

Snow chains

Situation: **Instructions for assembly and use**

Model Year: **As of 2017**

Notes: Snow chains can be fitted on the rear axle of the Panamera (971) with the following winter wheels (⇒ *Figure 1*):

- 19-inch winter wheel (295/40 R19 M+S on 10.5J x 19 RO 62 rim)
- 20-inch winter wheel (315/35 R20 M+S on 10.5J x 20 RO 71 rim) or 21-inch winter wheel (315/30 R21 M+S on 10.5J x 21 RO 71 rim)

Snow chains:

- have been tested and approved for the rear axle of the Panamera (971). The fitting of snow chains on the front axle is **NOT** permitted!
- have plastic elements (clips, 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.



Figure 1

Part nos.: **971.044.690.A**
971.044.690.B

⇒ Snow chain, "19-inch" (295/40 R19 M+S), set
⇒ Snow chain, "20-inch" (315/35 R20 M+S) / "21-inch" (315/30 R21 M+S), set

Parts List:

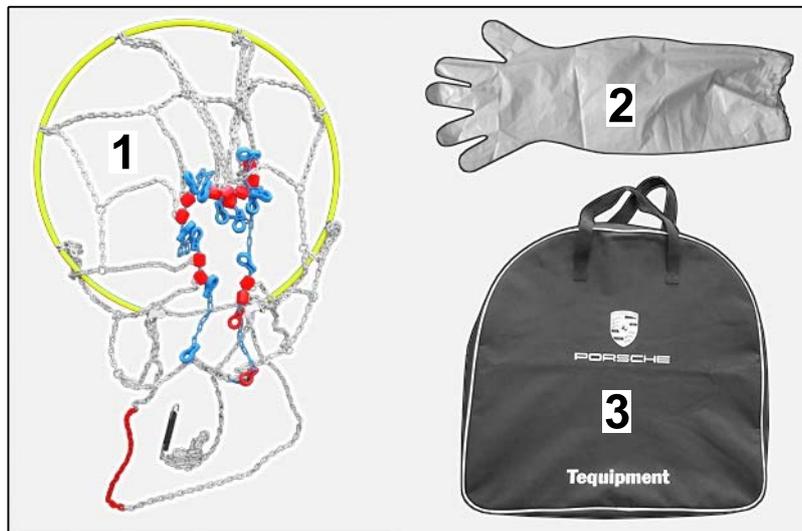


Figure 2

— — — 1	2 x	Snow chain ⇒ Figure 2-1-
— — —	2 x	Fitting glove ⇒ Figure 2-2-
— — —	1 x	Bag ⇒ Figure 2-3-
— — —	1 x	Instructions for use (not shown)

1 Size depends on the respective set!

Technical Data:

- Min. spring steel clip diameter² (closed): approx. 490 mm
- Min. spring steel clip diameter³ (closed): approx. 540 mm
- Max. spring steel clip diameter (opening dimension): approx. 990 mm
- Own weight⁴: approx. 3,050 g
- **Permitted top speed (v_{\max}): 50 km/h (30 mph)**

2 19-inch

3 20-inch/21-inch

4 One piece

Note: Observe the relevant legal regulations in the various countries!

ONLY for European Union (EU) member states:

For the snow chains described here, always check the list of approved wheels/tyres for Panamera vehicles, type 971, in the PIWIS information system.

Your Porsche partner will be happy to provide you with information about the current approval status.



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 Driver's Manual).
- ⇒ Avoid spinning wheels fitted with snow chains.
- ⇒ Observe recommended maximum speed of 50 km/h (30 mph) on roads that are well covered with snow.
- ⇒ Immediately after fitting and after driving a short distance (50 – 100 m): Check that snow chains are perfectly centred and re-tension if necessary.
- ⇒ After a distance of 20 km (12 mls) and after emergency braking: Check that snow chains are fitted correctly and check for signs of wear.
- ⇒ If the fitted snow chain hits/touches against a kerbstone/kerb: Check that the snow chain is fitted correctly and check for signs of wear.
- ⇒ Before starting **EVERY** journey: Check that the snow chain is fitted/positioned correctly on the wheel.
- ⇒ When towing a trailer, for example, follow the instructions in the Driver's Manual and observe the relevant road traffic regulations that apply in your country.

 **WARNING**

Fitting/removing snow chains

- Danger of injury
- Risk of damage to the wheel housing, wing and other vehicle parts
- ⇒ Learn how to handle snow chains by fitting/removing them when dry as a test.
- ⇒ **AFTER** fitting: 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 Driver'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 fitting/removing snow chains, wear a Hi-vis jacket (e.g. from PORSCHE EQUIPMENT).
- ⇒ Read the Installation and Conversion Instructions carefully and follow these instructions exactly during fitting/removal.
- ⇒ Observe the specified tyre pressure (see Driver's Manual). Reducing the tyre pressure for fitting/removal is **NOT** permitted.

⇒ Observe the snow chains' substantial own weight.

**WARNING****Using snow chains**

- Danger of injury
 - Risk of material damage
- ⇒ Snow chains may **ONLY** be used if the vehicle and tyre 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.

**Information**

Please pass all this information on to the customer as well.

- Fitting:
- 1 Preparatory work
 - 1.1 Check whether the fitted tyre/wheel combination on the rear axle is listed/approved in the Manufacturer's Certificate (⇒ "Panamera" Driver's Manual, section on "Tyres and wheels")
 - 1.2 **ONLY** for vehicles with rear axle steering including Power steering Plus (I-no. 0N5): Set "Jack and snow chain mode" (⇒ "Panamera" Driver's Manual, section on "Vehicle settings")
 - 1.2.1 Select the "CAR" sub-menu in Porsche Communication Management (PCM).
 - 1.2.2 Select the "Chassis" menu.
 - 1.2.3 Select the "Rear axle steering" menu and tick the relevant box. Snow chain mode is now active.
 - 1.3 **ONLY** for vehicles with Porsche Active Suspension Management (PASM) with air suspension and levelling system (I-no. 1BK): Check chassis setup and switch to "Comfort" (standard setting) if necessary (⇒ "Panamera" Driver's Manual, section on "Porsche Active Suspension Management (PASM) with air suspension and levelling system").
 - 1.4 Unpack snow chain and read Installation and Conversion Instructions carefully.

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 Grasp the snow chain at the ends of the spring steel clip (⇒ *Figure 3-1-*) with the opening facing downwards.

- 1 – Spring steel clip
- 2 – Chain net

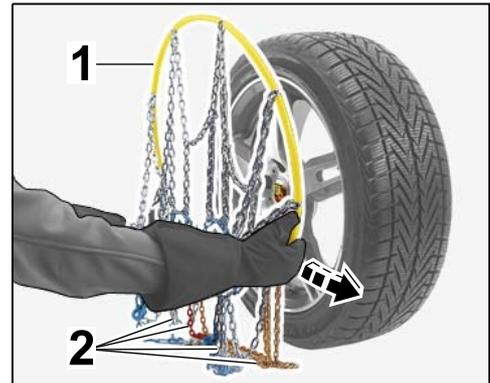


Figure 3

2.1.2 Arrange the snow chain's chain net (⇒ *Figure 3*).

2.1.3 Pull the ends of the spring steel clip apart as far as possible (⇒ *Figure 4-A-*) and guide the snow chain over the wheel from above (⇒ *Figure 4-B-*).

- 1 – Ends of spring steel clip

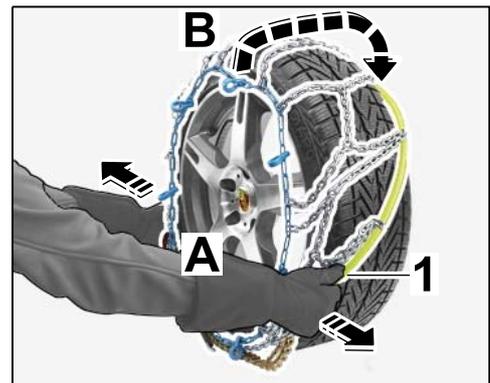


Figure 4

2.1.4 Guide the ends of the spring steel clip at the bottom of the wheel behind the wheel (⇒ *Figure 5-C-*).

- 1 – Ends of spring steel clip
- 2 – Chain bar



Figure 5

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 5-inset-*).

2.2 Tension snow chain on the wheel

2.2.1 Drive forward or back to turn the wheel by approx. $1/6$ (\Rightarrow *Figure 6 -arrows-*).

- 1 – Tensioning chain
- 2 – Locking plate

The tensioning chain (\Rightarrow *Figure 6-1-*) must **NOT** be under the wheel.



Figure 6

2.2.2 Check that the tensioning chain at the tensioning point and deflection roller (end of spring steel clip on inside of wheel) (\Rightarrow *Figure 7-A-*) is running parallel and is **NOT** twisted (\Rightarrow *Figure 7-B-*).

- 1 – Tensioning chain
- 2 – Deflection roller (end of spring steel clip)
- 3 – Tensioning point
- A – Tensioning chain routing: "OK"
- B – Tensioning chain routing: "NOT OK"

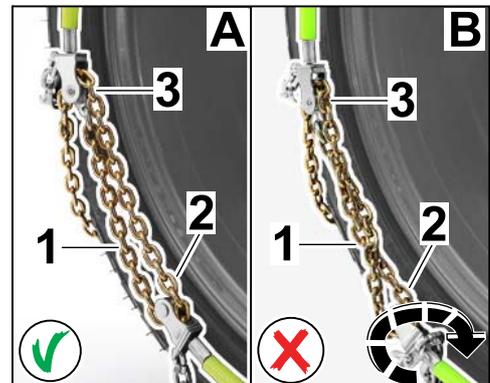


Figure 7

Turn deflection roller for spring steel clip if necessary (\Rightarrow *Figure 7 -arrow-*).

2.2.3 Grasp tensioning chain in the wheel running surface area and pull it firmly (\Rightarrow *Figure 8-A-*).

- 1 – Tensioning chain
- 2 – Ends of spring steel clip

The spring steel clip on the inside of the wheel closes (\Rightarrow *Figure 8-B-*).

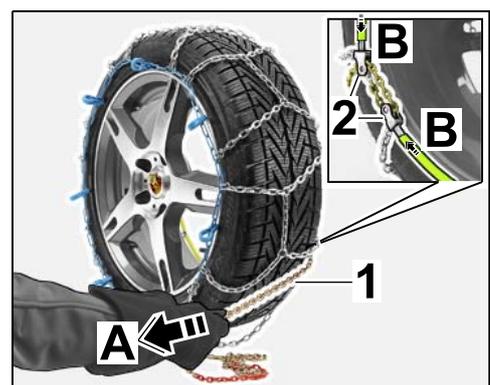


Figure 8

2.2.4 Pull the tensioning chain tightly through the locking plate (⇒ *Figure 9-C-*).

1 – Tensioning chain

Engage chain link of the tensioning chain in the slot on the locking plate (⇒ *Figure 9-D-*).

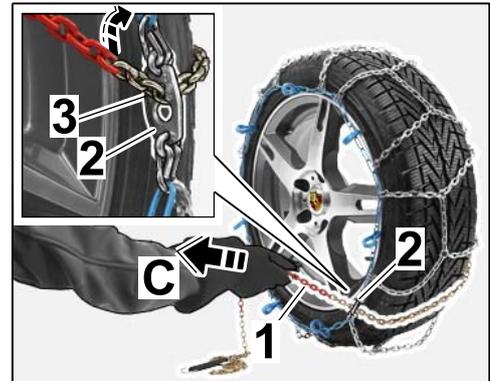


Figure 9

2.3 Secure the snow chain on the wheel

1 – Bungee cord with hook

2 – Plastic eyelet

2.3.1 Guide the tensioning chain further up to the next plastic eyelet.

2.3.2 Feed bungee cord with hook through the plastic eyelet (⇒ *Figure 10*).

2.3.3 Feed the rest of the tensioning chain in a circle (⇒ *Figure 10 -arrow-*) over the complete wheel through the remaining plastic eyelets.

2.3.4 Engage hook of the bungee cord slightly tensioned into a chain link on the outer chain or tensioning chain.

1 – Bungee cord with hook

2 – Chain link on outer chain

3 – Outer chain

4 – Tensioning chain

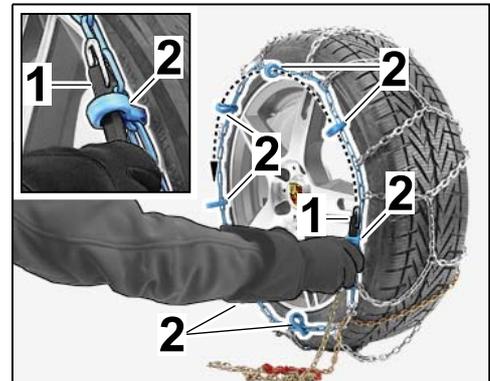


Figure 10

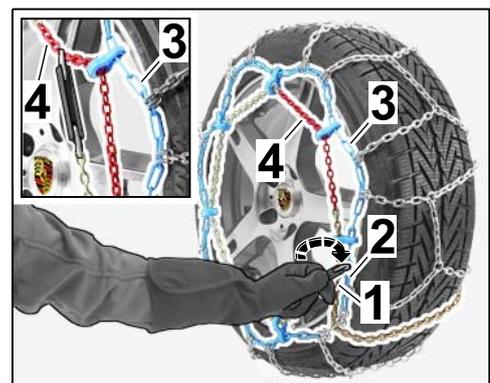


Figure 11

2.4 Check that the snow chain is fitted correctly on the wheel

- 1 – Area marked in red – tensioning chain
- 2 – Locking plate

- 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 12-X*.) can vary depending on the tyre size.
- Position of deflection roller/tensioning point (inside of wheel): Must **NOT** be lying on the running surface of the tyre or touching the road.

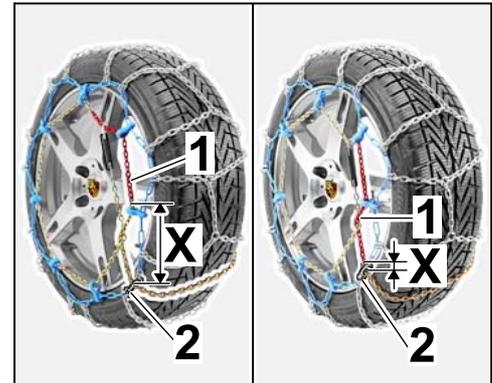


Figure 12

3 Remove snow chain

3.1 Loosen snow chain.

3.1.1 To make it easier to remove the snow chain: Drive/roll the vehicle until the locking plate for the snow chain is positioned according to ⇒ *Figure 13-circle*.

- 1 – Locking plate
- 2 – Bungee cord with hook
- 3 – Tensioning chain

3.1.2 Disengage bungee cord with hook from the chain link (⇒ *Figure 13-A*.)

3.1.3 Feed the tensioning chain through the plastic eyelets as far as the locking plate (⇒ *Figure 13-B*.)

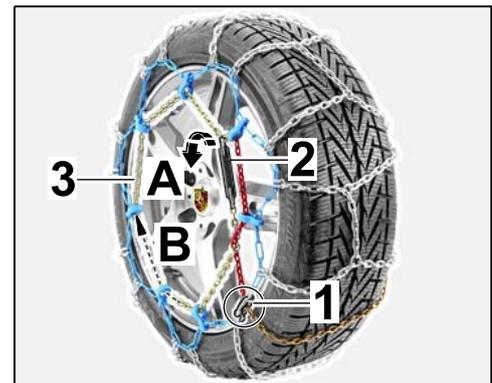


Figure 13

3.1.4 Disengage the chain link at the locking plate and pull the tensioning chain through the locking plate (⇒ *Figure 14 -C-*).

- 1 – Locking plate
- 2 – Tensioning chain
- 3 – Chain elements

3.1.5 Loosen chain elements (⇒ *Figure 14 -3-*) of the snow chain on the tyre.

3.2 Pull snow chain off the wheel.

3.2.1 Pull the ends of the spring steel clip apart as far as possible (⇒ *Figure 15 -A-*) and pull the snow chain off the wheel from above (⇒ *Figure 15 -B-*).

3.2.2 Set the snow chain down on the road (⇒ *Figure 16*).

3.2.3 Carefully drive the vehicle off the snow chain (⇒ *Figure 16 -arrows-*).

3.2.4 Shake out the snow chain and stow it away.

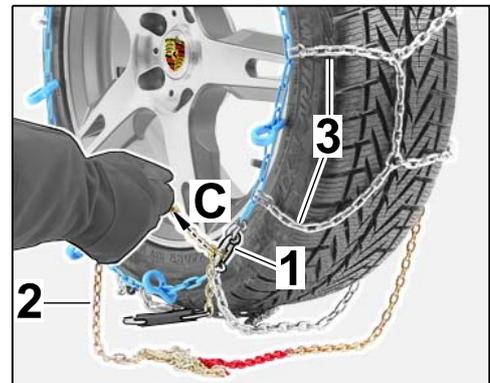


Figure 14

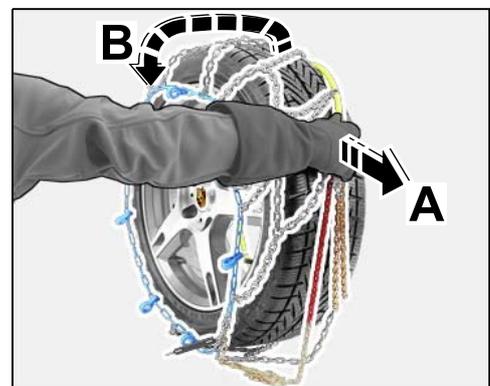


Figure 15



Figure 16