

Manufacturer's Certificate

911 (992)

51/21 ENU 4400

4

Approved Wheels and Tires (51/21)

Revision: This bulletin replaces bulletin Group 4 27/21, dated June 15, 2021.

Model Year: **As of 2020**

Vehicle Type: **Type 992 (Coupé/Cabriolet): 911 Carrera/911 Carrera 4/911 Carrera S/911 Carrera 4S/911 Turbo/911 Turbo S/911 Targa 4/911 Targa 4S/911 Targa 4S Heritage Design Edition**

Information: Approval status: June 2021

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

Tire sizes	Wheel sizes	Snow chains
911 Carrera/911 Carrera 4/911 Targa 4		
Summer		
19, 20-inch FA: 235/40 ZR 19 (96Y) XL RA: 295/35 ZR 20 (105Y) XL	FA: 8.5J x 19, RO 52 RA: 11.5J x 20, RO 67	No
19, 20-inch FA: 235/40 ZR 19 (92Y) RA: 295/35 ZR 20 (101Y)		
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	
20, 21-inch FA: 245/35 ZR 20 (91Y) RA: 305/30 ZR 21 (100Y)		

Tire sizes	Wheel sizes	Snow chains
911 Carrera/911 Carrera 4/911 Targa 4		
Winter		
Tire sizes	Wheel sizes	Snow chains
19, 20-inch FA: 235/40 R 19 92V RA: 295/35 R 20 101V)	FA: 8.5J x 19, RO 52 RA: 11J x 20, RO 66	RA only
19, 20-inch FA: 235/40 R 19 96V XL RA: 295/35 R 20 105V XL)		
20, 21-inch FA: 245/35 R 20 95V XL RA: 295/30 R 21 102V XL		
911 Carrera S/911 Carrera 4S/911 Targa 4S/911 Targa 4S Heritage Design Edition		
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
20, 21-inch FA: 245/35 ZR 20 (91Y) RA: 305/30 ZR 21 (100Y)		
Winter		
19, 20-inch FA: 235/40 R 19 92V RA: 295/35 R 20 101V)	FA: 8.5J x 19, RO 52 RA: 11J x 20, RO 66	RA only
19, 20-inch FA: 235/40 R 19 96V XL RA: 295/35 R 20 105V XL)		
20, 21-inch FA: 245/35 R 20 95V XL RA: 295/30 R 21 102V XL		

Tire sizes	Wheel sizes	Snow chains
911 Turbo/911 Turbo S		
Summer		
20, 21-inch FA: 255/35 ZR 20 (97Y) XL RA: 315/30 ZR 21 (105Y) XL	FA: 9J x 20, RO 41 RA: 11.5J x 21, RO 67	No
20, 21-inch FA: 255/35 ZR 20 (93Y) RA: 315/30 ZR 21 (105Y) XL		
20, 21-inch FA: 255/35 ZR 20 (97Y) XL RA: 315/30 ZR 21 (105Y) XL	FA: 9.5J x 20, RO 44 RA: 12J x 21, RO 70	No
20, 21-inch FA: 255/35 ZR 20 (93Y) RA: 315/30 ZR 21 (105Y) XL		
Winter		
20, 21-inch FA: 245/35 R 20 95V XL RA: 305/30 R 21 104V XL	FA: 8.5J x 20, RO 40 RA: 11J x 21, RO 66	RA only

*) 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 (summer, winter)

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

*Carrera 7***20-inch "Carrera S5" wheel**

FA: 8.5J x 20, RO 53 (summer, winter)

Part No. 992.601.025.C_FFF (summer, winter)

Part No. 992.601.029.K_FFF (summer)

RA: 11.5J x 21, RO 67 (summer)

Part No. 992.601.025.D_FFF (summer)

Part No. 992.601.029.L_FFF (summer)

RA: 11J x 21, RO 66 (winter)

Part No. 992.601.025.E_FFF (winter)

*Carrera S5*

20-inch "RS Spyder Design 2" wheel

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

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



RS Spyder Design 2

20-inch "Carrera Classic 3" wheel

FA: 8.5J x 20, RO 50 (summer)
Part No. 992.601.025.BC_FFF

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

or

FA: 8.5J x 20, RO 53 (summer)
Part No. 992.601.029.H_FFF

RA: 11.5J x 21, RO 67 (summer)
Part No. 992.601.029.J_FFF



Carrera Classic 3

20-inch "Carrera Exclusive Design" wheel

FA: 8.5J x 20, RO 50 (summer)
Part No. 992.601.025.BE_FFF

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

or

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



Carrera Exclusive Design

20-inch wheel "Turbo S 4"

FA: 9J x 20, RO 41 (summer)
Part No. 992.601.025.AS_FFF

FA: 11.5J x 21, RO 67 (summer)
Part No. 992.601.025.AA_FFF

FA: 8.5J x 20, RO 40 (winter)
Part No.
Part No. 992.601.025.AB_FFF

FA: 8.5J x 20, RO 50 (summer, winter)
Part No. 992.601.025.AT
RA: 11J x 21, RO 66 (winter)

Part No. 992.601.025.AC_FFF



Turbo S 4

20-inch "Turbo Exclusive Design" wheel

FA: 9.5J x 20, RO 44 (summer)
Part No. 992.601.025.AE_FFF

or
Part No. 992.601.025.AF_FFF

or

RA: 12J x 21, RO 70 (summer)
Part No. 992.601.025.AJ_FFF

or

Part No. 992.601.025.AG_FFF



Turbo Exclusive Design

20-inch "Turbo S Exclusive Design" wheel

FA: 9.5J x 20, RO 44 (summer)
Part No. 992.601.025.AF_FFF

RA: 12J x 21, RO 70
Part No. 992.601.025.AG_FFF



Turbo S Exclusive Design

20-inch "Sport Classic II" wheel

FA: 9.5J x 20, RO 44 (summer)
Part No. 992.601.025.AP_FFF

FA: 12J x 21, RO 70 (summer)
Part No. 992.601.025.DQ_FFF

21-inch "Carrera S5" wheel

FA: 9J x 20, RO 41
Part No. 992.601.025.AR_FFF (summer)
or

FA: 8.5J x 20, RO 50
Part No. 992.601.025.R_FFF (summer)

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

Part No. 992.601.025.P_FFF (winter)

FA: 8.5J x 20, RO 40
RA: 11J x 21, RO 66 (winter)
Part No. 992.601.025.Q_FFF



Carrera S5

21-inch "RS Spyder Design 2" wheel

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



RS Spyder Design 2

21-inch "Carrera Classic 3" wheel

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



Carrera Classic 3

21-inch "Carrera Exclusive Design" wheel

RA: 11.5J x 21, RO 67 (summer)

Part No. 992.601.025.L_FFF



Carrera Exclusive Design

21-inch wheel "Turbo S 4"

RA: 11.5J x 21, RO 67 (summer)

Part No. 992.601.025.AA_FFF

RA: 11J x 21, RO 66 (winter)

Part No. 992.601.025.AC_FFF



Turbo S 4

21-inch "Turbo Exclusive Design" wheel

RA: 12J x 21, RO 70 (summer)

Part No. 992.601.025.AJ_FFF



Turbo Exclusive Design

21-inch "Turbo S Exclusive Design" wheel

RA: 12J x 21, RO 70 (summer)
Part No. 992.601.025.AG_FFF

*Turbo S Exclusive Design***21-inch "Turbo 5" wheel**

RA: 11.5J x 21, RO 67 (summer)
Part No. 992.601.025.N_FFF
RA: 11J x 21, RO 66 (winter)
Part No. 992.601.025.Q_FFF

*Turbo 5***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:

using wheel bolts:

Tightening torque 160 Nm (118 ftlb.)

using central wheel lock:

Tightening torque 600 Nm (444 ftlb.)

Summer Tires:

Tire size	Tire make and type/ label value (link to EU database)
911 Carrera/911 Carrera 4/911 Targa 4	
FA: 235/40 ZR 19 (96Y) XL RA: 295/35 ZR 20 (105Y) XL	Michelin PilotSport 4S NAO FA: https://eprel.ec.europa.eu/qr/413170 RA: https://eprel.ec.europa.eu/qr/410061
FA: 235/40 ZR 19 (92Y) RA: 295/35 ZR 20 (101Y)	Pirelli P Zero NAO FA: https://eprel.ec.europa.eu/qr/595483 RA: https://eprel.ec.europa.eu/qr/595482
FA: 245/35 ZR 20 (95Y) XL RA: 305/30 ZR 21 (104Y) XL	Goodyear Eagle F1 Asymmetric3 NAO FA: https://eprel.ec.europa.eu/qr/529603 RA: https://eprel.ec.europa.eu/qr/529604
FA: 245/35 ZR 20 (91Y) RA: 305/30 ZR 21 (100Y)	Pirelli P Zero NA1 FA: https://eprel.ec.europa.eu/qr/596523 RA: https://eprel.ec.europa.eu/qr/596522
911 Carrera S/911 Carrera 4S/911 Targa 4S/911 Targa 4S Heritage Design Edition	
FA: 245/35 ZR 20 (95Y) XL RA: 305/30 ZR 21 (104Y) XL	Goodyear Eagle F1 Asymmetric3 NAO FA: https://eprel.ec.europa.eu/qr/529603 RA: https://eprel.ec.europa.eu/qr/529604
FA: 245/35 ZR 20 (91Y) RA: 305/30 ZR 21 (100Y)	Pirelli P Zero NA1 FA: https://eprel.ec.europa.eu/qr/596523 RA: https://eprel.ec.europa.eu/qr/596522

911 Turbo/911 Turbo S	
Tire size	Tire make and type/ label value (link to EU database)
911 Carrera/911 Carrera 4/911 Targa 4	
FA: 255/35 ZR 20 (97Y) XL RA: 315/30 ZR 21 (105Y) XL	Goodyear Eagle F1 Super Sport NAO FA: https://eprel.ec.europa.eu/qr/529629 RA: https://eprel.ec.europa.eu/qr/529628
FA: 255/35 ZR 20 (93Y) RA: 315/30 ZR 21 (105Y) XL	Pirelli P Zero NA1 FA: https://eprel.ec.europa.eu/qr/596542 RA: https://eprel.ec.europa.eu/qr/596543

Winter Tires:

Tire size	Tire make and type/ label value (link to EU database)
911 Carrera/911 Carrera 4/911 Targa 4	
FA: 235/40 R 19 92V RA: 295/35 R 20 101V)	Pirelli P Zero Winter NAO FA: https://eprel.ec.europa.eu/qr/595748 RA: https://eprel.ec.europa.eu/qr/595749
FA: 235/40 R 19 96V XL RA: 295/35 R 20 105V XL)	Continental Wintercontact TS 860 S NAO FA: https://eprel.ec.europa.eu/qr/479552 RA: https://eprel.ec.europa.eu/qr/479553
FA: 245/35 R 20 95V XL RA: 295/30 R 21 102V XL)	Continental TS 860 S NAO FA: https://eprel.ec.europa.eu/qr/479365 RA: https://eprel.ec.europa.eu/qr/479508
	Michelin Pilot Alpin 5 NAO FA: https://eprel.ec.europa.eu/qr/409016 RA: https://eprel.ec.europa.eu/qr/410247
911 Carrera S/911 Carrera 4S/911 Targa 4S/911 Targa 4S Heritage Design Edition	
FA: 235/40 R 19 92V RA: 295/35 R 20 101V)	Pirelli P Zero Winter NAO FA: https://eprel.ec.europa.eu/qr/595748 RA: https://eprel.ec.europa.eu/qr/595749

Tire size	Tire make and type/ label value (link to EU database)
FA: 235/40 R 19 96V XL RA: 295/35 R 20 105V XL *)	Continental Wintercontact TS 860 S NAO FA: https://eprel.ec.europa.eu/qr/479552 RA: https://eprel.ec.europa.eu/qr/479553
FA: 245/35 R 20 95V XL RA: 295/30 R 21 102V XL *)	Continental TS 860 S NAO FA: https://eprel.ec.europa.eu/qr/479365 RA: https://eprel.ec.europa.eu/qr/479508
	Michelin Pilot Alpin 5 NAO FA: https://eprel.ec.europa.eu/qr/409016 RA: https://eprel.ec.europa.eu/qr/410247
911 Turbo/911 Turbo S	
FA: 245/35 R 20 95V XL RA: 305/30 R 21 104V XL	Goodyear Ultragrip Performance Gen-1 NAO FA: https://eprel.ec.europa.eu/qr/529616 RA: https://eprel.ec.europa.eu/qr/529627
	Michelin Pilot Alpin 5 NA5 FA: https://eprel.ec.europa.eu/qr/410097 RA: https://eprel.ec.europa.eu/qr/411084

*) 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. "NA0", "NA1", "NA2" ... The complete "N ..." code of the relevant tire makes must be shown on the tire sidewall near the 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.

**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.

**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 (NA0, NA1, NA2, etc.) on a vehicle.**

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.**
- ⇒ **Check age of tires. Replace tires that are more than 6 years old.**
- ⇒ **Perform visual inspections.**
- ⇒ **Use only tires recommended by Porsche.**



Driving at high speed with low tire pressure can cause irreparable damage to tires.

- ⇒ **Set Comfort air pressure for tires only on vehicles with Tire Pressure Monitoring System (TPMS) and "Comfort" selected in the "Tire pressure" main menu in the multi-function display.**



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.

Standard tire pressure for summer tires + UHP

Standard tire pressure for summer tires + UHP						
911 Carrera/911 Carrera 4/911 Targa 4						
Tire size	Wheel size	Axle	Part load	Full load	Part load, comfort air pressure up to 270 km/h (165 mph)	Full load, comfort air pressure up to 270 km/h (165 mph)
235/40 ZR 19	8.5 x 19	FA	2.2 bar 220 kPa 31 psi	2.4 bar 240 kPa 35 psi	2.0 bar 200 kPa 29 psi	2.3 bar 230 kPa 33 psi
295/35 ZR 20	11.5J x 20	RA	2.5 bar 250 kPa 36 psi	3.0 bar 300 kPa 44 psi	2.2 bar 220 kPa 31 psi	2.6 bar 260 kPa 37 psi
245/35 ZR 20	8.5J x 20	FA	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
305/30 ZR 21	11.5J x 21	RA	2.6 bar 260 kPa 37 psi	3.1 bar 310 kPa 45 psi	2.2 bar 220 kPa 31 psi	2.6 bar 260 kPa 37 psi

Standard tire pressure for summer tires + UHP						
911 Carrera S/911 Carrera 4S						
1) except Cabriolet sports chassis						
2) except Coupé with Aerokit						
3) except Carrera S Coupé and Carrera 4S Coupé with sports chassis and without sliding roof						
Tire size	Wheel size	Axle	Part load	Full load	Part load, comfort air pressure up to 270	Full load, comfort air pressure up to 270

					km/h (165 mph)	km/h (165 mph)
245/35 ZR 20	8.5J x 20	FA	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
305/30 ZR 21	11.5J x 21	RA	2.6 bar 260 kPa 37 psi	3.1 bar 310 kPa 45 psi	2.2 bar 220 kPa 31 psi	2.6 bar 260 kPa 37 psi

Standard tire pressure for summer tires + UHP

911 Targa S

- 1) 992 Carrera S/Carrera 4S Cabriolet with sports chassis and sports aerodynamics
2) and Coupé with Aerokit
3) and 992 Carrera S/Carrera 4S Coupé with sports chassis and sports aerodynamics and without sliding roof

Tire size	Wheel size	Axle	Part load	Full load	Part load, comfort air pressure up to 270 km/h (165 mph)	Full load, comfort air pressure up to 270 km/h (165 mph)
245/35 ZR 20	8.5J x 20	FA	2.3 bar 230 kPa 33 psi	2.6 bar 260 kPa 37 psi	2.0 bar 200 kPa 29 psi	2.3 bar 230 kPa 33 psi
305/30 ZR 21	11.5J x 21	RA	2.7 bar 270 kPa 39 psi	3.2 bar 320 kPa 46 psi	2.2 bar 220 kPa 31 psi	2.6 bar 260 kPa 37 psi

Standard tire pressure for summer tires + UHP

911 Turbo/911 Turbo S

Tire size	Wheel size	Axle	Part load	Full load	Part load, comfort air pressure up to 270 km/h (165 mph)	Full load, comfort air pressure up to 270 km/h (165 mph)
-----------	------------	------	-----------	-----------	--	--

255/35 ZR 20	9/9.5J x 20	FA	2.4 bar 240 kPa 35 psi	2.6 bar 260 kPa 37 psi	2.1 bar 210 kPa 30 psi	2.3 bar 230 kPa 33 psi
315/30 ZR 21	11.5/12J x 21	RA	2.9 bar 290 kPa 42 psi	3.3 bar 330 kPa 48 psi	2.4 bar 240 kPa 35 psi	2.7 bar 270 kPa 39 psi

Standard tire pressure for winter tires

Standard tire pressure for winter tires				
911 Carrera/911 Carrera 4/911 Targa 4				
Tire size	Wheel size	Axle	Part load	Full load
235/40 R 19	8.5J x 19	FA	2.2 bar 220 kPa 31 psi	2.2 bar 220 kPa 31 psi
295/35 R 20	11J x 20	RA	2.2 bar 220 kPa 31 psi	2.5 bar 250 kPa 36 psi
245/35 R 20	8.5J x 20	FA	2.2 bar 220 kPa 31 psi	2.5 bar 250 kPa 36 psi
295/30 R 21	11J x 21	RA	2.4 bar 240 kPa 35 psi	2.9 bar 290 kPa 42 psi

Standard tire pressure for winter tires				
911 Carrera S/911 Carrera 4S				
1) except Cabriolet sports chassis				
2) except Coupé with Aerokit				
3) except Carrera S Coupé and Carrera 4S Coupé with sports chassis and without sliding roof				
Tire size	Wheel size	Axle	Part load	Full load
235/40 R 19	8.5J x 19	FA	2.2 bar 220 kPa 31 psi	2.2 bar 220 kPa 31 psi

295/35 R 20	11J x 20	RA	2.2 bar 220 kPa 31 psi	2.5 bar 250 kPa 36 psi
245/35 R 20	8.5J x 20	FA	2.2 bar 220 kPa 31 psi	2.5 bar 250 kPa 36 psi
295/30 R 21	11J x 21	RA	2.4 bar 240 kPa 35 psi	2.9 bar 290 kPa 42 psi

Standard tire pressure for winter tires

911 Targa S and

- 1) 992 Carrera S/Carrera 4S Cabriolet with sports chassis and sports aerodynamics
2) and Coupé with Aerokit
3) and 992 Carrera S/Carrera 4S Coupé with sports chassis
and sports aerodynamics and without sliding roof

Tire size	Wheel size	Axle	Part load	Full load
235/40 R 19	8.5J x 19	FA	2.2 bar 220 kPa 31 psi	2.3 bar 230 kPa 33 psi
295/35 R 20	11J x 20	RA	2.2 bar 220 kPa 31 psi	2.6 bar 260 kPa 37 psi
245/35 R 20	8.5J x 20	FA	2.2 bar 220 kPa 31 psi	2.5 bar 250 kPa 36 psi
295/30 R 21	11J x 21	RA	2.5 bar 250 kPa 36 psi	2.9 bar 290 kPa 42 psi

Standard tire pressure for winter tires

911 Turbo/911 Turbo S

Tire size	Wheel size	Axle	Part load	Full load
-----------	------------	------	-----------	-----------

245/35 R 20	8.5J x 20	FA	2.2 bar 220 kPa 31 psi	2.5 bar 250 kPa 36 psi
305/30 R 21	11J x 21	RA	2.6 bar 260 kPa 37 psi	3.0 bar 300 kPa 44 psi

Snow Chains:



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.**

Porsche offers the following snow chains as accessories:

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

- 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.

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2021 Porsche Cars North America, Inc.