

**GT sports steering wheel including multi-function and steering wheel heating**

Situation: **Retrofitting**

Model Year: **As of 2017**

Note The features of the particularly sporty GT sports steering wheels in leather (I-no. 858) or Alcantara (XLL) include:

- Steering wheel diameter: 360 mm
- In conjunction with PDK: Gearshift paddles for changing gear manually
- Including multi-function operation and steering wheel heating (489)



Part No.:

**991.044.400.22**

Vehicles with manual transmission (487)

⇒ GT sports steering wheel, Alcantara (XLL)

**991.044.400.23**

⇒ GT sports steering wheel, Alcantara (XLL), Sport Chrono (QR4/QR5)

**991.044.400.30 FFF<sup>1</sup>**

⇒ GT sports steering wheel, leather (858)

**991.044.400.31 FFF<sup>1</sup>**

⇒ GT sports steering wheel, leather (858), Sport Chrono (QR4/QR5)

Vehicles with PDK (250)

**991.044.400.20**

⇒ GT sports steering wheel, Alcantara (XLL)

**991.044.400.21**

⇒ GT sports steering wheel, Alcantara (XLL), Sport Chrono (QR4/QR5)

**991.044.400.32 FFF<sup>1</sup>**

⇒ GT sports steering wheel, leather (858)

**991.044.400.33 FFF<sup>1</sup>**

⇒ GT sports steering wheel, leather (858), Sport Chrono (QR4/QR5)

<sup>1</sup> The colour code can be found in the Porsche Electronic Parts Catalogue (PET).

**Only** for vehicles without multi-function steering wheel and leather steering wheel trim (XNS).



### Information

For vehicles with leather steering column casing, please use one of the part numbers listed below when placing your order!

<b>991.552.983.04 FFF<sup>2</sup></b>	1 x	Lower steering column casing with mechanical reach/height adjustment (647/655) with cruise control (454)/Automatic Distance Control (ADC) (456)
<b>991.552.983.05 FFF<sup>2</sup></b>	1 x	Lower steering column casing with electric reach/height adjustment (648/656) with cruise control (454)/Automatic Distance Control (ADC) (456)
<b>991.552.983.06 FFF<sup>2</sup></b>	1 x	Lower steering column casing with mechanical reach/height adjustment (647/655) <b>without</b> cruise control/Automatic Distance Control (ADC)
<b>991.552.983.07 FFF<sup>2</sup></b>	1 x	Lower steering column casing with electric reach/height adjustment (648/656) <b>without</b> cruise control/Automatic Distance Control (ADC)

<sup>2</sup> Special procurement as for CT spare parts orders. Order leather colour and stitching in accordance with vehicle equipment.

Information on ordering: For vehicles **without** the optional equipment multi-function operation + heated steering wheel (489), the steering wheel electronics control unit and steering-column switch must also be ordered.

9A7.953.568.11	1 x	Steering wheel electronics control unit
991.552.675.00.1E0	1 x	Cover
see table	1 x	Steering-column switch

installed steering-column switch (with on-board computer stalk) <b>without I-no. 489</b> (multi-function operation and steering wheel heating)		required steering-column switch (without on-board computer stalk) <b>with I-no. 489</b>
Part No.	Vehicle equipment	Part No.
991.613.011.50	(426) without rear wiper	991.613.013.50
970.613.011.50	(426) without rear wiper (454) cruise control	970.613.013.50
991.613.043.50	(288) headlight cleaning system (426) without rear wiper	991.613.045.50
970.613.043.50	(288) headlight cleaning system (426) without rear wiper (454) cruise control	970.613.045.50

991.613.019.50	(426) without rear wiper (QH1) voice control	991.613.021.50
970.613.019.50	(426) without rear wiper (454) cruise control (QH1) voice control	970.613.021.50
991.613.051.50	(288) headlight cleaning system (426) without rear wiper (QH1) voice control	991.613.053.50
970.613.051.50	(288) headlight cleaning system (426) without rear wiper (454) cruise control (QH1) voice control	970.613.053.50
991.613.027.50	(425) rear wiper	991.613.029.50
970.613.027.50	(425) rear wiper (454) cruise control	970.613.029.50
991.613.059.50	(288) headlight cleaning system (425) rear wiper	991.613.061.50
970.613.059.50	(288) headlight cleaning system (425) rear wiper (454) cruise control	970.613.061.50
991.613.035.50	(425) rear wiper (QH1) voice control	991.613.037.50
970.613.035.50	(425) rear wiper (454) cruise control (QH1) voice control	970.613.037.50
991.613.067.50	(288) headlight cleaning system (425) rear wiper (QH1) voice control	991.613.069.50
970.613.067.50	(288) headlight cleaning system (425) rear wiper (454) cruise control (QH1) voice control	970.613.069.50
970.613.015.50	(426) without rear wiper (456) Automatic Distance Control (ADC)	970.613.017.50
970.613.047.50	(288) headlight cleaning system (426) without rear wiper (456) Automatic Distance Control (ADC)	970.613.049.50
970.613.023.50	(426) without rear wiper (456) Automatic Distance Control (ADC) (QH1) voice control	970.613.025.50

970.613.055.50	(288) headlight cleaning system (426) without rear wiper (456) Automatic Distance Control (ADC) (QH1) voice control	970.613.057.50
970.613.031.50	(425) rear wiper (456) Automatic Distance Control (ADC)	970.613.033.50
970.613.063.50	(288) headlight cleaning system (425) rear wiper (456) Automatic Distance Control (ADC)	970.613.065.50
970.613.039.50	(425) rear wiper (456) Automatic Distance Control (ADC) (QH1) voice control	970.613.041.50
970.613.071.50	(288) headlight cleaning system (425) rear wiper (456) Automatic Distance Control (ADC) (QH1) voice control	970.613.073.50

Parts list:

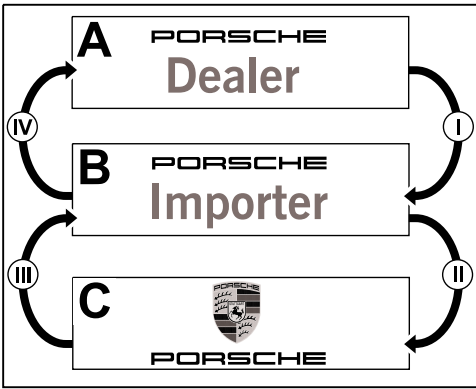


Figure 2

— — —	1 x	GT sports steering wheel, leather ⇒ Figure 2-1-
N .910.207.01	1 x	Screw, M18 x 1.5 x 26 ⇒ Figure 2-2-

Activation  
code:**Heated steering wheel, multi-function steering wheel**

You can request the activation codes using the ordering process shown in the table. The activation code for cruise control is shown in the vehicle code information.

<p>I Requesting enabling codes. (Directly via the Porsche Request Management System (PRMS) if necessary)</p> <p>The following details are absolutely essential:</p> <ul style="list-style-type: none"> <li>• Part number of the retrofit kit</li> <li>• Vehicle identification number (VIN) of the vehicle to be converted</li> <li>• Order number used for ordering parts</li> </ul> <p><b>IMPORTANT:</b> If you do not have the necessary data or if the data you have is incorrect, Porsche AG will <b>NOT</b> be able to generate the enabling code.</p>	 <p><i>Figure 3</i></p> <p><b>A</b> – Porsche dealer  <b>B</b> – Porsche importer  <b>C</b> – Porsche AG</p>
<p>II Checking and forwarding data via PRMS.</p>	
<p>III Generating activation codes and feedback via PRMS.</p>	
<p>IV Forwarding feedback (also via PRMS if possible).</p> <p>The activation code generated by Porsche AG can now be viewed in the “Vehicle information” menu under PIWIS information system in the Porsche Partner Network (PPN).</p>	

Tools: **9900 - PIWIS Tester 3**

Notes: Observe the relevant legal regulations in the various countries!



**Information**

The specifications provided under ⇒ *Workshop Manual '6X00IN Handling and replacing airbag and seat-belt pretensioner units'* must be followed!

**Within Germany:** Explosives legislation – SprengG:

The removed steering wheel with installed airbag and an airbag unit that may have been removed must never be handed over to private individuals. It is also prohibited to hand these over to people/companies that do not comply with the requirements as per the Explosives Act (SprengG), Explosives Storage Directive 240 as well as the corresponding ordinances of SprengG.

In accordance with § 14 of the Explosives Act (SprengG), the handling of airbag units is notifiable to the authorities. They may only be stored in compliance with the Explosives Storage Directive 240 “Storage of airbag and seat belt-pretension units”; always observe the maximum quantities regarding net explosive mass (NEM) specified therein. Employees working with airbag units must possess the specific specialist skills according to § 4 subsection 3 of the First Ordinance of SprengG. Removed airbag units must be stored, transported and disposed off in accordance with the stipulations in the Explosives Act, the Explosives Storage Directive 240 as well as the corresponding ordinances of SprengG.

**For European Union (EU) member states:**

The GT sports steering wheel described here is contained in the following EU general certifications for 911 vehicles and has been tested and approved for use in the Porsche standard-production vehicles specified below in accordance with ECE Regulation No. 12 Amendment No. 04:

- 991:	e13*2007/46*1187*12
- 991 Turbo:	e13*2007/46*1188*04

**Applicable only in Germany:**

Approval of installation or fitting in accordance with § 19 or § 21 StVZO (German Road Traffic Regulations) and revision of the vehicle documents is not necessary since the GT sports steering wheels specified above were approved with the vehicle at the factory.

An excerpt on this topic can be retrieved from the EU type approval system in the PIWIS information system. This excerpt must be used by the respective Porsche Centre to confirm that the components were fitted in accordance with regulations, and must be handed over to the customer. The excerpt confirming that components were installed according to regulations must be kept in the vehicle.

- Fitting:
- 1 Disconnect the battery. ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*
  - 2 Remove driver's airbag unit. ⇒ *Workshop Manual '695819 Removing and installing driver's airbag unit'*
  - 3 Remove standard steering wheel. ⇒ *Workshop Manual '481019 Removing and installing steering wheel'*
  - 4 **Only** for vehicles without multi-function steering wheel.
    - 4.1 Remove steering column casing. ⇒ *Workshop Manual '481319 Removing and installing steering column casing'*
    - 4.2 Remove steering-column switch. ⇒ *Workshop Manual '945019 Removing and installing steering-column switch'*
    - 4.3 Install new steering wheel electronics control unit on the new steering-column switch. ⇒ *Workshop Manual '916219 Removing and installing control unit for steering wheel electronics'*
    - 4.4 Install new steering-column switch. ⇒ *Workshop Manual '945019 Removing and installing steering-column switch'*

- 4.5 Slide cover into the steering column casing ⇒ *Figure 4 -arrow-*.



**Information**

On vehicles with leather steering wheel trim (XNS), the steering wheel trim must be replaced.

- 4.6 Install steering column casing. ⇒ *Workshop Manual '481319 Removing and installing trim panel'*



Figure 4

- 5 Install GT sports steering wheel. ⇒ *Workshop Manual '481019 Removing and installing steering wheel'*
- 6 Install driver's airbag unit. ⇒ *Workshop Manual '695819 Removing and installing driver's airbag unit'*
- 7 Connect the battery. ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*

**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 ignition and remove ignition key.
- ⇒ Ensure that the power supply is not interrupted during programming.
- ⇒ Connect a battery charger with a current rating of at least Nominal value 40 A to the vehicle battery.





**Information**

The **9900 - PIWIS Tester 3** 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 additional information may appear in **9900 - PIWIS Tester 3**.

- 8 Code control units.
- 8.1 Connect a battery charger. ⇒ *Workshop Manual '2X00IN Battery trickle charging'*

- 8.2 **9900 - PIWIS Tester 3** must be connected before switching on the ignition.
- 8.3 **Only** for vehicles with new steering-column switch and steering wheel electronics control unit.  
Write basic coding from PCM.
- 8.3.1 Select **Steering wheel electronics** control unit. Press **•F11** to confirm the question "Create vehicle analysis log (VAL)?".  
Switch to the **Maintenance/repairs** menu.
- 8.3.2 Select **Control unit replacement**. Press **•F12** to continue.
- 8.3.3 Select **Write data** mode. Press **•F12** to continue.  
Press **•F8** to write basic information.  
Wait until the message **Coding has been written successfully** appears.  
Press **•F12** to continue.
- 8.3.4 Press **•F11** to go back. Switch to the **Overview** menu.
- 8.4 Check the chassis number in the steering wheel electronics control unit.
- 8.4.1 Select **Steering wheel electronics** control unit.
- 8.4.2 Switch to the **Extended identification** menu. Check the chassis number and change it if necessary.
- 8.5 Maintenance of vehicle data
- 8.5.1 **Additional menu** must now be selected by pressing **•F7** .
-  **Information**  
Steering wheels are listed either in the value group X numbers or M numbers. The multi-function sports steering wheel in Carbon (I-no. XHW) is deleted from the vehicle equipment as an example.
- 8.5.2 Select the **Maintenance of vehicle data** function. Press **•F12** until **X numbers** appears in the Value group column.
- 8.5.3 Select **XHW – MF sports steering wheel, Carbon** in the Coding value column.  
Touch the **Installed** cell – the tick after the value **XHW – MF steering wheel, Carbon** disappears.  
Press **•F8** to save the value. The message **Modified values have been buffered** appears.
-  **Information**  
If the GT sports steering wheel in Alcantara (XLL) is retrofitted, the vehicle data is updated in the value group X.
- 8.5.4 Press **•F12** until **M numbers** appears in the Value group column.



- Select **858 – GT sports steering wheel, leather** in the Coding value column.  
Touch the **Installed** cell – a tick appears next to the value **858 – GT sports steering wheel, leather**.  
Press **•F8"** to save the value. The message **Modified values have been buffered** appears.
- 8.5.5 Select **489 – MF operation and heated steering wheel** in the Coding value column if necessary.  
Touch the **Installed** cell – a tick appears next to the value **489 – MF operation + heated steering wheel**.  
Press **•F8"** to save the value. The message **Modified values have been buffered** appears.
- 8.5.6 A table containing the values to be changed appears.  
Save the values by pressing **•F8"** .  
Wait until the message **Generation of vehicle data is complete.....** appears.
- 8.5.7 Press **•F12"** to switch to Report management. Open the log by pressing **•F10"** and check that the following vehicle equipment has been entered:
- **e.g. – GT sports steering wheel, leather (858)**
  - **MF operation + heated steering wheel (489)**
- Check that the vehicle equipment **MF sports steering wheel, Carbon (XHV)**, for example, is no longer entered.  
Close the log.
- 8.6 Adapt coding.
- 8.6.1 Press **•F11"** to return to the list of control units.  
Select all control units by pressing **•Ctrl A"** .
- 8.6.2 Switch to the **Codings/adaptations** menu.  
Select **Automatic coding** mode. Press **•F12"** to continue.  
Wait until the message **Coding has been completed successfully** appears.  
Press **•F12"** to continue.
- 8.7 **Only** for vehicles with new steering-column switch and steering wheel electronics control unit:  
Enable functions.
- 8.7.1 Switch to the **Maintenance/repairs** menu. Select the **Function enable** function.
- 8.7.2 Enable the **Heated steering wheel and multi-function steering wheel** function.  
Enter the activation codes and confirm by touching the Status cell.
- 8.7.3 Enable the **Cruise control** function if necessary.  
Enter the activation code and confirm by touching the Status cell.

- 8.7.4 Press •F8" to execute. Wait until the message **Enable was successful** appears. Press •F12" to continue.
- 8.8 Calibrate steering-angle sensor. ⇒ *Workshop Manual '456005 Initialising and calibrating PSM steering-angle sensor'*
- 8.9 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'*
- 8.10 Switch off ignition and disconnect **9900 - PIWIS Tester 3**.
- 8.11 Disconnect the battery charger. ⇒ *Workshop Manual '2X00IN Battery trickle charging'*

48103100:	Converting steering wheel Includes: Removing and installing steering wheel and replacing steering-column switch and steering wheel electronics control unit, updating vehicle data, enabling multi-function steering wheel, heated steering wheel and cruise control, erasing fault memory	Labor time: <b>120 TU</b>
48101900:	Removing and installing steering wheel Includes: For vehicles with multi-function operation and heated steering wheel (I-no. 489): removing standard steering wheel, installing new steering wheel Without: Updating vehicle data, erasing fault memory	Labor time: <b>38 TU</b>
03350050:	On-board diagnosis (OBD)	Labor time: <b>14 TU</b>