

911 (964) **5/03** 4440

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Binder - Service Technical Bulletins

Summer Tire and Wheel Summary

Vehicle Type: 911 Carrera 2/4 (964), 911 Speedster (964), 911 Carrera RS (964), 911 Turbo (964),

911 Carrera 2/4 Cabrio "Turbo Look" (964), 911 RS America (964),

911 America Roadster (964)

Model Year: As of 1989 (K) up to 1994 (R)

Information: This bulletin replaces all other previously published summer tire and wheel information.

Concerns: Overview of summer tires, wheels and spacer rings.

Makes/Types: Approved Summer Tire Makes and Types

Tire Sizes	Manufacturer and Type
205/55 ZR 16 ¹	BF Goodrich Comp T/A N0 BF Goodrich Comp T/A ZR N0 Bridgestone RE71 N1 Bridgestone Expedia S-01 N2 Bridgestone Expedia S-02 N3 Continental SportContact CZ 91 N0
and 225/50 ZR 16 ¹	Continental SportContact N1 Goodyear Eagle ZR N1 Goodyear Eagle GSD N2 Michelin MXX3 Pilot SX N1 Michelin MXX3 Pilot SX N2 Pirelli P700-Z N1 Toyo Proxes F1 S N0
	Yokohama A-008 P N0 Yokohama AVS S1-Z N1
205/55 ZR 16 ¹ and 245/45 ZR 16 ¹	Bridgestone RE71 N1 Bridgestone Expedia S-01 N2 Bridgestone S-02 N3 Continental SportContact CZ 91 N0 Continental SportContact N1 Michelin MXX3 Pilot SX N1 Michelin Pilot Sport N2 Pirelli P-Zero Asimmetrico N2 Toyo Proxes F1 S N0

Footnote:

¹ = Only for 911 Carrera 2/4 (964) narrow body, width of vehicle 65" (1652 mm).

Information: 16 " wheels and tires can not be installed on 911 Speedster (964),

911 Carrera RS (964), 911 Turbo (964), 911 Carrera 2/4 Cabrio "Turbo Look" (964),

911 RS America (964), and 911 America Roadster (964) models.



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Makes/Types: (cont'd)

Approved Summer Tire Makes and Types

Tire Sizes	Manufacturer and Type
	Bridgestone Expedia S-01 NO
	Bridgestone Expedia S-01 N1
	Bridgestone S-02 N3
	Bridgestone Potenza S-02A N4
	Continental SportContact CZ91 NO
	Continental SportContact N1
205/50 ZR 17	Continental SportContact 2 N2
and	Dunlop SP Sport 8000 NO
255/40 ZR 17	Michelin MXX3 Pilot SX NO
,	Michelin MXX3 Pilot SX N1
	Michelin Pilot Sport N2
	Pirelli P-ZERO Asimmetrico N1
	Pirelli P-ZERO Direzionale N2 ² /Asimmetrico N2 ³
	Pirelli P-ZERO ROSSO N3
	Toyo Proxes F1 S NO
	Yokohama A 008 P N0 ⁴
	Yokohama AVS S1-Z N1

Footnotes:

- ² = Only for the front axle
- 3 = Only for the rear axle

Approved Summer Tire Makes and Types for 911 Turbo (964), 911 Carrera 2/4 Cabrio "Turbo Look". and 911 America Roadster (964) only.

Tire Sizes	Manufacturer and Type
225/45 ZR 17	Bridgestone Expedia S-01 NO on Front
275/35 ZR 17	Bridgestone Expedia S-01 N – on Rear

Note: The tire combination above 225/45 ZR 17 (front) and 275/35 ZR 17 (rear) have specification codes of **"NO" and "N -"** respectively.

"N..." = Specification characters of the tyre, e.g. "N0", "N1" "N2", "N3", or "N4". The complete code "N..." of the tires in question must be located on the tire sidewall near the tire type designation. Only tyres of the same make and type, as well as the same speed class ("ZR") and specification code ("N0", "N1", "N2", "N3" or "N4") may be used.

The tire types printed in bold correspond to the latest approval status and are available at tire suppliers since June, 2002. When replacing tires due to wear on front and rear axles or when replacing for any other reason, it is recommended to only use these tire types.

⁴ = Not for Speedster



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Mounting Instructions:

Instructions for proper tire mounting are located on the tire sidewall.

Arrow with Rotation marking

Front Axle

Rear Axle

= directional mounting

Inside/Outside marking
Arrow with Rotation marking

= mounting on specified side only

and Inside/Outside marking = 0

= directional mounting on specified side only

If there are no mounting instructions on the tire sidewall, the tire must be mounted so that the DOT code is visible from the outside.

Tire Pressure:

 16 " Wheels
 17" Wheels

 36 psi / 2.5 bar
 36 psi / 2.5 bar

 44 psi / 3.0 bar
 36 psi / 2.5 bar

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

Wheel Mounting:

The tightening torque for the wheel and fastening spacer ring is 130 Nm (96 ftlb.).

Tire Sizes:

Approved summer tire and wheel sizes for 911 Carrera 2/4

Tires	Wheels	Offset (mm)	Axle	Notes
205/55 ZR 16	6 J x 16	52.0/52.3	Front	
225/50 ZR 16	8 J x 16	52.0/52.3	Rear	
205/55 ZR 16	6 J x 16	52.0/52.3	Front	
245/45 ZR 16	8 J x 16	52.0/52.3	Rear	
205/55 ZR 16	7 J x 16	55.0	Front	Modification M1 See page 4
245/45 ZR 16	9 J x 16	52.3	Rear	Snow chains cannot be installed
205/50 ZR 17	7 J x 17	55.0	Front	Modification M1 & M2 See page 4 Check clearance of wheels Snow chains cannot be installed
255/40 ZR 17	8 J x 17	52.0	Rear	

Approved summer tire and wheel sizes for 911 Carrera RS (964)

Tires	Wheels	Offset (mm)	Axle	Notes
205/50 ZR 17	7.5 J x 17	55.0	Front	Snow chains cannot be Installed
255/40 ZR 17	9 J x 17	55.0	Rear	

Approved summer tire and wheel sizes for 911 Speedster (964) and 911 RS America

Tires	Wheels	Offset (mm)	Axle	Notes
205/50 ZR 17	7 J x 17	55.0	Front	
255/40 ZR 17	8 J x 17	52.0	Rear	



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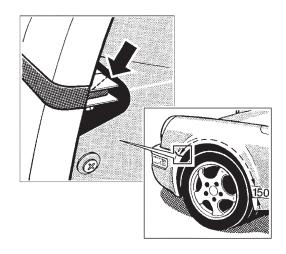
Tire Sizes: (cont'd)

Approved summer tire and wheel sizes for 911 Turbo (964), 911 Carrera 2/4 Cabrio "Turbo Look" and 911 America Roadster (964)

Tires	Wheels	Offset (mm)	Axle	Notes
205/50 ZR 17 255/40 ZR 17	7 J x 17 9 J x 17	55.0 55.0	Front Rear	Snow chains cannot be installed
225/45 ZR 17 275/35 ZR 17	8 J x 17 9.5 J x 17	52.0 68.0	Front Rear	Modification M3 & M4 See page 4 Check clearance of wheels Snow chains cannot be installed

Modifications:

- M1 Steering angle limit by replacing left and right stop washer Part No. 964 347 325 02.
- **M2** On the front axle, make sure that the fender lip does not project over the front section at the outer connection point between the front section and the wings. If necessary, the fender lips in this area must be reworked on these vehicles.
- M3 On the front axle, the entire area of the fender lip is to be flanged beginning 150 mm above the side member trim up to the front section; it must never be ground. Also, the wings must be trimmed at the transition point to the front section.
- **M4** A 17 mm spacer ring, part No. 996 361 617 00 must be installed on each wheel of the rear axle



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Wheels: Overview of Porsche wheels for summer tires

Wheel Style	Wheel Dimension	Offset (mm)	Porsche Part Number			
16" Design 90						
	6 J x 16 H2 7 J x 16 H2 8 J x 16 H2 9 J x 16 H2	52.3 55.0 52.3 52.3	964 362 112 01 964 362 114 01 964 362 116 01 964 362 118 02			
16" Forged Light Alloy						
	6 J x 16 H2 6 J x 16 H2 8 J x 16 H2 8 J x 16 H2	52.3 52.3 52.3 52.3	944 362 113 00 944 362 113 01 928 362 117 00 928 362 117 01			
16" Cup Design						
	6 J x 16 H2 8 J x 16 H2	52.0 52.0	944 362 112 00 944 362 116 00			
17" Cup Design						
	7 J x 17 AH 8 J x 17 AH 9 J x 17 AH 9.5 J x 17 AH 7.5 J x 17 AH 9 J x 17 AH	55.0 52.0 55.0 68.0 55.0 55.0	965 362 124 00/01 965 362 126 00/01 965 362 128 00 965 362 128 05 965 362 124 15 5 965 362 128 10 5			

Footnote:

 $^{^{5}}$ = 911 Carrera RS (964) only.



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Wheels: (cont'd)

Overview of Porsche wheels for summer tires

Wheel Style 17" Targa	Wheel Dimension	Offset (mm)	Porsche Part Number
	7 J x 17 H2	55.0	993 362 124 50
	9 J x 17 H2	55.0	993 362 128 50
17" Cup Design 93			
	7 J x 17 H2/AH	55.0	993 362 124 00
	9 J x 17 H2/AH	55.0	993 362 128 01
17" SportClassic			
	7 J x 17 H2	55.0	993 362 124 51
	9 J x 17 H2	55.0	993 362 128 51
17" Carrera 4			
	7 J x 17 H2	55.0	996 362 124 01
	9 J x 17 H2	55.0	996 362 128 01



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Wheels: (cont'd)

Overview of Porsche wheels for summer tires

Wheel Style	Wheel Dimension	Offset (mm)	Porsche Part Number
17" Carrera			
	7 J x 17 H2 9 J x 17 H2	55.0 55.0	996 362 124 00 996 362 128 00
17" Carrera II			
	7 J x 17 H2 9 J x 17 H2	50.0 55.0	996 362 124 02 996 362 128 02

General:

Always use new valves when changing tires:

Rubber valves, Part Nos. 900 265 001 50 and 000 044 600 00. Only steel valve caps, Part No. 993 361 163 90 may be used.

Always observe any possible instructions concerning the rolling direction and/or specifying which side the tires must be mounted on. Refer to notes on page 1 (if applicable).

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 $<0.7\ \text{mm}$. Maximum permissible radial runout and lateral runout of the wheels with tires $<1.25\ \text{mm}$. Values $<1.50\ \text{mm}$ - ideally approx. $0.5\ \text{mm}$ — are desirable.



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General: (cont'd)

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.

If new tires are to be mounted or the tires of one axle are to be replaced, tires of the same make, the same 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 %.

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 allowed, as is the use of inner tubes in tubeless tires. 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.

Tires/complete wheels must be stored in a cool, dry and dark room with adequate ventilation. They must never come into contact with fuel, oil, grease or chemicals.

Complete wheels can be stacked for storage; it is advisable to increase the tire pressure by 0.4 bar. Optimum conditions for proper storage of the complete wheels are provided by the Original Porsche storage stand (trolley), Part Number 000 044 000 38.

If the tires are not mounted on wheels, it is best to store them in vertical position. Tires stored in vertical position should be turned every two weeks in order to prevent excessive flattening. If the tires are stacked in horizontal position, they will become severely deformed and cannot be seated in the rim flange easily when they are mounted.

Literature:

911 Carrera (964) Technical Manual, Volume IV, Gr. 44 - Wheels

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