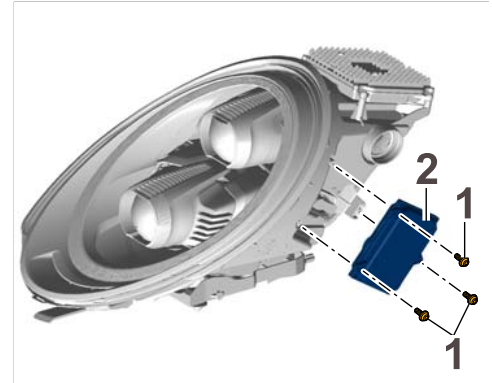


Figure 3

2.2 Convert LED module ⇒ *Figure 4.*

2.2.1 Remove LED module fan and LED module fan holder from the standard headlight. ⇒ *Workshop Manual '941519 Removing and installing LED module fan'*

2.2.2 Remove LED module from the standard headlight and install it in the new headlight. ⇒ *Workshop Manual '942419 Removing and installing LED module'*

2.2.3 Install LED module fan and LED module fan holder in the new headlight. ⇒ *Workshop Manual '941519 Removing and installing LED module fan'*



Figure 4

2.3 Remove LED module control unit from the standard headlight.

2.3.1 Unscrew screws ⇒ *Figure 5-1-*.

2.3.2 Carefully disconnect LED module control unit ⇒ *Figure 5-2-* from the headlight.

2.4 Fit LED module control unit on the new headlight.

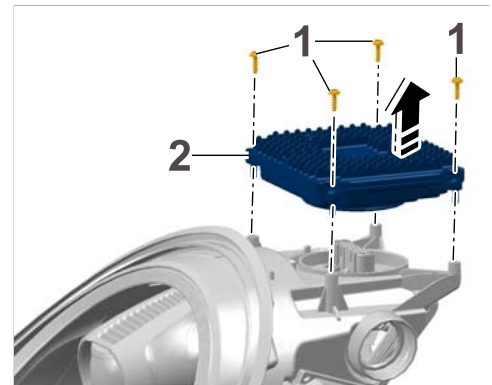


Figure 5

- 2.4.1 Check that the seal ⇒ *Figure 6 -3-* is fitted correctly on the LED module control unit ⇒ *Figure 6 -2-*.
- 2.4.2 Carefully insert LED module control unit ⇒ *Figure 6 -2-* into the headlight.
- 2.4.3 Screw in and tighten screws ⇒ *Figure 6 -1-*.

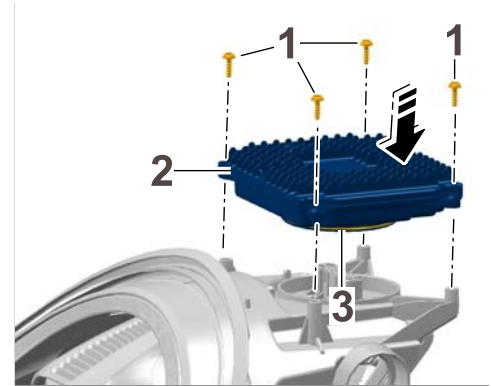


Figure 6

### 3 Concluding work

- 3.1 Install headlight. ⇒ *Workshop Manual '941519 Removing and installing headlights'*

Install front apron. ⇒ *Workshop Manual '631519 Removing and installing front apron'*

## NOTICE

### Voltage drop

- Risk of irreparable damage to control unit
  - Risk of damage to control unit
  - Fault entries in the control unit
  - Coding in the control unit is aborted
  - Malfunctions in control unit, even during programming
- ⇒ Prior to disconnecting the control unit, switch off the ignition and remove the ignition key.
- ⇒ Ensure that the power supply is not interrupted during programming.
- ⇒ Connect battery charger/power supply suitable for AGM Type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V.



### Information

The **9818 - PIWIS Tester 2** instructions take precedence since the description may be different with later Tester releases.

The procedure described here has been structured in general terms; different text or additions may appear on the **9818 - PIWIS Tester 2**.

### 4 Code headlights.

- 4.1 **9900 - PIWIS Tester 3**
- 4.2 Select vehicle type. PIWIS Tester II Diagnostics starts.
- 4.3 Update vehicle data.

- 4.3.1 **Additional menu** must now be selected by pressing •F7" . Press •F11" to confirm the question "Create vehicle analysis log (VAL)?".
- 4.3.2 Select the **Maintenance of vehicle data** function. Press •F12" until **X numbers** appears in the Value group column.
- 4.3.3 Select **KEY - LED headlights, darkened + dynamic cornering light** in the Coding value column. When you touch the Installed cell, a tick appears.  
Press •F12" until **M numbers** appears in the Value group column.  
Select **602 - LED headlights + dynamic cornering light** in the Coding value column. When you touch the Installed cell, the tick disappears.  
Press •F12" to continue.
- 4.3.4 A table showing all selected coding values appears. Press •F8" to write values.  
Wait until the message **Generation of vehicle data is complete** appears.
- 4.3.5 Press •F12" to switch to Report management. Press •F10" to open the log and check whether the vehicle equipment **KEY - LED headlights, darkened + dynamic cornering light** is entered.  
Check that the vehicle equipment "602 - LED headlights + dynamic cornering light" is no longer entered. Close the log.
- 4.4 Headlight start-up
  - 4.4.1 Select the **Headlights, left/central** control unit.  
Switch to the **Maintenance/repairs** menu.
  - 4.4.2 Select the **Headlight start-up** function. Press •F12" to continue.  
Follow the instructions on the PIWIS Tester until the message **Start-up completed successfully** appears. Press •F12" to continue.  
Switch to the **Overview** menu. Press •F11" to go back.
- 4.5 Read out the fault memories of all systems, work through any existing faults and erase the fault memories. ⇒ *Workshop Manual '033500 Fault memory for on-board diagnosis'*
- 4.6 Switch off ignition and disconnect **9900 - PIWIS Tester 3**.
- 5 Adjust main headlights. ⇒ *Workshop Manual '941519 Removing and installing headlights'*
- 6 Disconnect battery charger. ⇒ *Workshop Manual '2X00IN Battery trickle charging'*

94152341:      Retrofitting black LED headlights      Labor time: **226 TU**  
 Includes:      Removing and installing headlights and front apron, adjusting  
    headlights

**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 safely. 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.

© Porsche Cars North America, Inc.

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

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®, PDK®, 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.

Printed in the USA