

### Installation and Conversion Instructions

Cayenne (9YA)

23/17 ENU 4439

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### **Snow Chains**

Revision: This bulletin replaces bulletin Group 4, #23/17, dated March 27, 2018.

This bulletin was revised to include the Cayenne Coupe model.

Model Year: As of 2018

Concern: Instructions for assembly and use

Restrictions: **NOT** approved for use on the front axle!

NOT approved for use with 21-inch all-weather tires (all-season tires)!

- Cayenne (9YA):

**ONLY** approved for winter/all-weather complete wheels on the rear axle with the following dimensions:

- 19-inch winter/all-weather complete wheel (275/50 R19 M+S on 9.5 J x 19 RO 54 rim)
- 20-inch winter/all-weather complete wheel (305/40 R20 M+S on 10.5 J x 20 RO 64 rim)
- 21-inch winter complete wheel (305/35 R21 M+S on 11 J x 21 RO 58 rim)

### - Cayenne Coupé (9YA):

**ONLY** approved for winter/all-weather complete wheels on the rear axle with the following dimensions:

- 20-inch winter/all-weather complete wheel (305/40 R20 M+S on 10.5 J x 20 R0 55 rim)
- 21-inch winter complete wheel (305/35 R21 M+S on 11 J x 21 RO 49 rim)



Figure 1

## Cayenne (9YA)

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Notes:

Snow chains:

- have been tested and approved for the rear axle of the Cayenne (9YA  $\Rightarrow$  Figure 1).
- have plastic elements (eyelets and sleeve on the spring steel clip) to protect the rim from damage.
- can be fitted easily in the narrow wheel housing on the rear axle using the spring steel clip.
- can be repaired by retail outlets if necessary.

Parts Info:

9Y0.044.690.A

⇒ Snow chains, set

Parts List:

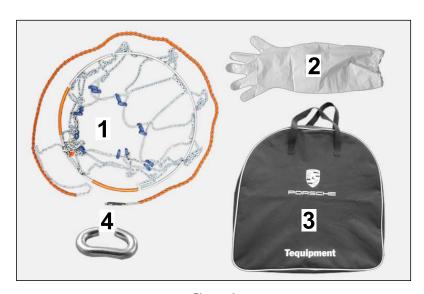


Figure 2

 2 x	Snow chain $\Rightarrow$ <i>Figure 2-1-</i>
 2 x	Glove <i>⇒ Figure 2</i> - <b>2</b> -
 1 x	Bag <i>⇒ Figure 2 - 3-</i>
 2 x	Chain link (for temporary repairs) $\Rightarrow$ Figure 2-4-
 1 x	Instructions for assembly and use (not shown)

- Technical Data: Min. spring steel clip diameter (closed): approx. 545 mm
  - Max. spring steel clip diameter (opening dimension): approx. 630 mm (for fitting: approx. 960 mm)
  - Weight: approx. 7.4 lbs (3,360 g) ea.
  - Permitted top speed (v<sub>max</sub>): 30 mph (50 km/h)

Note:

For the snow chains described here, always check the list of approved wheels/tires for Cayenne vehicles, type 9YA, in the PIWIS information system.

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#### **Driving with snow chains**

- · Danger of injury
- · Risk of material damage
- ⇒ Snow chains may ONLY be used for driving on snow-covered and icy roads.
- ⇒ On partly snow-covered roads: Drive much more slowly.
- ⇒ Driving with snow chains in off-road areas has NOT been tested and approved.
- ⇒ Allow for change in vehicle handling (see also Owner's Manual).
- ⇒ Avoid spinning wheels fitted with snow chains.
- ⇒ Observe recommended maximum speed of 30 MPH (50 km/h) on roads that are well covered with snow.
- ⇒ Immediately after fitting and after driving a short distance (150–300 ft/50 100 m): Check that snow chains are perfectly centered and re-tension if necessary.
- ⇒ After a distance of 12 miles (20 km) and after test emergency braking: Check that snow chains are installed correctly and check for signs of wear.
- ⇒ If the installed snow chain hits/touches against a curb: Check that the snow chain is installed correctly and check for signs of wear.
- ⇒ Before starting EVERY trip: Check that the snow chain is fitted/positioned correctly on the wheel.
- ⇒ When towing a trailer, follow the instructions in the Owner's Manual and observe all road traffic laws.



### Fitting/removing snow chains

- Danger of injury
- Risk of damage to the wheel housing, fender and other vehicle parts
- ⇒ Learn how to handle snow chains by installing/removing them when dry as a test.
- ⇒ AFTER installation: Check clearance of the wheel WITH snow chain in extreme positions (compressed).
- ⇒ Always fit/remove snow chains on level ground.
- ⇒ Always fit/remove snow chains when the vehicle is stationary and secured as described in the Owner's Manual.
- ⇒ As soon as the wheel fitted with the chain moves: Keep ALL parts of the body (fingers, hands and hair) a safe distance away.
- ⇒ When tightening and loosening the tensioner: Keep ALL parts of the body (fingers, hands and hair) a safe distance away.
- ⇒ For greater visibility and for your own safety when installing/removing snow chains, wear a Hi-vis jacket (e.g. from PORSCHE TEQUIPMENT).
- ⇒ Read the Installation and Conversion Instructions carefully and follow these instructions exactly during installation/removal.

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- ⇒ Observe the specified tire pressure (see Owner's Manual). Reducing the tire pressure for installation/removal is NOT permitted.
- ⇒ Observe the snow chains' substantial own weight.



### Using snow chains

- Danger of injury
- · Risk of material damage
- ⇒ Snow chains may ONLY be used if the vehicle and tire and rim combination have been approved by Porsche for the use of snow chains.
- ⇒ Incorrect and improper use of snow chains, e.g. pulling, lifting or other actions, is NOT permitted! After fitting snow chains correctly, ONLY use them for driving on suitable surfaces.
- ⇒ The use of one snow chain is NOT permitted. ALWAYS use snow chains on the left and right side of the vehicle when fitting them on the rear axle.
- ⇒ Visually check previously used snow chains before fitting. Damaged or broken snow chains must NEVER be used. This applies even if the wire diameter of a chain link is more than half worn in just a small area.
- ⇒ Broken chain elements can be repaired at retail outlets. ONLY use genuine spare parts for repairs.
- ⇒ After use: Clean/wash snow chains and leave them to dry. Store snow chains away from damaging chemicals.

#### Work Procedure: 1 Preparatory work

- 1.1 Check whether the installed tire/wheel combination on the rear axle is listed in the appropriate Approved Wheel and Tire bulletin (⇒ "Cayenne" Owner's Manual, section on "Tires and wheels")
- 1.2 **ONLY** for vehicles with rear axle steering (I-no. ON5): Set "Jack and snow chain mode" (⇒ "Cayenne" Owner's Manual, section on "Vehicle settings"
  - 1.2.1 Select the "CAR" sub-menu in Porsche Communication Management (PCM).
  - 1.2.2 Select the menu "Control" → "Vehicle" → "Chassis".
  - 1.2.3 Select the "Rear axle steering" menu and tick the relevant box. Snow chain mode is now active.
- ONLY for vehicles with adaptive air suspension with levelling system and height adjustment including Porsche Active Suspension Management (PASM = I-no. 1BK): Check chassis setup and switch to "Normal" (standard setting) if necessary (⇒ "Cayenne" Owner's Manual, section on "Porsche Active Suspension Management (PASM) with air suspension and levelling system").
- 1.4 Unpack snow chain and read instructions carefully.

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1.5 Check previously used snow chain for damage/breaks.The wire diameter must **NOT** be worn by more than half at any point!

- 2 Fit snow chain
  - 2.1 Position snow chain on the wheel
    - 2.1.1 Hold the snow chain at the ends of the spring steel clips.
      - 1 End of spring steel clip
      - 2 Chain net
      - 3 Locking plate
      - **4** Tensioning chain
      - 5 Bungee cord with hook

Arrange the chain net in such a way that it hangs down correctly at the clip ( $\Rightarrow$  *Figure 3*).

Turn entwined parts of the chain back over the clip if necessary.

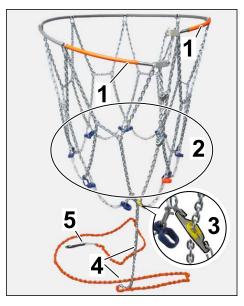


Figure 3



### Information

The snow chain that was tested and approved for Porsche does **NOT** have blue plastic corners ( $\Rightarrow$  Fig. 4, item 3).

- 2.1.2 Position snow chain in front of the wheel with the opening facing downwards.
  - Spring steel clip
  - 2 Chain net
  - 3 Plastic corner

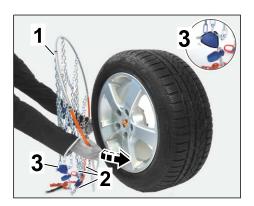


Figure 4

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- 2.1.3 Pull the ends of the spring steel clip the maximum distance apart (⇒ Figure 5 -A-).
  - 1 End of spring steel clip

Guide snow chain over the wheel from above ( $\Rightarrow$  *Figure 5* -**B**-).

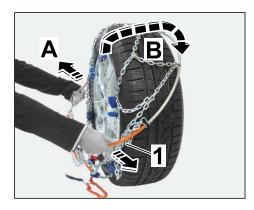


Figure 5

- 2.1.4 Guide the ends of the spring steel clip at the bottom of the wheel behind the wheel (\$\Rightarrow\$ Figure 6 -C-).
  - End of spring steel clip
  - **2** Chain bar
- 2.1.5 Carefully let the ends of the spring steel clip go so that the spring steel clip springs together.
- 2.1.6 Arrange the chain net and make sure that no bars of the chain are caught in the tread (⇒ Figure 6 -inset-).
- 2.2 Tension snow chain on the wheel

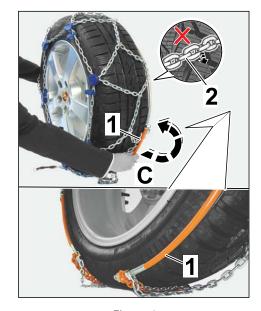


Figure 6

- 2.2.1 Drive forward or back to turn the wheel by approx. 1/4 (⇒ Figure 7 Arrows-).
  - 1 Tensioning chain
  - 2 Locking plate

The tensioning chain ( $\Rightarrow$  Figure 7 -1-) must **NOT** be under the wheel.

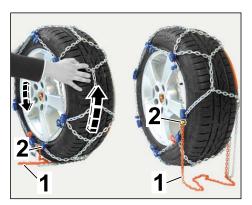


Figure 7

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- 2.2.2 Check that the tensioning chain is running parallel at the tensioning point and deflection roller (end of spring steel clip on inside of wheel) (⇒ Figure 8-A-) and is NOT twisted (⇒ Figure 8-B-).
  - 1 Tensioning chain
  - Deflection roller (end of spring steel clip)
  - 3 Tensioning point
  - A Tensioning chain routing: "OK"
  - B Tensioning chain routing: "NOT OK"

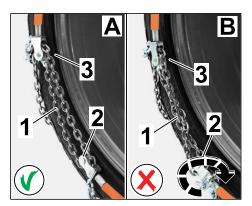
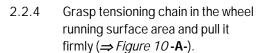


Figure 8

Turn deflection roller for spring steel clip if necessary ( $\Rightarrow$  *Figure 8* -arrow-).

- 2.2.3 Guide chain link of the tensioning chain out of the lock in the slot on the locking plate (⇒ Figure 9 -arrow-).
  - 1 Chain link
  - 2 Lock in slot on locking plate
  - 3 Locking plate

To do this, press the chain link past the locking lug on the lock ( $\Rightarrow$  *Figure 9-3-*).



- 1 Tensioning chain
- Ends of spring steel clip

The spring steel clip on the inside of the wheel closes ( $\Rightarrow$  *Figure 10-B-*).

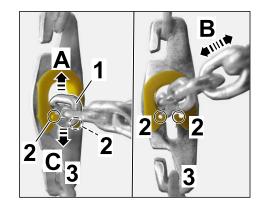


Figure 9

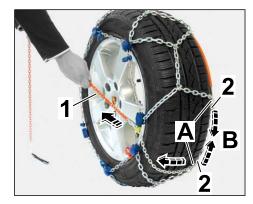


Figure 10

- 2.2.5 Pull the tensioning chain tightly through the locking plate (⇒ Figure 11-C-).
  - 1 Tensioning chain
  - 2 Locking plate with lock
  - 3 Chain link
  - 4 Slot on locking plate

Check that the coloured part of the tensioning chain (⇒ Figure 11-X-) is pulled completely through the locking plate.

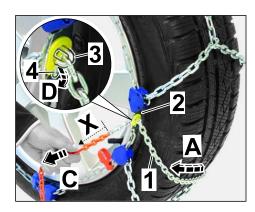


Figure 11

Engage chain link of the tensioning chain in the slot and lock on the locking plate ( $\Rightarrow$  *Figure 11-D-*).

- 2.3 Secure the snow chain on the wheel
  - 2.3.1 Guide tensioning chain after the locking plate to the orange plastic eyelet first (⇒ *Figure 13*).
    - 1 Tensioning chain
    - 2 Plastic eyelet
    - **3** Bungee cord with hook
  - 2.3.2 Feed bungee cord with hook through the plastic eyelet (⇒ Figure 12-inset, arrow-).



Figure 12

- 2.3.3 Feed the rest of the tensioning chain in a circle (⇒ Figure 13 -A-) over the complete wheel through the remaining plastic eyelets.
  - 1 Bungee cord with hook
  - 2 Chain link on outer chain

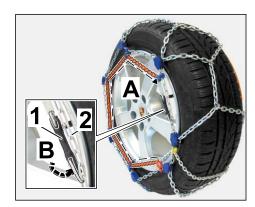
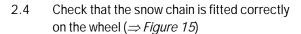


Figure 13

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- 2.3.4 If the tensioning chain does not end at the last plastic eyelet: Feed the tensioning chain through the plastic eyelets again (⇒ Figure 14 -A-).
  - 1 Last plastic eyelet
  - 2 Tensioning chain
  - **3** Bungee cord with hook
- 2.3.5 Engage hook of the bungee cord slightly tensioned into a chain link on the outer chain (⇒ Figure 13 -B- or ⇒ Figure 14 -B-).



- Area marked in red tensioning chain
- Slot on locking plate
- 3 Deflection roller/tensioning point
- The area marked in red on the tensioning chain must be pulled completely through the slot on the locking plate. The distance between the area marked in red and the slot on the locking plate (dimension X ⇒ Figure 15-X-) can vary depending on the tyre size.

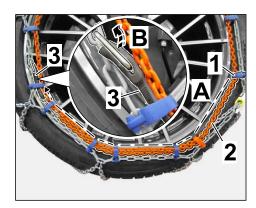


Figure 14

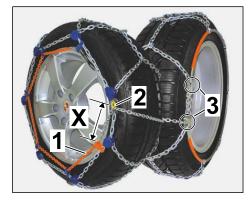


Figure 15

- Position of deflection roller/tensioning points (inside of wheel ⇒ Figure 15-4-): Must
   NOT be lying on the running surface of the tire or touching the road.
- 3 Remove snow chain
  - 3.1 Loosen snow chain.

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- 3.1.1 To make it easier to remove the snow chain: Drive/roll the vehicle so that the locking plate of the snow chain is at axle height (⇒ Figure 16).
  - 1 Locking plate
  - 2 Axle height
- 3.1.2 Disengage bungee cord with hook from the chain link.
- 3.1.3 Feed the tensioning chain through the plastic eyelets as far as the locking plate (⇒ Figure 16-1-).



Figure 16

- 3.1.4 Disengage the chain link at the locking plate and pull the tensioning chain through the locking plate (⇒ Figure 17-C-).
  - 1 Tensioning chain
  - 2 Locking plate



Figure 17

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- 3.1.5 Hold the chain net above the center of the axle and pull it away from the wheel (⇒ Figure 18-D-).
  - 1 Chain net
  - 2 End of spring steel clip

End of spring steel clip is rubbing slightly on the tire running surface (⇒ Figure 18-E-).

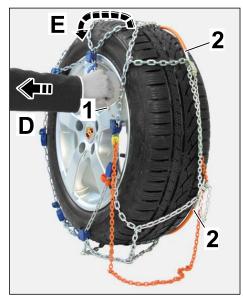


Figure 18

- 3.2 Pull snow chain off the wheel.
  - 3.2.1 If the end of the spring steel clip is visible: Pull the ends of the spring steel clip apart as far as possible (⇒ Figure 19-A-) and pull the snow chain off the wheel from above (⇒ Figure 19-B-).

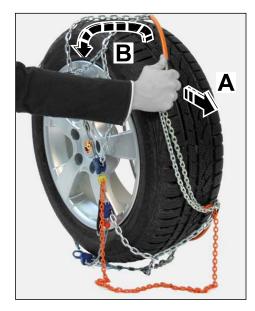


Figure 19

### Installation and Conversion Instructions

3.2.2 Set the snow chain down on the road ( $\Rightarrow$  *Figure 20*).



Figure 20

### NOTICE

### Using snow chains

- Damage to plastic eyelet/locking plate
- ⇒ The plastic eyelet/locking plate must be outside of the rolling area on the running surface of the tire.
  - 3.2.3 Carefully drive the vehicle off the snow chain ( $\Rightarrow$  *Figure 20-***Arrows-**).
  - 3.2.4 Shake out the snow chain and stow it away.

#### 4 Snow chain maintenance

- Wash snow chain in hot water immediately after use and dry it.
- Visually inspect the snow chain for signs of damage and adequate wire strength (chain links).
- Snow chains must **NOT** be oiled! Spray snow chains with commercially available anti-rust agent if necessary.
- After drying, stow dry snow chains back in the vehicle if necessary.
- Snow chains are made of high-quality steel, but are not rust-resistant. A small amount of rust will not impair the quality of the snow chains.

### Installation and Conversion Instructions

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Labor time: 50 TU

Labor time: 75 TU

44 39 24 00: - Snow chains (2 ea.) fitted on rear axle

Includes: Reading instructions.

Checking snow chains for damage before fitting and fitting

snow chains.

Checking that snow chains are fitted correctly and

re-tensioning after driving approx. 150 – 300 ft (50 – 100 m).

44 39 20 00: - Snow chains (2 ea.) removed/fitted on rear axle

Includes: Reading instructions.

Removing fitted snow chains.

Checking snow chains for damage before fitting and fitting

snow chains.

Checking that show chains are fitted correctly and

re-tensioning after driving approx.  $150 - 300 \, \text{ft} \, (50 - 100 \, \text{m})$ .

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