

Manufacturer's Certificate

911 (997)

76/21 ENU 4440

4

Approved Winter Tires, Wheels and Snow Chains (76/21)

Revision: This bulletin replaces bulletin Group 4 23/08, dated May 25, 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)**

Information: Approved winter tire makes and types – September 2021.



**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)	Application range
235/40 R 18 91V M+S and 295/35 R 18 99V M+S	Nokian WR NO Label value currently not available	For all conditions
	Pirelli Winter 240 Sottozero series II N2 <sup>1</sup> Label value currently not available	for areas with a lot of snow
235/35 R 19 87V M+S and 295/30 R 19 100V XL M+S	Nokian WR NO Label value currently not available	For all conditions
	Pirelli Winter 240 Sottozero series II N1 <sup>1</sup>	For frequent highway trips
	FA: <a href="https://eprel.ec.europa.eu/qr/594258">https://eprel.ec.europa.eu/qr/594258</a> RA: <a href="https://eprel.ec.europa.eu/qr/594262">https://eprel.ec.europa.eu/qr/594262</a>	

<sup>1</sup> "Pirelli Winter 240 Sottozero" tires – with identical N specification codes "N..." – are also approved. These tires can be mixed with "Pirelli Winter 240 Sottozero Serie II" tires provided the N specification codes of the two tire types are identical. The Porsche versions of the "Pirelli Winter 240 Sottozero" and "Pirelli Winter 240 Sottozero Serie II" tires with identical N specification codes are identical, even down to the inscription on the side wall.

**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.

**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 winter tires and wheel sizes (RO = rim offset in mm)**

Tires	Wheels	Comments
Front: 235/40 R 18 91V M+S and Rear: 295/35 R 18 99V M+S	8 J x 18, RO 57 11 J x 18, RO 51	Part No. of snow chain 997.044.600.18
Front: 235/35 R 19 87V M+S and Rear: 295/30 R 19 100V XL M+S	8 J x 19, RO 57 11 J x 19, RO 51	Part No. of snow chain 997.044.600.18



**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 winter 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. 997.362.137.01Rear: 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. 997.362.157.00Rear: 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" 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*



#### 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 2012): 160 Nm**  
**Tightening torque when using black wheel bolts: 160 Nm**



**Incorrectly installed snow chains**

- **Uncontrollable vehicle handling**
- ⇒ **Do not exceed the maximum speed of Speed 30 mph/50 km/h.**
- ⇒ **Observe installation instructions from the chain manufacturer.**

Snow Chains: Porsche offers the following snow chains as accessories:

Tire size	Porsche Part No.	Type of snow chain
295/35 R 18 M+S	997.044.600.18	Link-type chain, quick fit
295/30 R 19 M+S		



**Information**

Sufficient snow-chain clearance is only guaranteed by first removing any spacers that are installed.

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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