PORSCHE'

Technical Information

17/19 ENU 4400

911 (992)

4

Approved Wheels and Tires (17/19)

Vehicle Type: 911 Carrera S / 4S; Coupé / Cabrio (992)

Model Year: As of 2020

Concern: Approval status: August 2019

Sizes: Permissible tire and wheel sizes (RO = rim offset in mm, FA = front axle, RA = rear axle)

Tires	Tire sizes	Wheel sizes	Snow chains
911 Cari	rera S / 4S Coupé / Cabrio		
Summer	20, 21-inch FA: 245/35 ZR 20 (95Y) XL RA: 305/30 ZR 21 (104Y) XL	FA: 8,5J x 20, RO 53 RA: 11,5J x 21, RO 67	No
Winter	19, 20-inch FA: 235/40 R 19 92V RA: 295/35 R 20 101V *)	FA: 8,5J x 19, RO 52	
	19, 20-inch FA: 235/40 R 19 96V XL RA: 295/35 R 20 105V XL *)	RA: 11J x 20, RO 66	RA only
	20, 21-inch FA: 245/35 R 20 91V RA: 295/30 R 21 98V	FA: 8,5J x 20, RO 53	
	20, 21-inch FA: 245/35 R 20 95V XL RA: 295/30 R 21 102V XL	RA: 11J x 21, RO 66	

*) Not for vehicles with Porsche Ceramic Composite Brake (PCCB)

Wheels:

Overview of Porsche wheels for summer and winter tires

Identification on inside of wheel:

Wheel size, rim offset (RO) in mm, part number (without color code FFF) and Porsche logo

19-inch "Carrera 7" wheel FA: 8,5J x 19, RO 52 Part No. 992.601.025_FFF



Carrera 7

20-inch "Carrera 7" wheel

RA: 11.5J x 20, RO 67 (summer) Part No. 992.601.025.A_FFF

RA: 11J x 20, RO 66 (winter) Part No. 992.601.025.B_FFF

20-inch "Carrera S5" wheel

Part No. 992.601.025.C_FFF

FA: 8,5J x 20, RO 53



Carrera 7



Carrera S5

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RS Spyder Design 2



Carrera Classic 3

Carrera Exclusive Design

20-inch "RS Spyder Design 2" wheel

FA: 8.5J x 20, RO 53 (summer) Part No. 992.601.025.F_FFF

20-inch "Carrera Classic 3" wheel FA: 8.5J x 20, RO 53 (summer) Part No. 992.601.025.H_FFF

20-inch "Carrera Exclusive Design" wheel

FA: 8.5J x 20, RO 53 (summer) Part No. 992.601.025.K_FFF

21-inch "Carrera S5" wheel

RA: 11.5J x 21, RO 67 (summer) Part No. 992.601.025.D_FFF

RA: 11J x 21, RO 66 (winter) Part No. 992.601.025.E_FFF

Technical Information



Carrera S5



RS Spyder Design 2

21-inch "RS Spyder Design 2" wheel

RA: 11.5J x 21, RO 67 (summer) Part No. 992.601.025.G_FFF



Carrera Classic 3



Carrera Exclusive Design

21-inch "Carrera Classic 3" wheel

21-inch "Carrera Exclusive Design" wheel

RA: 11.5J x 21, RO 67 (summer) Part No. 992.601.025.L FFF

RA: 11.5J x 21, RO 67 (summer) Part No. 992.601.025.J_FFF



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.



Only fit wheels with identical part numbers on one axle.

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Wheel using wheel bolts:

Tightening torque 160 Nm (118 ftlb.)

using central wheel lock:

Tightening torque 600 Nm (444 ftlb.)

Mounting:

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 (N0, N1, N2, ...) on a vehicle.

Model	Tire size	Tire make and type
911 Carrera S,	FA: 245/35 ZR 20 (95Y) XL	Goodyear Eagle F1 Asymmetric3 NAO
911 Carrera 4S	RA: 305/30 ZR 21 (104Y) XL	Pirelli P Zero NA1

Winter Tires:

Model	Tire size	Tire make and type
911 Carrera S, 911 Carrera 4S	FA: 245/35 R 20 95V XL RA: 295/30 R 21 102V XL	Michelin Pilot Alpin 5 NAO

*) Not for vehicles with Porsche Ceramic Composite Brake (PCCB)

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

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.

i 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 permissable, 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.

Tire Pressure:

Incorrect tire pressure

- Uncontrollable vehicle handling
- ⇒ Adjust the tire pressure according to specifications. Never allow the pressure to fall below the minimum pressure.
- \Rightarrow Check age of tires. Replace tires that are more than 6 years old.
- \Rightarrow Perform visual inspections.
- \Rightarrow Use only tires recommended by Porsche.



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.

	991 Carrera C2 S/C4 S (1) except Cabriolet sports chassis (2) except Cabriolet with Aerokit (3) except Coupé with sports chassis and without sunroof							
Wheel size	Part load		Full load		comfort ai up to 27	load ir pressure 70 km/h mph)	comfort ai up to 27	load ir pressure 70 km/h mph)
	FA	RA	FA	RA	FA	RA	FA	RA

20-inch wheels	2.3 bar 230 kPa 33 psi	_	2.5 bar 250 kPa 36 psi	_	2.0 bar 200 kPa 29 psi	_	2.3 bar 230 kPa 33 psi	_
21-inch wheels	_	2.6 bar 260 kPa 37 psi	_	3.1 bar 310 kPa 44 psi	_	2.2 bar 220 kPa 31 psi	_	2.6 bar 260 kPa 37 psi

Standard tire pressure for winter tires

Wheel	991 Carrera C2 S/C4 S (1) except Cabriolet sports chassis (2) except Cabriolet with Aerokit (3) except Coupé with sports chassis and without sunroof						
	Part load		Full load				
	FA	RA	FA	RA			
19-inch wheels	2.2 bar 220 kPa 31 psi	_	2.2 bar 220 kPa 31 psi	_			
20-inch wheels	-	2.2 bar 220 kPa 31 psi	_	2.5 bar 250 kPa 36 psi			
20-inch wheels	2.2 bar 220 kPa 31 psi	-	2.5 bar 250 kPa 36 psi	-			
21-inch wheels	_	2.4 bar 240kPa 35 psi	_	2.9 bar 290 kPa 42 psi			

Snow Chains:

Incorrectly installed snow chains

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

Porsche offers the following snow chains as accessories:

Tire size	Porsche Part No.	Type of snow chain	
295/35 R 20	000.044.00.4	Link turn a bain antiak fit	
295/30 R 21	992.044.690.A	Link-type chain, quick fit	

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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 aneven 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 by more than 30 %.

- More than 30 % up through MY16.
- More than 2mm began on some vehicles starting in MY17.

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 on "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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