Noise Symptom - Rumbling in the Vehicle and Vibrations on the Steering Wheel When Air Conditioning is at the Highest Setting: Reworking compressor / evaporator line (SY 57 / 19)

Vehicle Type: **Panamera 4 E-Hybrid (971) / Panamera Turbo S E-Hybrid (971)**
Panamera 4 E-Hybrid Executive (971) / Panamera Turbo S E-Hybrid Executive (971)
Panamera 4 E-Hybrid Sport Turismo (971) / Panamera Turbo S E-Hybrid Sport Turismo (971)

Model Year: **As of 2017 up to 2019**

Subject: **Air conditioning – compressor / evaporator line**

Symptom: When air conditioning is activated and the blower is at its highest setting, rumbling noises can be heard in the vehicle and vibrations can be felt on the steering wheel.

Cause: Vibrations from the electric air-conditioning compressor can be transmitted into the interior of the vehicle via the compressor / evaporator refrigerant line.

Remedial Action: Rework compressor / evaporator line as described under **"Work Procedure"**.

Parts Info:

Part No.	Designation	Qty.
971298091	⇒ Repair kit	1

Tools:
- Measuring tape
- Water-resistant felt-tip pen, e.g. white, yellow
- Scissors

Preliminary work

Work Procedure: 1 Remove compressor / evaporator line – section from compressor to connection point – in accordance with the instructions in ⇒ *Workshop Manual '874519 Removing and installing compressor / evaporator line'*.

Reworking compressor / evaporator line

Work Procedure:

Information
Be extremely careful when cutting open the cut protection so as not to damage the hose on the refrigerant line underneath.

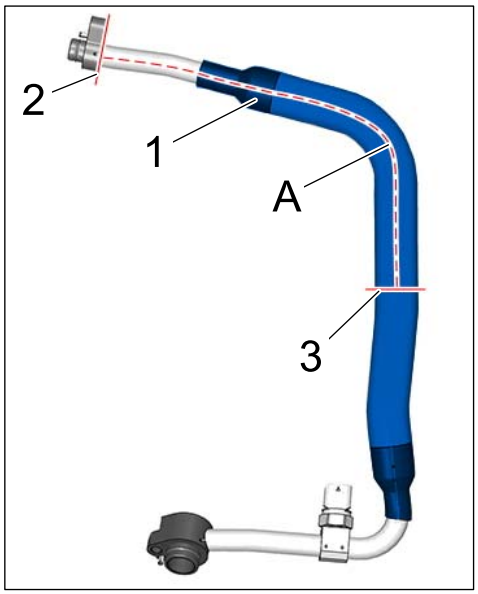
1 Expose compressor / evaporator line and open cut protection.

1.1 Determine the cutting length ⇒*Cut protection* **-dimension A-**.

1.1.1 Place measuring tape on connection block ⇒*Cut protection* **-2-** and measure along the compressor/evaporator line in order to determine the cutting length ⇒*Cut protection* **-dimension A-**.

1.1.2 Mark cutting length using a water-resistant felt-tip pen on the cut protection ⇒*Cut protection* **-3-**.

1.2 Carefully cut open cut protection to the required length, starting from the connection block to the applied marking ⇒*Cut protection* **-3-**.



Cut protection

1 – Cut protection
2 – Starting point for measurement
3 – Cutting length marking
Dimension A – **Length 355 mm**/
Length 14 Zoll

2 Fold down cut protection to expose the mounting point ⇒*Cut protection folded down*.

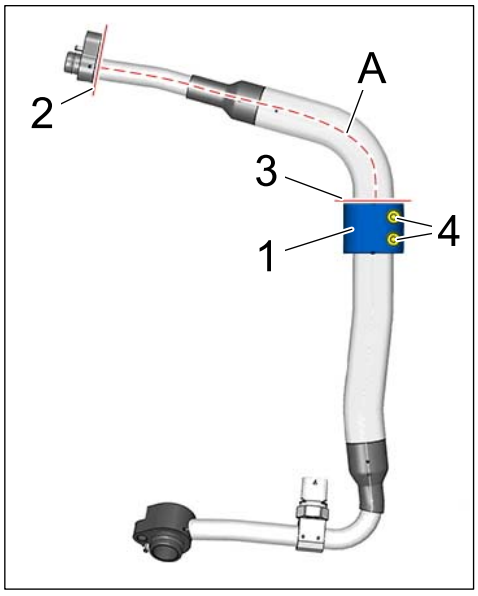
Cut protection folded down

3 Fit blocking mass ⇒*Blocking mass on compressor/evaporator line* **-1-** on compressor/evaporator line.

3.1 Place measuring tape on connection block ⇒*Blocking mass on compressor/evaporator line* **-2-** and measure along the compressor/evaporator line ⇒*Blocking mass on compressor/evaporator line* **-dimension A-** to determine the installation position of the upper edge of the blocking mass ⇒*Blocking mass on compressor/evaporator line* **-3-**.

3.2 Mark installation position of upper edge of blocking mass ⇒*Blocking mass on compressor/evaporator line* **-3-** on the compressor/evaporator line.

3.3 Position blocking mass at the marking ⇒*Blocking mass on compressor/evaporator line* **-3-** and tighten screws ⇒*Blocking mass on compressor/evaporator line* **-4-** to **Tightening torque 8 Nm (6 ftlb.)** .



Blocking mass on compressor/evaporator line

1 – Blocking mass
2 – Starting point for measurement
3 – Installation position of upper edge of blocking mass
Dimension A – **Length 291 mm/ Length 11.5 Zoll**

4 Place cut protection over blocking mass and fold it in above it. Make sure that the complete hose is covered by the cut protection ⇒*Positioning: Cut protection*.

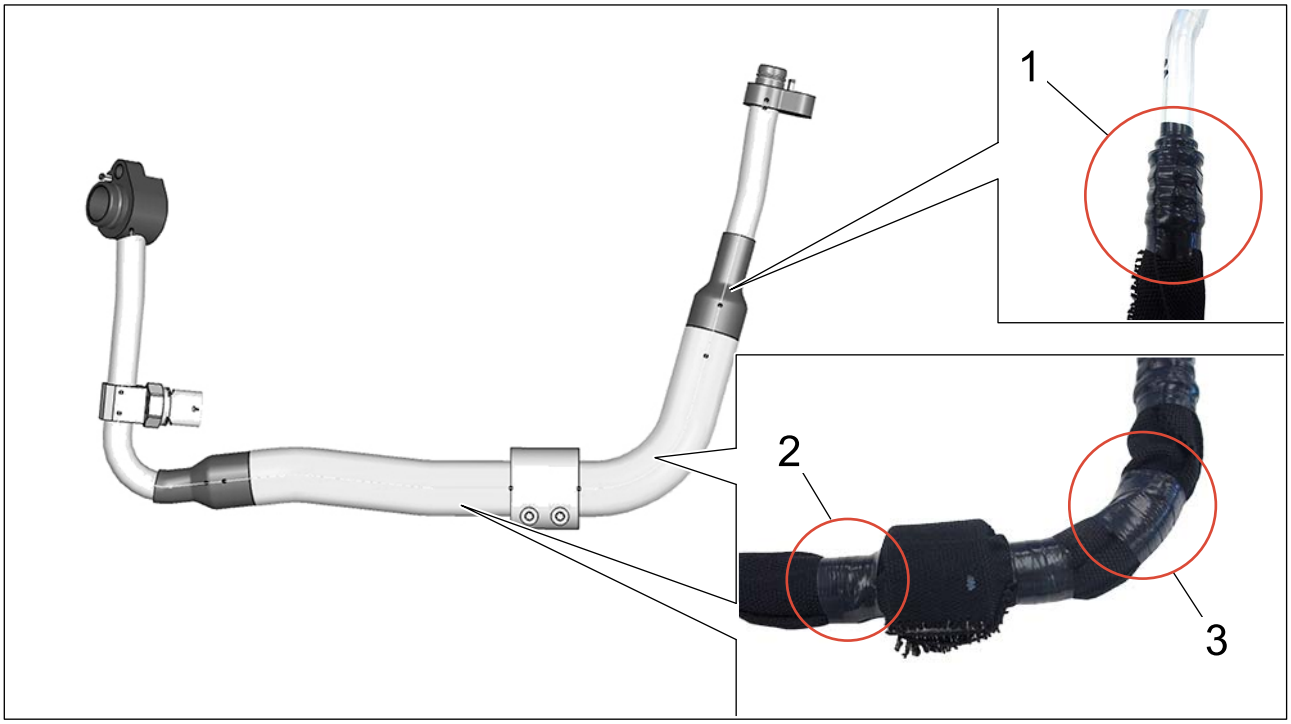
Positioning: Cut protection

Information
The silicone tape must be applied tightly to ensure that it holds properly.

5 Secure cut protection over blocking mass with silicone tape ⇒*Securing cut protection: Step 1*.

Securing cut protection: Step 1

6 Secure cut protection over crimping ⇒*Securing cut protection: Step 2* **-1-**, under blocking mass ⇒*Securing cut protection: Step 2* **-2-** and at the bend ⇒*Securing cut protection: Step 2* **-3-** using silicone tape.



Securing cut protection: Step 2

7 Wrap silicone tape all around the blocking mass ⇒*Securing cut protection: Step 3*.

Securing cut protection: Step 3

8 Before installing the line, visually check that all fixings are attached properly ⇒*Overview: Cut protection secured properly*.

Overview: Cut protection secured properly

Subsequent work

Work Procedure: 1 Install compressor/evaporator line – section from compressor to connection point – in accordance with the instructions in ⇒ *Workshop Manual '874519 Removing and installing compressor/evaporator line'*.

Invoicing

Invoicing: The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
87454900	Reworking compressor/evaporator line	

For invoicing and documentation using PQIS, enter the following coding:

Location (FES5)	87010	Air conditioning
Damage type (SA4)	2018	rumbling, humming

References: ⇒ *Workshop Manual '874519 Removing and installing compressor/evaporator line'*