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WM 440519 Removing and installing wheel

Technical values

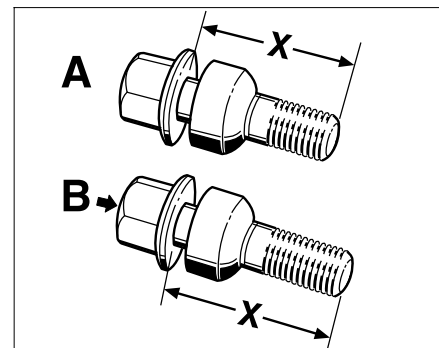
Location	Description	Type	Basic value	Tolerance 1	Tolerance 2
Wheel mounting	911 Carrera/911 Turbo	Screw length	approx. 45 mm		
Wheel mounting	911 GT3/GT3 RS/GT2	Screw length	approx. 50 mm		

Information

Wheel mounting

The wheels on the 911 Carrera (997) and 911 Turbo (997) are secured using the same standard wheel bolts **-A-** (M14 x 1.5) as are used on the 911 Carrera (996). Length: dimension **-X-** → **Screw length: approx. 45 mm.**

The longer wheel bolts **-B-** dimension **-X-** → **Screw length: approx. 50 mm** are used on the 911 GT3/GT3 RS/GT2 (997). Designation with GT or red colour **-arrow-**. These wheel bolts can also be recognised by the red spherical cap ring.



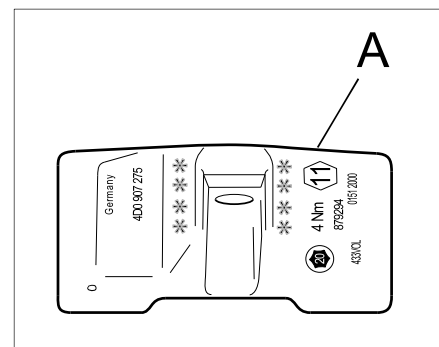
Wheel bolt length

Wheels with sensors for TPM

Before changing wheels (e.g. changing from summer to winter wheels), check that the wheels are compatible with the vehicle's tyre pressure monitoring (TPM) system.

The TPM system **as of 2009 model** (2nd generation TPM) is essentially different from the TPM system **up to 2008 model** (1st generation TPM).

1st generation TPM wheel electronics **-A-** are not compatible with 2nd generation TPM wheel electronics.



Wheel electronics

If wheels with 1st generation TPM wheel electronics are fitted on a vehicle with 2nd generation TPM wheel electronics (or vice versa), the TPM system will not recognise the wheel electronics. The TPM system is not active and a corresponding warning message appears in the instrument cluster. In addition, the wheel electronics are reported as defective in the fault memory of the TPM control unit.

Refer to the Technical Information for more information and an overview. → 443200 Tyre Pressure Monitoring (TPM) system not active after changing wheels (17/08).

Removing wheel

Removing wheel



Information

- Use suitable commercially available tools (wrench size 19 mm)! Never use an impact bolter to tighten the wheel bolts.
- Before the wheel is placed on the wheel hub, re-grease the centring surface of the wheel hub (if required) as necessary with a very thin coat of Optimoly TA (aluminium paste).
- The wheel bolt consists of two parts that are permanently joined together. Other wheel bolts must not be used.

NOTICE

Removing/fitting wheels

- **Risk of damage to (ceramic) brake discs**

- Use two assembly pins when removing and fitting the wheel.
- Carefully guide the wheel towards the wheel hub, thereby preventing any heavy impact on the (ceramic) brake disc.

NOTICE

Removing/fitting wheels

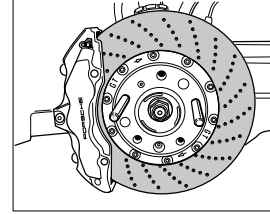
- **Risk of damage to (ceramic) brake discs**

- Use two assembly pins when removing and fitting the wheel.
- Carefully guide the wheel towards the wheel hub, thereby preventing any heavy impact on the (ceramic) brake disc.



Information

- The assembly pins for removing / mounting the wheel for vehicles with PCCB can be ordered separately as a spare part. Part No.: 999 571 074 30.
- In the case of vehicles with PCCB (Porsche Ceramic Composite Brake), screw the two assembly aids (assembly pins), instead of two wheel bolts, into the wheel hub before removing the wheel. Only then remove the three remaining wheel bolts and remove the wheel carefully, without touching the brake discs.



Assembly pins for vehicles with PCCB brakes

Installing wheel

Installing wheel



Information

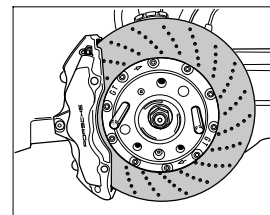
- Use suitable commercially available tools (wrench size 19 mm)! Never use an impact bolter to tighten the wheel bolts.
- Before the wheel is placed on the wheel hub, re-grease the centring surface of the wheel hub (if required) as necessary with a very thin coat of Optimoly TA (aluminium paste).
- The wheel bolt consists of two parts that are permanently joined together. Other wheel bolts must not be used.



Information

- The assembly pins for removing / mounting the wheel for vehicles with PCCB can be ordered separately as a spare part. Part No.: 999 571 074 30.
1. In the case of vehicles with PCCB (Porsche Ceramic Composite Brake), screw the two assembly aids (assembly pins) into the wheel hub before mounting the wheel.

Wheels with sensors for TPM: Before changing wheels (e.g. changing from summer to winter wheels), check that the wheels are compatible with the vehicle's tyre pressure monitoring (TPM) system.

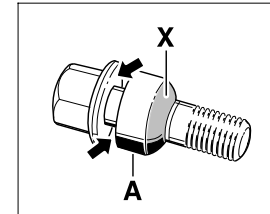


Assembly pins for vehicles with PCCB brakes

2. In the event of heavy soiling, clean the wheel bolts and the concavities in the wheel with a lint-free cloth.

- Always apply a thin coat of Optimoly TA (aluminium paste) on the thread of the wheel bolts, on the shank and between the bolt head bearing surface and spherical cap ring (under the head) **-arrows-**. The spherical cap bearing surface **-X-** of the wheel bolts that face the wheel must **not be greased**.

- A-** - Spherical cap ring (permanently connected to the wheel bolt)
- X-** - Spherical cap bearing surface facing the wheel (do not grease)



Wheel bolt



Information

- *Rework on wheel bolts is impermissible.*

- Always replace damaged wheel bolts.

This damage includes mechanical damage to the thread, the spherical cap and damage resulting from seizure of the bolt head bearing surface and spherical cap ring. It must be possible to rotate the spherical cap ring on the bolt shank and to move it in axial direction.



Information

- **Always observe the specified tightening torque.** The tightening torque for securing wheels is contained in the document 4001TW. → 4001TW Tightening torques for front axle

- Screw in wheel bolts by hand and then tighten evenly. Start at the top when tightening.
 - Silver wheel bolts (up to model year 2011) = 130 Nm (96 ftlb.). 160 Nm (118 ftlb.) also permitted retroactively.
 - Silver wheel bolts as of model year 2012 = 160 Nm (118 ftlb.).
 - **Black wheel bolts = 160 Nm (118 ftlb.)**

997110, 997111, 997120, 997121, 997140, 997141, 997160, 997161, 997170, 997310, 997311, 997320, 997321, 997360, 997361, 997370, 997410, 997411, 997420, 997421, 997430, 997431, 997450, 997451, 997460, 997461, 997470, 997471, 997510, 997511, 997520, 997521, 997560, 997561, 997610, 997611, 997620, 997621, 997630, 997631, 997650, 997651, 997660, 997661, 997670, 997671, 997720, 997721, 477012

Model year as of 2005

C00, C02, C05, C06, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C39, C41, C45, C46, C96, C97, C98, C99