

Manufacturer's Certificate

911 (997)

75/21 ENU 4440

4

Approved Summer Tires, Wheels and Spacers (75/21)

Revision: This bulletin replaces bulletin Group 4 06/10, dated May 26, 2011.

Model Year: As of 2009

Vehicle Type: 911 Carrera 4 (997) / 911 Carrera 4S (997) / 911 Carrera 4 Cabrio (997) / 911 Carrera 4S Cabrio (997) / 911 Targa 4 (997) / 911 Targa 4S (997)



Driving with different tires (mixed tires)

- Uncontrollable vehicle handling
- ⇒ Only use tires of the same make and type, with the same speed index and the same specification code (NO, N1, N2, ...) on a vehicle.

Makes/Types:

Tire size	Tire make and type / Label value (Link to EU database)	Comment
235/40 ZR 18 (91Y) and 295/35 ZR 18 (99Y)	Bridgestone Potenza RE050A N1 (Inside/Outside) Label value currently not available	Only for 911 Carrera 4 and 911 Targa 4
	Michelin Pilot Sport 2 N4 (Inside/Outside) FA: https://eprel.ec.europa.eu/qr/410964 RA: https://eprel.ec.europa.eu/qr/409462	
	Yokohama Advan Sport V103S N1 (Inside/Outside) Label value currently not available	

Tire size	Tire make and type / Label value (Link to EU database)	Comment
235/35 ZR 19 (87Y) and 305/30 ZR 19 (102Y) XL	Bridgestone Potenza RE050A N1 (Inside/Outside) Label value currently not available	für 911 Carrera 4 / 4S and 911 Targa 4 / 4S
	Michelin Pilot Sport 2 N1 (Inside/Outside) Label value currently not available	
	Michelin Pilot Sport 2 N2 (Inside/Outside) FA: https://eprel.ec.europa.eu/qr/408700 RA: https://eprel.ec.europa.eu/qr/412234	
	Pirelli P-Zero N2 (Inside/Outside) FA: https://eprel.ec.europa.eu/qr/594212 RA: https://eprel.ec.europa.eu/qr/594214	



Information

N... = Specification code of the tire, e.g. "N0", "N1", "N2" ... The complete "N ..." code of the tires in question must be shown on the tire sidewall near the tire type designation.

Instructions for correct mounting of the tires are also given on the tire sidewall. If there are no mounting instructions on the tire sidewall, the tire must be mounted so that the DOT marking is visible from the outside.

Arrow with inscription "Rotation"	= directional mounting.
"Inside/Outside" inscription	= mounting on specified side only.
Arrow with both inscriptions "Rotation" and "Inside/Outside"	= directional mounting on specified side only.



Information

If a tire is damaged and it is not possible to determine with absolute certainty that there is no ply damage - with all of its consequences - or if the tire was thermally and/or mechanically overloaded due to a loss of pressure or other prior damage, replace the tire in question for safety reasons.

Repairs to "V", "W", "Y" and "ZR" tires are not permissible, as well as the use of inner tubes in tubeless tires. Please inform your customers accordingly. It is advisable to mount winter tires at temperatures below **45° F/7°C**, because the driving characteristics of summer tires are reduced at low temperatures. Extremely low temperatures can cause permanent damage to summer tires.

 **WARNING****Driving with sports tires**

- **Aquaplaning on wet or muddy roads**
- ⇒ **Reduce speed.**
- ⇒ **Drive according to the road conditions.**

UHP Tires:

Tire size	Tire make and type / Label value (Link to EU database)	Comment
235/35 ZR 19 (87Y) and 305/30 ZR 19 (102Y) XL	Michelin Pilot Sport Cup NO (Inside/Outside) Label value currently not available	Ultra High Performance Tire

Arrow with inscription "Rotation"

= directional mounting.

"Inside/Outside" inscription

= mounting on specified side only.

Arrow with both inscriptions "Rotation" and
"Inside/Outside"

= directional mounting on specified side only.

**Information**

Sports tires (**Ultra High Performance Tires**) are permitted on public roads and satisfy all legal requirements and road safety criteria.

These tires are also designed for use on racing circuits (driving safety training courses, sports driving schools, Clubsport events) and offer distinct advantages with regard to dry adhesion and wear-and-tear compared to normal road tires.

The main features are a reduced tread depth as well as a special thread design and substructure.

 **WARNING****Incorrect tire pressure**

- **Uncontrollable vehicle handling**
- ⇒ **Adjust the tire pressure according to specifications. Never allow the pressure to fall below the minimum pressure.**
- ⇒ **Check age of tires. Replace tires that are more than 6 years old.**
- ⇒ **Perform visual inspections.**
- ⇒ **Use new rubber valves at every tire change.**
- ⇒ **Use only tires approved by Porsche.**

Tire Pressure:

Wheel size	Part load (Up to 2 persons without luggage) FA/RA	Full load (2 persons or more with luggage) FA/RA
18-inch wheels	2.3 bar / 2.5 bar (33 psi/36 psi)	2.5 bar/3.0 bar (36 psi/43 psi)
19-inch wheels	2.3 bar / 2.5 bar (33 psi/36 psi)	2.5 bar/3.0 bar (36 psi/43 psi)

**Information**

The tire pressure applies only to the tire makes and types approved by Porsche, and is specified for cold tires (approx. **68° F/20°C**). The tire pressures must never be lower than the specified values.

Sizes:

Permissible summer tire and wheel sizes (RO = rim offset in mm)

Tires	Wheels	Comments
Front: 235/40 ZR 18 (91Y) Rear: 295/35 ZR 18 (99Y)	8 J x 18, RO 57 11 J x 18, RO 51	for 911 Carrera 4 only.
Front: 235/40 ZR 18 (91Y) Rear: 295/35 ZR 18 (99Y)	8 J x 18, RO 57 11 J x 18, RO 51	only for 911 Carrera 4, 5-mm spacer, Part No. 997.361.605.90, permitted per wheel, snow chains cannot be installed.
Front: 235/35 ZR 19 (87Y) Rear: 305/30 ZR 19 (102Y) XL	8 J x 19, RO 57 11 J x 19, RO 51	911 Carrera 4 and 911 Carrera 4S, snow chains cannot be installed.
Front: 235/35 ZR 19 (87Y) Rear: 305/30 ZR 19 (102Y) XL	8 J x 19, RO 57 11 J x 19, RO 51	911 Carrera 4 and 911 Carrera 4S, 5-mm spacer, Part No. 997.361.605.90, permitted per wheel, snow chains cannot be installed.
Front: 235/35 ZR 19 (87Y) Rear: 305/30 ZR 19 (102Y) XL	8,5 J x 19, RO 55 11,5 J x 19, RO 50	911 Carrera 4 and 911 Carrera 4S, snow chains cannot be installed.

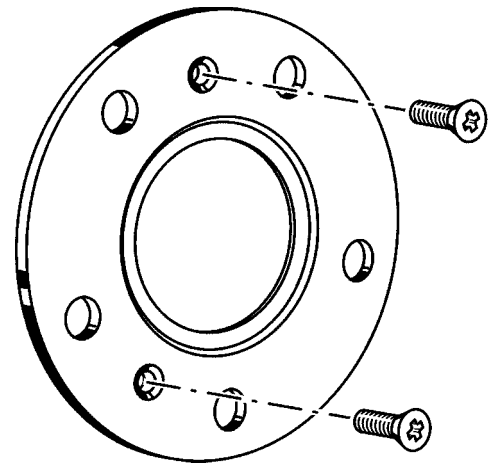
Subsequent installation of spacers

Securing spacers and wheels

The 5-mm thick spacers are secured on the wheel hubs together with the brake discs using countersunk screws (M6x16), Part No. 900.269.106.09.

Tightening torque 10 Nm (7.5 ftlb.)

The 5-mm spacer must remain on the vehicle when mounting the spare wheel.



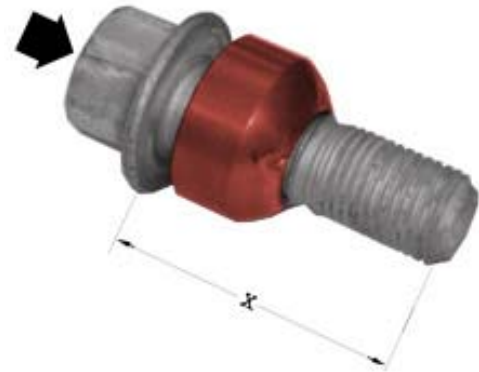
5-mm spacer

If 5-mm spacers are used, the wheels must be secured using the 5-mm longer wheel bolts used on the 911 GT3, Part No. 996.361.980.00. These wheel bolts are marked with GT or with a red color on the front of the bolt head (arrow) or the rotating spherical cap is galvanized in red.

Length "X" approx. 50 mm

Tightening torque 130 Nm (96 ftlb.)

If the spacer is removed, the original wheel bolts, **Length "X" approx. 45 mm**, must be used again.



Wheel bolt

⚠ WARNING

Wheel electronics units not detected, incorrectly secured or loose on vehicles without Tire Pressure Monitoring (TPM)

- Risk of damage to wheels and/or tires
- Uncontrollable vehicle handling

⇒ **Do not mount wheels with wheel electronics units on vehicles without TPM.**

Wheels:

Overview of Porsche wheels for summer tires

Identification on the inside/outside of the wheel disc:
Wheel size, rim offset (RO) in mm, Part No. and Porsche logo

Front: 8 J x 18 H2, RO 57
Part No. 997.362.137.01

Rear: 11 J x 18 H2, RO 51
Part No. 997.362.143.00



18" Carrera IV wheel

Front: 8 J x 19 H2, RO 57
Part No. 997.362.157.00

Rear: 11 J x 19 H2, RO 51
Part No. 997.362.163.01



19-inch Carrera S II wheel

Front: 8 J x 19 H2, RO 57
Part No. 997.362.156.03

Rear: 11 J x 19 H2, RO 51
Part No. 997.362.162.03



19-inch Carrera Classic wheel

Front: 8 J x 19 H2, RO 57
Part No. 997.362.156.04

Rear: 11 J x 19 H2, RO 51
Part No. 997.362.162.06



19-inch SportDesign wheel

Front: 8 J x 19 H2, RO 57
Part No. 997.362.156.02

Rear: 11 J x 19 H2, RO 51
Part No. 997.362.162.02



19-inch Turbo wheel

Front: 8 J x 19 H2, RO 57
Part No. 997.362.157.02

Rear: 11 J x 19 H2, RO 51
Part No. 997.362.163.02



19-inch Turbo II wheel

Front: 8.5 J x 19 H2, RO 55
Part No. 997.362.156.55

Rear: 11.5 J x 19 H2, RO 50
Part No. 997.362.162.56



19-inch Carrera Sport wheel

Front: 8,5 J x 19 H2, RO 55
Part No. 997.362.157.56

Rear: 11.5 J x 19 H2, RO 50
Part No. 997.362.163.56



19-inch Sport Classic wheel



Information

Improper handling can damage the wheel surface.

Carry out tire removal and mounting using a bead holding-down device only.

Use a leather pad on the rim flange to support the valve insertion tool.

Only use the Porsche centering clamping set for balancing.

Do not use brushes to clean the wheels because brushes can cause deep scratches that cannot be removed by polishing.

Never use solvents or other chemical substances on tires.

Wheel
mounting:

Tightening torque when using silver wheel bolts (up to model year 2011): 130 Nm

Tightening torque when using silver wheel bolts (as of model year 2011): 160 Nm

Tightening torque when using black wheel bolts: 160 Nm

Navigation
Systems:

After a wheel or tire change, the full locating accuracy is attained only after a trip of approx. 50 km (30 miles), if possible on a highway and at a speed > 60 km/h (40 mph). Furthermore, high wheel slip factor (e.g. wheel spin) can result in temporary incorrect positioning.

Wheel Storage:

- Tires must be stored in a cool, dry and dark room with adequate ventilation.
- Tires must never come into contact with fuel, oil, grease or chemicals.
- Do not store summer tires in storage areas with ambient temperatures of less than 5° F (-15° C).
- Complete wheel & tire assemblies can be stacked for storage; we recommend that you increase the tire pressure by approximately 6 psi (0.4 bar).
- Optimum conditions for storage of the complete wheels are provided by the Original Porsche storage trolley, Part No. 000.044.000.38.
- If the tires are not mounted on wheels, it is best to store them in a vertical position.

- We recommend that you turn tires stored in this position every two weeks in order to prevent flat spots.
- Tires that are stacked in a horizontal position will become severely deformed and cannot be seated properly in the rim flange when they are mounted.

General
Information:

- Always use new valves when changing tires.
- Always observe any possible instructions concerning the rolling direction and/or specifying which side the tires must be mounted on.
- Coat the tire beads and humps with mounting lubricant before mounting the tire. This ensures that the tire beads will slide over the humps easily.
- In order to prevent the tire from turning on the wheel, avoid extreme driving maneuvers (acceleration and braking) during the first 100 to 200 miles with new or recently mounted tires.
- In order to optimize smoothness of rolling, it is appropriate - and necessary in individual cases - to mount the tire in a certain (favorable) position with respect to the wheel (matching).

Matching (uncontrolled and controlled) is explained below: Uncontrolled matching:

- Turning the tire on the wheel by 90° or 120° if necessary in order to achieve an acceptable value with regard to rolling smoothness (true running, imbalance and weight distribution of balance weights).

Controlled matching:

- With a balancing machine with matching program. In most cases, this produces an even better result with regard to the rolling smoothness (true running, imbalance and weight distribution of the balance weights) than can be achieved with uncontrolled matching.
- Maximum permissible radial runout and lateral runout of the wheels < 0.7 mm. Maximum permissible radial runout and lateral runout of the wheels with tires < 1.25 mm. Values < 1.50 mm -ideally approx. 0.5 mm - are desirable.
- The mounting pressure (seating pressure) of 58 psi/4.0 bar overpressure must not be exceeded before both tire beads are evenly seated on the rim flange.

New Tires (Replacements):

- If new tires are to be mounted or the tires of one axle are to be replaced, tires of the same make, type and with the same specification code must always be used on each of the two axles.
- If tires are replaced on one axle only, the different tread depth from that on the other axle can cause a noticeable change in the familiar handling.
- This is especially the case if new tires are mounted on the rear axle.
- This effect decreases with increasing tire mileage.

When replacing a tire on an axle, make sure that the tread depth of the new tire does not differ from that of the other tire on the same axle by more than 30 %.

Refer to WM 449503 for specific details of the vehicle you are working on.

- >The 2mm specification will be given here.
- > If there is none listed then the default is 30%.

Repairs to Tires:

- If a tire is damaged and it cannot be determined with absolute certainty that there is no ply damage - with all of its consequences - or if the tire was thermally or mechanically overloaded due to a loss of pressure or other prior damage, we recommend replacement of the tire in question for safety reasons.
- Repairs to "V", "W", "Y", and "ZR" tires are not permissible, as is the use of inner tubes in tubeless tires.

Tire Aging:

- Tires age due to chemical and physical processes, which can impair their function.
- Tires that are stored unused for an extended period harden and become brittle faster than tires that are in continual use.
- Hairline aging cracks can occur on older tires.
- On tires in continual use, the kneading action activates the plasticizer in the rubber and thereby prevents hardening and cracking.
- Therefore, attention should be paid not only to the tread depth but also to the age of the tire.
- Tires should not be older than 6 years.
- The age of the tire can be determined via the DOT code on the sidewall, which indicates the production date of the tire: e.g. DOT 2201 = 22nd week of 2001.

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