

Noise Symptom - Whirring, Vibration in the Area of the Front End: Check Air-Conditioning Compressor Mounts are Secure (SY 86/23)

Vehicle Type: **Taycan (Y1A, Y1C)**

Model Year: **As of 2021 up to 2023**

Concerns: **Air-conditioning compressor mounts**

Symptom: Customers complain of a vibrating or buzzing noise in the front end area while the air conditioning is switched on.

Cause: The noises can be caused either by out-of-tolerance mounts on the air conditioning compressor, or by out-of-tolerance mounting holes on the front axle carrier auxiliary frame for the air conditioning compressor.

This can lead to increased play or the mounts for the air-conditioning compressor not being secure, which is noticeable by buzzing and/or vibration in the area of the front end.

Remedial Action: If there is a customer complaint, check the air-conditioning compressor mounts and replace them if necessary. Due to the different possible causes, proceed with the following steps:

- 1 Check whether the vibrations originate from the air-conditioning compressor and check that the air-conditioning compressor mounts are secure in the bolted state. ⇒ *Technical Information 'Check air-conditioning compressor is secure'*
- 2 If the vibrations originate from the air-conditioning compressor, remove air-conditioning compressor, replace air-conditioning compressor mount(s) and then check again for tightness. ⇒ *Technical Information 'Replacing air-conditioning compressor bearing'*
- 3 If one or more mounts for the air-conditioning compressor can still be moved in the mounting hole on the auxiliary frame after being replaced, replace auxiliary frame on the front axle carrier and also replace the mounts again. Replace ⇒ *Technical Information 'auxiliary frame on front axle carrier'*



Inspection for tightness



Information

If the mounts for the air-conditioning compressor have already been replaced on a vehicle in the past, replace the auxiliary frame on the front axle carrier directly and also replace the mounts for the air-conditioning compressor again. ⇒ *Technical Information 'Replace auxiliary frame on front axle carrier'*

Check air-conditioning compressor is secure

- Tools:
- Torque wrench, 2-10 Nm (1.5-7.5 ftlb.), e.g. **V.A.G 1783 - torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
 - Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **V.A.G 1331A - torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.)**
 - Torque wrench 40–200 Nm (30–148 ftlb.), e.g. **V.A.G 1332A - Torque wrench 40–200 Nm (30–148 ftlb.)**

- Work Procedure: 1 Remove front axle support (rear section).
⇒ *Workshop Manual '400819 Removing and installing front axle support (rear section)'*
- 2 Switch on air conditioning.
- 3 Check air-conditioning compressor for tightness.
- Check air-conditioning compressor for vibrations.
 - Check air-conditioning compressor for play between the mounts and the auxiliary frame.
 - Let the air conditioning compressor run for a few minutes. Pay attention to noises coming from the mounts..

Assessment	Action
<ul style="list-style-type: none"> • Vibration on air-conditioning compressor and / or • Play between mounts and auxiliary frame and / or • Buzzing noise coming from the air-conditioning compressor mount 	Continue to replace air-conditioning compressor ⇒ <i>Technical Information '400819 bearing'</i>
None of the above abnormalities present on the air-conditioning compressor	Install front axle support (rear section) and continue troubleshooting elsewhere. ⇒ <i>Workshop Manual '400819 Removing and installing front axle support (rear section)'</i>

Replacing air-conditioning compressor mount

Parts Info:	Part No.	Designation – Location	Number
	95557374903	⇒ O-Ring 23.8 x 2.4 - air-conditioning compressor	1 piece

95557374901	⇒ Round seal 11 x 2.5 - air-conditioning compressor	1 piece
N 10261307	⇒ M10 hexagon nut - Wiper arm	2 pieces
N 91074201	⇒ Internal hexagon round-head bolt M5 x 16 - Electric passenger compartment heater bracket	1 piece
N 10737001	⇒ Hexagon nut, self-locking, M6 - Electric passenger compartment heater bracket	3 pieces
PAF106825	⇒ Cheese head bolt with multiple-tooth head M8 x 40 - Dome strut to spring strut mount	4 pieces
PAF912040	⇒ Hexagon-head bolt M8 x 50 - (Dome) strut to spring strut mount	4 pieces
9J1819228	⇒ Mounting - air-conditioning compressor	3 pieces

The high-voltage charger is fastened either with 4 nuts or with 3 nuts and a screw. Use the appropriate combination.

N 10737001	⇒ Hexagon nut, self-locking, M6 - Holder for high-voltage charger	3 or 4 pieces
N 91096801	⇒ Internal hexagon round-head countersunk screw M6 - Holder for high-voltage charger	1 piece

Material: **Required materials** (usually already available in the Porsche Center):

Part No.	Designation - Location	Quantity
00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube) - Wheel centring surface at wheel hub	As required
00004330516	⇒ Coolant additive - Cooling system	As much as required (approx. 1 liter/ 33.8 fl oz required per vehicle)

9A757390000 ⇒ Refrigerant oil SP-A2 approx. 15 ml/ 0.51 fl oz

Vehicles with refrigerant R134a

... ⇒ Refrigerant R134a As required

Vehicles with refrigerant R1234yf

... ⇒ Refrigerant R1234yf As required

Tools:

- Threaded bolts for fitting wheel
- Plastic wedge
- Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **V.A.G 1783 - torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.)**
- Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **V.A.G 1331A - torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.)**
- Torque wrench 40–200 Nm (30–148 ftlb.), e.g. **V.A.G 1332A - Torque wrench 40–200 Nm (30–148 ftlb.)**
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 - battery charger 90 A 9900 - PIWIS Tester 4**
- **VAS 6935 - Pole terminal puller**
- **VAS 6883A - Insulated tool set**
- **VAS 6786 - Warning sign (warning of dangers associated with batteries)**
- **VAS 6558/9-6A - High-voltage test adapter**
- **VAS 6558A - High-voltage testing module**
- **VAS 6558A/27 - Set of Kelvin clamps and test probes**
- **T40262 - T40262 - Locking cap**
- **VAS 6410 - Contact surface cleaning set**
- **VAS 6558A/30 - High-voltage measuring adapter**
- **VAS 6122 - Engine bung set**
- **3093 - 3093 - Hose clamp**
- **VAS 6890 - Spring band clamp pliers**
- **VAS 6675A - Funnel**
- **VAS 531 011 - Cooling system service equipment or**
- **VAS 6096/2 - Vacuum pump**

For vehicles in the USA

- **VAS 6558/14A - High-voltage test adapter**
- **VAS 6558/18A - High-voltage test adapter**

For vehicles with refrigerant R134a:

- Air conditioner suitable for refrigerant R134a, e.g. **VAS 6381B - air-conditioning service unit R134a**

For vehicles with refrigerant R1234yf:

- Air conditioner suitable for refrigerant R1234yf, e.g. **VAS 581 001A - air-conditioning service unit R1234yf**

Work Procedure: 1 Remove air-conditioning compressor. For instructions, see
 ⇒ *Workshop Manual '873419 Removing and installing electric air-conditioning compressor'*

2 Replace air-conditioning compressor mount.

3 Make sure air-conditioning compressor mounting is secure.

- Pull air-conditioning compressor mount in vertical direction.
- Turn air-conditioning compressor mount in the auxiliary frame.
- Tilt air-conditioning compressor mount back and forth horizontally.

Assessment	Action
<ul style="list-style-type: none"> • Air-conditioning compressor mount cannot be pulled out in a vertical direction • Air-conditioning compressor mount is difficult to twist in the auxiliary frame • Air-conditioning compressor mount cannot be tilted back and forth horizontally in the auxiliary frame 	Continue with Step 4.
<ul style="list-style-type: none"> • Air-conditioning compressor mount can be pulled out in a vertical direction and / or <ul style="list-style-type: none"> • Air-conditioning compressor mount can be twisted very easily in the auxiliary frame and / or <ul style="list-style-type: none"> • Air-conditioning compressor mount can be tilted back and forth horizontally in the auxiliary frame 	Continue with ⇒ <i>Technical Information '873419 Replace auxiliary frame on front axle carrier'</i>

4 Install the air-conditioning compressor. For instructions, see
 ⇒ *Workshop Manual '873419 Removing and installing electric air-conditioning compressor'*

5 Test drive.

Replace auxiliary frame on front axle carrier



Information

Replace the auxiliary frame including mounts for air-conditioning compressor.

Parts Info:	Part No.	Designation – Location	Number
	9J1713633B	⇒ Frame – Front axle carrier	1 piece
	PAF909664	⇒ Hexagon nut, self-locking, M12 x 1.5 - Frame on front axle carrier	2 pieces
	N 10640301	⇒ Hexagon-head bolt, M12 x 1.5 x 100 x 90 - Frame on front axle carrier	2 pieces
	9J1819228	⇒ Mounting - air-conditioning compressor	3 pieces
	PAF106825	⇒ Cheese head bolt with multiple-tooth head M8 x 40 - Dome strut to spring strut mount	4 pieces
	N 10261307	⇒ M10 hexagon nut – Wiper arm	2 pieces
	9A700837900	⇒ Tie-wrap, A8.0 x 337 - Front brake-disc air guide	2 pieces
	WHT007646	⇒ Eccentric screw, M14 x 1.5 x 105 - Lower trailing arm on rear axle housing	2 pieces
	WHT001938	⇒ Hexagon nut, self-locking, M14 x 1.5 - Lower trailing arm on rear axle housing	2 pieces
	PAF009123	⇒ Eccentric screw, M12 x 1.5 x 95 – Tie rod on rear axle steering	2 pieces
	PAF909664	⇒ Hexagon nut, self-locking, M12 x 1.5 – Tie rod on rear axle steering	2 pieces
	N 91244301	⇒ Hexagon-head bolt with inner hexagon socket head (DUO) M12 x 1.5 x 90 - Front axle beam to body	6 pieces
	N 10628301	⇒ Hexagon-head bolt, M12 x 90 – Power steering gear on front axle carrier	2 pieces
	PAF909664	⇒ Hexagon collar nut, self-locking, M12 x 1.5 – Power steering gear on front axle carrier	2 pieces

N 10782201	⇒ Hexagon-head bolt M8 x 95 – Power steering gear on front axle carrier	1 piece
N 10435506	⇒ Hexagon collar nut, self-locking M8 – Power steering gear on front axle carrier	1 piece
WHT004955A	⇒ Internal hexagon round cheese head bolt, M8 x 30 – Universal joint for steering column	1 piece
N 10261311	⇒ M10 hexagon nut – Spring strut on spring strut dome	6 pieces
PAF911085	⇒ Collared cheese head bolt with multiple-tooth head, M10 x 60 – Upper trailing arm on wheel bearing housing	2 pieces
PAF102861	⇒ Hexagon collar nut, self-locking M10 – Upper trailing arm on wheel bearing housing	2 pieces

Vehicles with 17-inch brake

PAF004571	⇒ Collared cheese head bolt with multiple-tooth head, M14 x 1.5 x 115 – Brake calliper front	2 pieces
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Vehicles with 18 and 19-inch brake

PAF004572	⇒ Collared cheese head bolt with multiple-tooth head, M14 x 1.5 x 135 – Brake calliper front	2 pieces
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Material: **Required materials** (usually already available in the Porsche Center):

Part No.	Designation – Location	Quantity
00004330508	⇒ Mounting paste (100 gram/ 3.52 oz tube) – Wheel centring surface at wheel hub	As required
00004330516	⇒ Coolant additive – Cooling system	As much as required (approx. 1 liter/ 33.8 fl oz required per vehicle)

9A757390000 ⇒ Refrigerant oil SP-A2 approx. 15 ml/ 0.51 fl oz

Vehicles with refrigerant R134a

... ⇒ Refrigerant R134a As required

Vehicles with refrigerant R1234yf

... ⇒ Refrigerant R1234yf As required

Tools:

- Threaded bolts for fitting wheel
- Plastic wedge
- Mounting lever e.g. **HAZET 650-20**
- Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **V.A.G 1783 - torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.)**
- Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **V.A.G 1331A - torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.)**
- Torque wrench 40–200 Nm (30–148 ftlb.), e.g. **V.A.G 1332A - Torque wrench 40–200 Nm (30–148 ftlb.)**
- Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 - battery charger 90 A 9900 - PIWIS Tester 4**
- **VAS 6935 - Pole terminal puller**
- **VAS 6883A - Insulated tool set**
- **VAS 6558/9-6A - High-voltage test adapter**
- **VAS 6558A - High-voltage testing module**
- **VAS 6558A/27 - Set of Kelvin clamps and test probes**
- **T40262 - T40262 - Locking cap**
- **VAS 6410 - Contact surface cleaning set**
- **VAS 6959 - Torx screwdriver insert T30**
- **3093 - 3093 - Hose clamp**
- **VAS 6675A - Funnel**
- **P90009 - P90009 - Puller**
- **VAS 6931 - Transmission and gearbox jack**
- **VAS 6826 - Steering wheel balance**
- **VAS 531 011 - Cooling system service equipment**
- **VAS 6927 - Tie-wrap pliers**
- **T90009 - T90009 - Insert tool**
- **VAS 261 019 - Ratchet ring wrench socket, a/f 19**
- **VAS 6826 - Steering wheel balance**
- **VAS 6918 - Quick-clamping unit**
- **VAS 6832 - Master Gear unit elevating platform**
- **VAS 6832/12 - Supplementary set**
- **VAS 6832/8 - Universal assembly tool or**
- **VAS 6096/2 - Vacuum pump**

For vehicles in the USA

- **VAS 6558/14A - High-voltage test adapter**
- **VAS 6558/18A - High-voltage test adapter**

For vehicles with refrigerant R134a:

- Air conditioner suitable for refrigerant R134a, e.g. **VAS 6381B - air-conditioning service unit R134a**

For vehicles with refrigerant R1234yf:

- Air conditioner suitable for refrigerant R1234yf, e.g. **VAS 581 001A - air-conditioning service unit R1234yf**

For vehicles with LED headlights (M no. 8IS)

- **VAS 5208A - Headlight aiming device** or
- **VAS 5209B - Headlight aiming device**

For vehicles with LED matrix headlights (M no. 8IU and 8JU)

- **VAS 5208A - Headlight aiming device** or
- **VAS 621 001 - Headlight aiming device**

For vehicles with Park Assist assistance systems including Surround View (M no. KA6)

- **VAS 721 001 - Calibration System**

For vehicles with Night View Assist (M no. 9R1)

- **VAS 6430/1A - Adjustment device with reflector**
- **VAS 6430/6 - Night View Assist calibration unit**
- **VAS 6350A - Calibration unit**

For vehicles with adaptive cruise control (ACC) (M no. 3V2 or 3V9)

- **VAS 6430/1A - Adjustment device with reflector**
- **VAS 6430/3 - Mirror for adjustment device**

For vehicles with City Assist / Intersection Assist (M no. JX1)

- **VAS 6350/2A - Spacing laser**
- **VAS 6350/4 - Calibration unit for Lane Change Assist**
- **VAS 6350A - Calibration unit**

- Work Procedure: 1 Replace auxiliary frame on front axle carrier incl. new mount. For instructions, see
⇒ *Workshop Manual '400637 Replacing front axle carrier (2WD)'*
- 2 If the air-conditioning compressor was previously removed, reinstall the air-conditioning compressor after replacing the auxiliary frame and installing the front axle carrier. For instructions, see
⇒ *Workshop Manual '873419 Removing and installing electric air-conditioning compressor'*
- 3 Test drive.

Labor position and PCSS encryption



Information

The following labor operations must be consulted if necessary.

- 90802550 Program camera night vision
- 96382550 Calibrating front camera
- 27851550 Adjusting distance measuring sensor control unit

Labor position:

APOS	Labor operation	I No.
87340145	Check air-conditioning compressor	
87344900	Rework air-conditioning compressor (remove and install air-conditioning compressor, replace air-conditioning compressor mount)	
87344901	Rework air-conditioning compressor (replace auxiliary frame, install air-conditioning compressor, valid for vehicles with air suspension)	
87344902	Rework air-conditioning compressor (replace auxiliary frame, install air-conditioning compressor, valid for vehicles with steel chassis)	
87344903	Rework air-conditioning compressor (replace auxiliary frame, valid for vehicles with air suspension)	
87344904	Rework air-conditioning compressor (replace auxiliary frame, valid for vehicles with steel chassis)	

Location (FES5)	87340	Air-conditioning compressor
Damage type (SA4)	2018	Drones, hums

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