

# Manufacturer's Certificate

Cayenne (92A)

45/20 ENU 4400

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## Approved Tires, Wheels and Wheel Spacers (45/20)

Revision: This bulletin replaces bulletin Group 4, 11/16.

Model Year: As of 2015 up to 2018

Vehicle Type: All Cayenne models

Information: Approval status: February 2016

General: This Manufacturer's Certificate contains information about

• technically permissible wheel/tire combinations,

measures that may be required when changing the wheel/tire combination installed at the factory,

· approved original Porsche alloy wheels and

approved summer, all-season and winter tires and their tire pressures.

Sizes:

Technically permissible wheel/tire combinations (RO = rim offset in mm, FA = front axle, RA = rear axle)

Tires	Tire size	Wheel size	Snow chains
Cayenne, C	ayenne Diesel, Cayenne S, Cayenne S D	iesel, Cayenne S E-Hybrid	
Summer	255/55 R 18 109Y XL	8 J x 18 H2, RO 53	
	<ul> <li>Not for vehicles with Porsche Ceramic Composite Brake (PCCB)</li> </ul>		No
	265/50 R 19 110Y XL	8.5 J x 19 H2, RO 59	
	<ul> <li>Not for vehicles with 20-inch Porsche Ceramic Composite Brake (PCCB)</li> </ul>		No
	275/45 R 20 110Y XL	9 J x 20 H2, RO 57	
	<ul> <li>Permitted for vehicles with 20-inch</li> <li>Porsche Ceramic Composite Brake</li> <li>(PCCB) depending on wheel type</li> </ul>		No
	275/45 R 20 110Y XL	9.5 J x 20 H2, RO 47	
	<ul> <li>Only with wheel arch extensions or SportDesign package</li> </ul>		No
	295/35 R 21 107Y XL	10 J x 21 H2, RO 50	
	<ul> <li>Only with wheel arch extensions or SportDesign package</li> </ul>		No

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Tires	Tire size	Wheel size	Snow chains
All-season	255/55 R 18 109V XL M+S	8 J x 18 H2, RO 53	
Winter	- Not for vehicles with Porsche Ceramic Composite Brake (PCCB)		FA and RA
	265/50 R 19 110V XL M+S	8.5 J x 19 H2, RO 59	
	– Not for vehicles with 20-inch Porsche Ceramic Composite Brake (PCCB)		RA only
	275/45 R 20 110V XL M+S	9 J x 20 H2, RO 57	
	- Permitted for vehicles with 20-inch Porsche Ceramic Composite Brake (PCCB) depending on wheel type		RA only
	275/45 R 20 110V XL M+S	9.5 J x 20 H2, RO 47	
	– Only with wheel arch extensions or SportDesign package		No
Spare wheel	195/75 R18 106P	6.5 B x 18, RO 28	
	- Not for vehicles with Porsche Ceramic Composite Brake (PCCB)		No
	195/65 R19 106P	6.5 B x 19, RO 28	
	– Not for vehicles with 20-inch Porsche Ceramic Composite Brake (PCCB)		No
	195/55 R20 102P	6.5 B x 20, RO 28	No
Cayenne GT	S, Cayenne Turbo		
Summer	265/50 R 19 110Y XL	8.5 J x 19 H2, RO 59	
	- Not for vehicles with Porsche Ceramic Composite Brake (PCCB)		No
	275/45 R 20 110Y XL	9 J x 20 H2, RO 57	
	- Permitted for vehicles with Porsche Ceramic Composite Brake (PCCB) depending on wheel type		No
	275/45 R 20 110Y XL	9.5 J x 20 H2, RO 47	
	– Only with wheel arch extensions or SportDesign package		No

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Tires	Tire size	Wheel size	Snow chains
	295/35 R 21 107Y XL	10 J x 21 H2, RO 50	
	– Only with wheel arch extensions or SportDesign package		No
All-season	265/50 R 19 110V XL M+S	8.5 J x 19 H2, RO 59	
Winter	- Not for vehicles with Porsche Ceramic Composite Brake (PCCB)		RA only
	275/45 R 20 110V XL M+S	9 J x 20 H2, RO 57	
	<ul> <li>Permitted for vehicles with Porsche Ceramic Composite Brake (PCCB) depending on wheel type</li> </ul>		RA only
	275/45 R 20 110V XL M+S	9.5 J x 20 H2, RO 47	
	– Only with wheel arch extensions or SportDesign package		No
Spare wheel	195/65 R19 106P	6.5 B x 18, RO 28	
	- Not for vehicles with Porsche Ceramic Composite Brake (PCCB)		No
	195/55 R20 102P	6.5 B x 20, RO 28	No
Cayenne Tu	rbo S		
Summer	275/45 R 20 110Y XL	9 J x 20 H2, RO 57	
	<ul> <li>Permitted for vehicles with Porsche</li> <li>Ceramic Composite Brake (PCCB)</li> <li>depending on wheel type</li> </ul>		No
	275/45 R 20 110Y XL	9.5 J x 20 H2, RO 47	
	– Only with wheel arch extensions or SportDesign package		No
	295/35 R 21 107Y XL	10 J x 21 H2, RO 50	
	– Only with wheel arch extensions or SportDesign package		No

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Tires	Tire size	Wheel size	Snow chains
All-season Winter	275/45 R 20 110V XL M+S  – Permitted for vehicles with Porsche Ceramic Composite Brake (PCCB) depending on wheel type	9 J x 20 H2, RO 57	RA only
	275/45 R 20 110V XL M+S  – Only with wheel arch extensions or SportDesign package	9.5 J x 20 H2, RO 47	No
Spare wheel	195/55 R20 102P	6.5 B x 20, RO 28	No

5-mm wheel spacers:

The front and rear axle can be installed with 5-mm wheel spacers, Part No. 958.044.500.00 (set), for the wheel/tire combinations listed in the table above.

17-mm wheel spacers:

The rear axle can be installed with 17-mm wheel spacers, Part No. 955.044.600.23 (set), for the wheel/tire combinations listed in the table above.

Exception: The use of 17-mm wheel spacers is not approved for the wheel sizes 9.5 J x 20 H2, RO 47 and 10 J x 21 H2, RO 50.

Generally, the vehicle must meet one of the following requirements before 17-mm wheel spacers can be installed:

- Wheel arch extensions are installed
- SportDesign package is installed

#### Wheels:

### Overview of Porsche wheels for summer, all-season and winter tires

Identification on inside of wheel:

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

### 18-inch spare wheel

6.5 B x 18, RO 28

(not shown)

Part No. 958.362.050.01 and 7P0.601.017.A

### 19-inch spare wheel

6.5 B x 19, RO 28

(not shown)

Part No. 958.362.050.21 and 7P5.601.017.B

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### 20-inch spare wheel

6.5 B x 20, RO 28

Part No. 958.362.050.31 and 7P5.601.017.C

(not shown)

## 18-inch Cayenne wheel

8 J x 18 H2, RO 53 Part No. 958.362.136.20 FFF and 7P5.601.025.AB FFF



## 18-inch Cayenne S wheel

8 J x 18 H2, RO 53 Part No. 958.362.144.20 FFF and 7P5.601.025.AC FFF



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## 19-inch Cayenne Turbo wheel

8.5 J x 19 H2, RO 59 Part No. 958.362.138.20 FFF and 7P5.601.025.AD FFF



## 19-inch Cayenne Design wheel

8.5 J x 19 H2, R0 59 Part No. 958.362.146.20 FFF and 7P5.601.025.AG FFF



## 19-inch Cayenne Sport Classic II wheel

8.5J x 19 H2, RO 59 Part No. 7P5.601.025.BE FFF



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### 20-inch Cayenne SportDesign wheel

9 J x 20 H2, RO 57 Part No. 958.362.140.20 FFF and 7P5.601.025.AF FFF

 Not for vehicles with 20-inch Porsche Ceramic Composite Brake (PCCB)



### 20-inch RS Spyder Design wheel

9 J x 20 H2, RO 57 Part No. 958.362.148.10 FFF and 7P5.601.025.AH FFF

or

9.5 J x 20 H2, R0 47 Part No. 958.362.151.00 FFF and 7P5.601.025.N FFF



## 21-inch 911 Turbo Design wheel

10 J x 21 H2, R0 50 Part No. 958.362.142.20 and 7P5.601.025.AE FFF



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## 21-inch Cayenne Sport Edition wheel

10 J x 21 H2, R0 50 Part No. 958.362.152.01 FFF or 958.362.150.02/10 FFF and 7P5.601.025.BF/BG/BH/BJ FFF



## 21-inch Cayenne Sport Classic II wheel

10 J x 21 H2, R0 50 Part No. 958.362.154.00 FFF or 7P5.601.025.BD/BK FFF





### 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.

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Wheel

Mounting: Tightening torque 180 Nm (133 ftlb.)



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.

Summer Tires: Madel

Model	Tire size	Tire make and type
Cayenne, Cayenne Diesel,	255/55 R 18 109Y XL	Continental ContiSportContact 3 NO (Inside/Outside)
Cayenne S, Cayenne S Diesel, Cayenne S E-Hybrid		Michelin Latitude Sport N1 (Inside/Outside)
Cayenne 3 E-nybrid	265/50 R 19 110Y XL	Goodyear Eagle F1 Asymmetric 2 SUV N1 (Inside/Outside)
		Michelin Latitude Sport 3 NO (Inside/Outside)
		Pirelli P Zero NO (Inside/Outside)
	275/45 R 20 110Y XL	Michelin Latitude Sport NO (Inside/Outside)
		Yokohama Advan Sport V-103H NO (Inside/Outside)
	295/35 R 21 107Y XL	Michelin Latitude Sport 3 N1 (Inside/Outside)
		Yokohama Advan Sport V-105T N2 (Inside/Outside)
Cayenne GTS, Cayenne Turbo	265/50 R 19 110Y XL	Goodyear Eagle F1 Asymmetric 2 SUV N1 (Inside/Outside)
		Michelin Latitude Sport 3 NO (Inside/Outside)
		Pirelli P Zero NO (Inside/Outside)
	275/45 R 20 110Y XL	Michelin Latitude Sport NO (Inside/Outside)
		Yokohama Advan Sport V-103H NO (Inside/Outside)

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Model	Tire size	Tire make and type
	295/35 R 21 107Y XL	Michelin Latitude Sport 3 N1 (Inside/Outside)
		Yokohama Advan Sport V-105T N2 (Inside/Outside)
Cayenne Turbo S	275/45 R 20 110Y XL	Michelin Latitude Sport NO (Inside/Outside)
		Yokohama Advan Sport V-103H NO (Inside/Outside)
	295/35 R 21 107Y XL	Michelin Latitude Sport 3 N1 (Inside/Outside)
		Yokohama Advan Sport V-105T N2 (Inside/Outside)

All-Season Tires:

Model	Tire size	Tire make and type
Cayenne, Cayenne Diesel,	255/55 R 18 109V XL M+S	Continental CrossContact LX Sport NO (Inside/Outside)
Cayenne S, Cayenne S Diesel,		Goodyear Eagle LS2 N1
Cayenne S E-Hybrid		Michelin Latitude Tour HP GreenX N1
	265/50 R 19 110V XL M+S	Goodyear Eagle LS2 N1
		Michelin Latitude Tour HP GreenX NO
	275/45 R 20 110V XL M+S	Continental CrossContact LX Sport NO (Inside/Outside)
		Goodyear Eagle LS2 N1
		Pirelli Scorpion Verde All Season NO (Inside/Outside)
Cayenne GTS,	265/50 R 19 101V XL M+S	Goodyear Eagle LS2 N1
Cayenne Turbo		Michelin Latitude Tour HP GreenX NO
	275/45 R 20 110V XL M+S	Continental CrossContact LX Sport NO (Inside/Outside)
		Goodyear Eagle LS2 N1
		Pirelli Scorpion Verde All Season NO (Inside/Outside)

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Model	Tire size	Tire make and type	
Cayenne Turbo S	275/45 R 20 110V XL M+S	Continental CrossContact LX Sport NO (Inside/Outside)	
		(Inside/Outside) Goodyear Eagle LS2 N1	
		Pirelli Scorpion Verde All Season NO (Inside/Outside)	

Winter Tires:

Model	Tire size	Tire make and type
Cayenne, Cayenne Diesel,	255/55 R 18 109V XL M+S	Dunlop SP Winter Sport 3D NO (Rotation)
Cayenne S, Cayenne S Diesel, Cayenne S E-Hybrid		Michelin Latitude Alpin LA2 N1 (Rotation)
Cayenne 3 L-mybrid		Pirelli Scorpion Ice & Snow N1 (Inside/Outside)
	265/50 R 19 110V XL M+S	Dunlop SP Winter Sport 3D NO (Rotation)
		- Only for vehicles with air suspension
		Pirelli Scorpion Winter NO (Rotation)
	275/45 R 20 110V XL M+S	Dunlop SP Winter Sport 3D NO (Rotation)
		- Only for vehicles with air suspension
		Michelin Latitude Alpin LA2 NO (Rotation)
Cayenne GTS, Cayenne Turbo	265/50 R 19 110V XL M+S	Dunlop SP Winter Sport 3D NO (Rotation)
		- Only for vehicles with air suspension
		Pirelli Scorpion Winter NO (Rotation)
	275/45 R 20 110V XL M+S	Dunlop SP Winter Sport 3D NO (Rotation)
		- Only for vehicles with air suspension
		Michelin Latitude Alpin LA2 NO (Rotation)

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Model	Tire size	Tire make and type
Cayenne Turbo S	275/45 R 20 110V XL M+S	Dunlop SP Winter Sport 3D NO (Rotation)
		Michelin Latitude Alpin LA2 NO (Rotation)



### 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 or "Left" or "Right" = mounting on specified side only

Arrow with both inscriptions "Rotation" and = directional mounting on specified side only.

"Inside/Outside"

Arrow with both inscriptions "Rotation" and "Left" = directional mounting on specified side only. or "Right"



### 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.



#### 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.

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Tire Pressure:



## 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

Wheel		ayenne, Ca enne S, Ca	-			Cayenne S	S E-Hybrid	
size	Part	load	Full	load	Part	load	Full	load
	FA	RA	FA	RA	FA	RA	FA	RA
18-inch	2.5 bar (36 psi)	2.8 bar (41 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)	2.4 bar (35 psi)	2.9 bar (42 psi)	2.6 bar (38 psi)	3.2 bar (46 psi)
19-inch/ 20-inch/ 21-inch	2.4 bar (35 psi)	2.6 bar (38 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)	2.4 bar (35 psi)	2.9 bar (42 psi)	2.6 bar (38 psi)	3.2 bar (46 psi)
18/19/ 20-inch spare wheel	3.5 bar (51 psi)							

	Cayenne GTS			
Wheel size	Part load		Full load	
	FA	RA	FA	RA
19-inch/ 20-inch/ 21-inch	2.4 bar (35 psi)	2.6 bar (38 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)
19/20-inch spare wheel	3.5 bar (51 psi)			

	Cayenne Turbo				
Wheel size	Part load		Full load		
	FA	RA	FA	RA	
19-inch/ 20-inch/ 21-inch	2.5 bar (36 psi)	2.7 bar (39 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)	
19/20-inch spare wheel	3.5 bar (51 psi)				

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	Cayenne Turbo S			
Wheel size	Part	load	Full load	
	FA	RA	FA	RA
20-inch/ 21-inch	2.6 bar (38 psi)	2.8 bar (41 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)
20-inch spare wheel	3.5 bar (51 psi)			

### Standard tire pressure for winter and all-season tires

Wheel	Cayenne, Cayenne Diesel Cayenne S, Cayenne S Diesel			Cayenne S E-Hybrid				
size	Part	load	Full	load	Part	load	Full	load
	FA	RA	FA	RA	FA	RA	FA	RA
18-inch	2.5 bar (36 psi)	2.8 bar (41 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)	2.4 bar (35 psi)	2.9 bar (42 psi)	2.6 bar (38 psi)	3.2 bar (46 psi)
19-inch/ 20-inch	2.4 bar (35 psi)	2.6 bar (38 psi)	2.6 bar (38 psi)	3.0 bar (44 psi)	2.4 bar (35 psi)	2.9 bar (42 psi)	2.6 bar (38 psi)	3.2 bar (46 psi)

	Cayenne GTS, Cayenne Turbo, Cayenne Turbo S				
Wheel size	Part load		Full load		
	FA	RA	FA	RA	
19-inch/ 20-inch			2.6 bar (38 psi)	3.0 bar (44 psi)	



### 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:** 

The best possible handling characteristics are achieved with 18-inch tires with snow chains installed on all 4 wheels on the vehicle, while it is also possible to install snow chains only on the rear axle. On vehicles with 19-inch and 20-inch tires, snow chains can only be installed on the rear axle. Only use snow chains together with all-season or winter tires.

Porsche offers the following snow chains as accessories:

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Tire size	Porsche Part No.	Type of snow chain
255/55 R 18	958.044.600.13	Link-type chain, quick fit
265/50 R 19 275/45 R 20	958.044.600.14 <sup>1</sup>	Link-type chain, quick fit

### 1 Only permitted on rear axle

### 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.</li>
- 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.

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### 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 %.

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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