

WMP5 – Checking Pressure Sensors and Replacing them if Necessary (Workshop Campaign)

Revision: This bulletin replaces bulletin Group 8 199/21 WMP5, dated March 8, 2022

Model Year: **As of 2020 up to 2022**

Model Line: **Taycan (Y1A/Y1B)**

Concerns: **Air conditioning system pressure sensors**

Information: **Due to a manufacturing error at the supplier, pressure sensors for the refrigerant circuit purchase were installed on the affected vehicles that do not meet the required specifications.**

The failure of one or more pressure sensors in the refrigerant circuit can therefore not be excluded over the lifetime of the vehicle. As a result, there is a possibility that the proper functioning of the air conditioning and battery cooling system is not given. This can lead to an increased temperature of the high-voltage battery and, as a result, to a reduced charging performance during the fast charging process as well as to a reduced driving performance.

Action required: Check pressure sensors and replace them if necessary.



Information

Every vehicle is assigned **all campaign scopes**.

Depending on the result of the check, the following scopes arise:

Scope 1: Check pressure sensors

Scope 2: Checking pressure sensors and replacing **pressure sensor PT1**

Scope 3: Checking pressure sensors and replacing **pressure sensor PT2**

Scope 4: Checking pressure sensors and replacing **pressure sensor PT3**

Scope 5: Checking pressure sensors, replacing **pressure sensors PT1** and **PT2**

Scope 6: Checking pressure sensors, replacing **pressure sensors PT1** and **PT3**

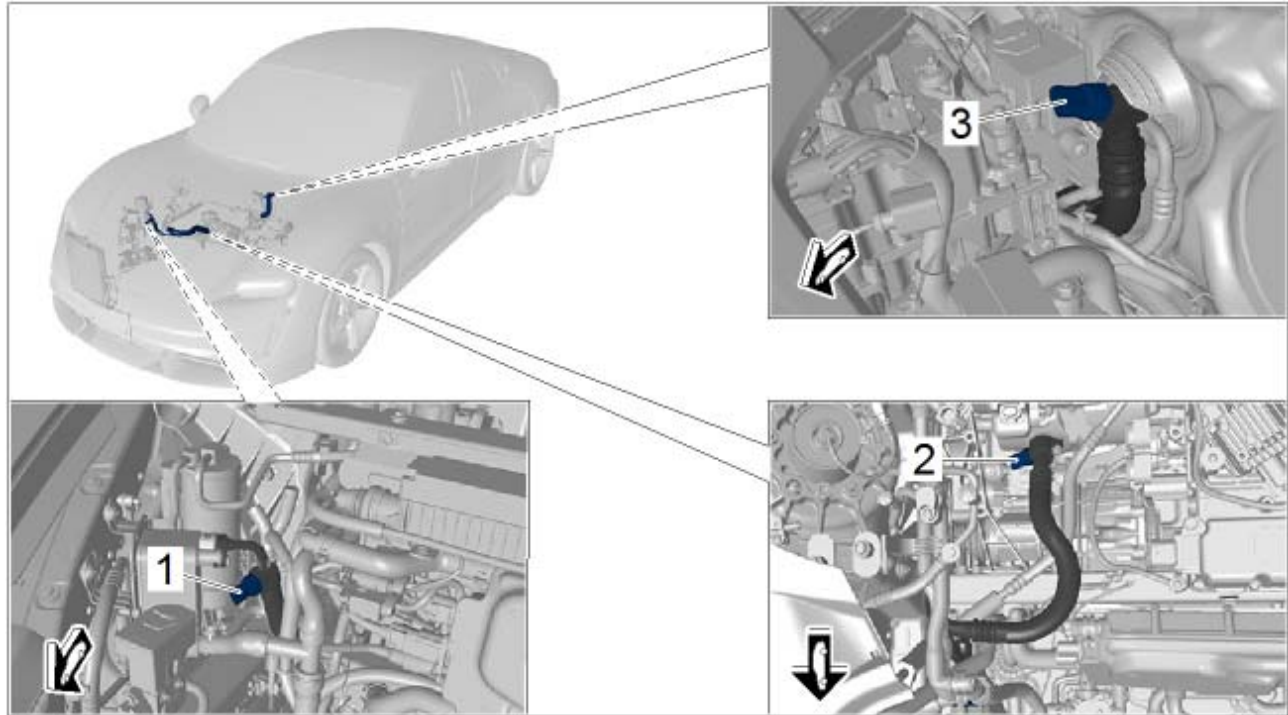
Scope 7: Checking pressure sensors, replacing **pressure sensors PT2** and **PT3**

Scope 8: Checking pressure sensors, replacing **pressure sensors PT1, PT2 and PT3**

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information).

Installation

Position:



Installation position of pressure sensors for air conditioning

- 1 – Pressure sensor PT1 (**check and replace if necessary**)
- 2 – Pressure sensor PT2 (**check and replace if necessary**)
- 3 – Pressure sensor PT3 (**check and replace if necessary**)

Required parts and materials

Parts Info:	Part No.	Designation	Number
	N 10261307	⇒ Hexagon nut, M10 – Wiper arm	2 ea.
The following parts are required for replacing the pressure sensors :			
	V04015800AR	⇒ Pressure sensor	up to 3 ea. (as required)
Additional parts required for scopes 4, 6, 7 and 8 :			
	PAF106825	⇒ Cheese head screw M8 x 50 – Strut	4 ea.

Materials: **Required materials** (usually already available at the Porsche dealer):

Part No.	Designation	Number
...	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container) Corresponds to Part No. 9A757390000. Alternatively, commercially available refrigerant oil – SP-A2 ¹⁾	approx. 15 ml/ 0.50 fl oz (Only if required)
...	Refrigerant R134a ²⁾	approx. 220 g/ 7.76 oz (Only if required)
or		
...	Refrigerant R1234yf ³⁾	approx. 200 g/ 7.06 oz (Only if required)

¹⁾ For warranty processing, enter Part No. WMP50000001 with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost: \$7.50

²⁾ For warranty processing, enter Part No. WMP50000002 with the designation 'Refrigerant R134a' **as a sublet part** in the warranty claim; maximum cost: \$6.25

³⁾ For warranty processing, enter Part No. WMP50000003 with the designation 'Refrigerant R1234yf' **as a sublet part** in the warranty claim; maximum cost: \$18.75



Information

Depending on usage and environmental influences, approx. 10% of the refrigerant can escape from the refrigerant circuit each year. This corresponds to 220 g for the refrigerant R134a and 200 g for the refrigerant R1234yf during a service life of two years.

If significantly more refrigerant has escaped from the refrigerant circuit, this needs to be checked. This work cannot be invoiced under the workshop campaign number.

Required tools

Tool: Tools required **for replacing pressure sensors**:

- Socket wrench, a/f 24, e.g. **T40363 - socket wrench, a/f 24**
- Torque wrench, 2-10 Nm, e.g. **V.A.G 1783 - torque wrench, 2-10 Nm**
- Torque wrench, 6-50 Nm e.g. **V.A.G 1331A - torque wrench, 6-50 Nm**
- **Air conditioning servicing equipment** for refrigerant **R134a or R1234yf** recommended by Porsche (depending on the refrigerant used). For recommended service equipment, see the Workshop Equipment and Special Tools Manual.

- Battery charger with a current rating of **at least 90A** and - if required - **also with a current and voltage controlled charge map** for lithium starter batteries, e.g. **VAS 5908 90A battery charger**
- **9900 - PIWIS Tester 3**

Additional tool required for replacing pressure sensor PT2:

- **T40262 - Locking cap**
- **VAS 6410 - Contact surface cleaning set**
- **VAS 6558/9-6A - High-voltage test adapter**
- **VAS 6558A - High-voltage test adapter**
- **VAS 6883A - Insulated tool set**

Additional tool required for replacing pressure sensor PT3::

- Suitable puller, e.g. **VAS 6935 - Pole terminal puller**

Check pressure sensors and replace them if necessary

NOTICE

Opened refrigerant system for repairs.

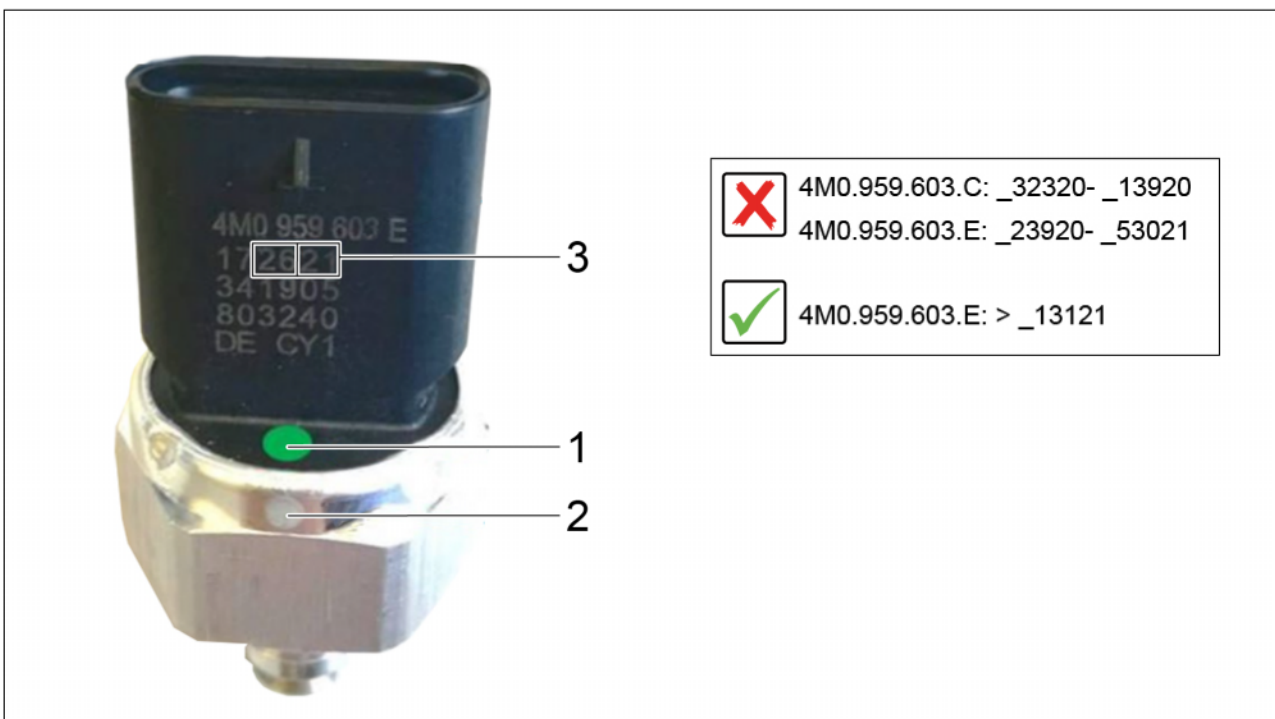
- Risk of moisture getting into the refrigerant system.
 - Risk of contaminating the refrigerant circuit.
 - Risk of saturation and irreparable damage to the dryer.
 - Irreparable damage to the dryer can damage the compressor and evaporator.
- ⇒ Replace the pressure sensors one by one so that the refrigerant circuit remains open for as short a time as possible to avoid contamination, moisture ingress and the need to replace the dryer.
- ⇒ The dryer must be replaced if the air humidity is high and if the refrigerant circuit is left open for a long time.

- Work Procedure: 1 Move the vehicle onto a lifting platform and raise it. ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
- 2 Remove luggage compartment liner. ⇒ *Workshop Manual '501919 Removing and installing luggage compartment liner'*
- 3 Removing cowl panel cover. ⇒ *Workshop Manual '508719 Removing and installing cowl panel cover'*



Information

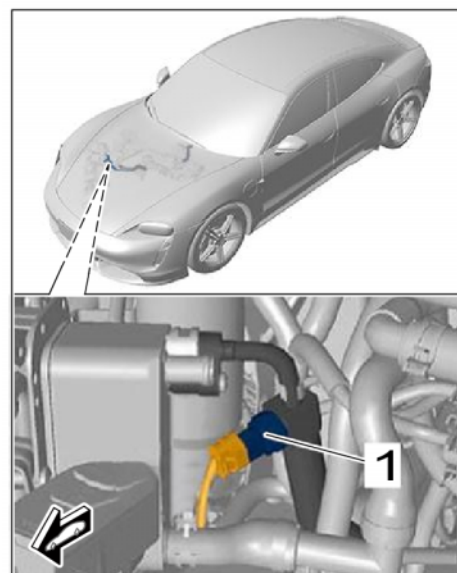
Pressure sensors with a new component type have the following features:



New type of pressure sensor

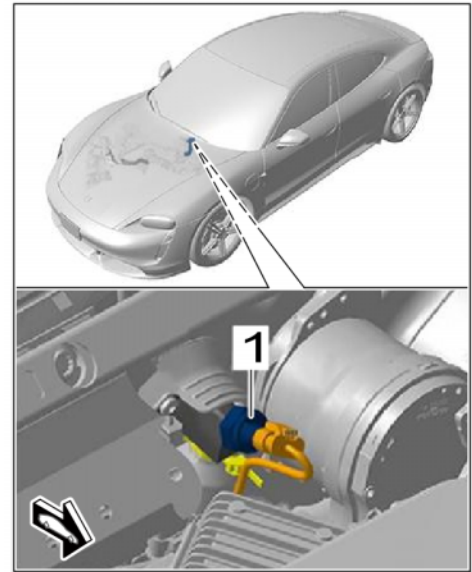
- 1 – green dot
- 2 – lasered dot
- 3 – Production date as of _42921 (SDWWYY - Shift/Weekday/Week/Year)

4 Check whether the **pressure sensor PT1** ⇒ *Pressure sensor PT1-1* already corresponds to the new type of component (green dot).

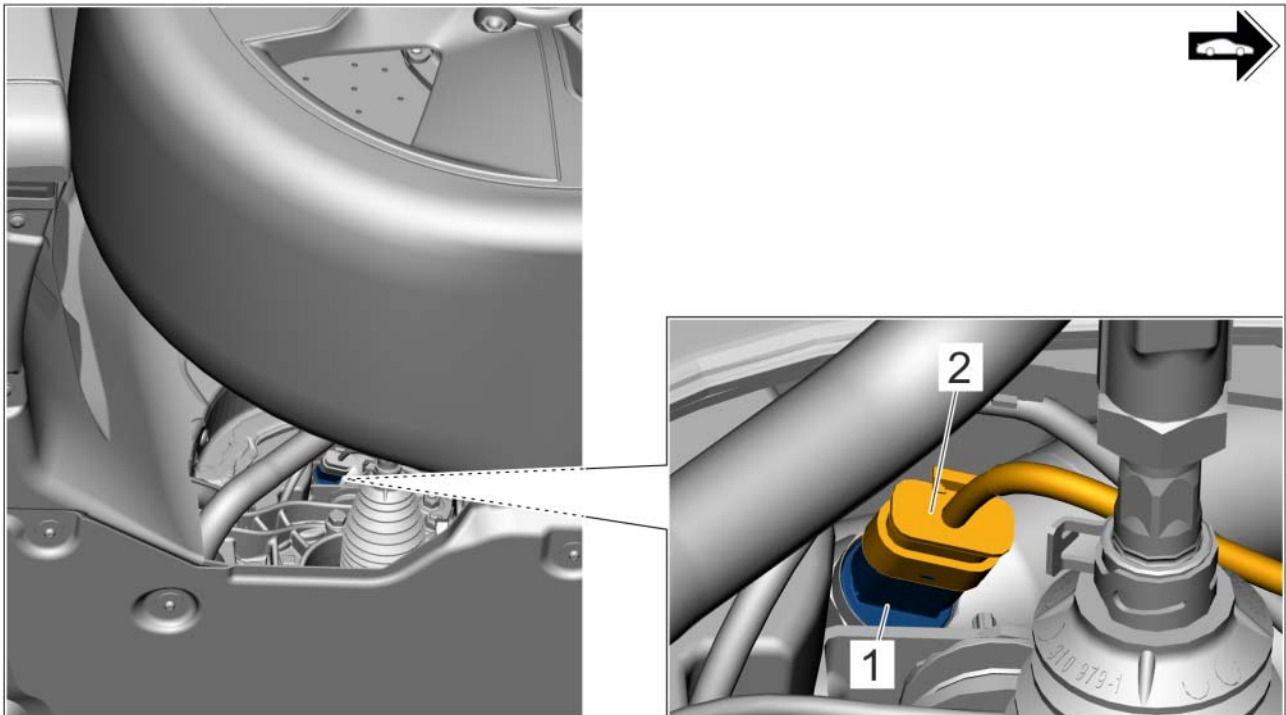


Pressure sensor PT1

- 5 Check whether the **pressure sensor PT3**⇒
Pressure sensor PT3-1-already corresponds to the
new type of component (green dot).
- 6 Raising the vehicle.
- 7 Check whether the **pressure sensor PT2**⇒
Pressure sensor PT2-1-already corresponds to the
new type of component (green dot).



Pressure sensor PT3



Pressure sensor PT2

- 8 Lower the vehicle.

Assessment		Action required
(✓)	All pressure sensors correspond to the new component type.	End of remedial action. ⇒ Continue with Step 10 [Scope 1]
(X)	At least one of the pressure sensors corresponds to the old type.	Replace the relevant pressure sensors. ⇒ Continue with Step 9 [Scope 2-8]

- 9 Replace pressure sensors **with old component type** individually one after the other.
⇒ *Workshop Manual '878319 Removing and installing pressure sensor (PT1)' ⇒ Workshop Manual '878319 Removing and installing pressure sensor (PT1)'*
and/or
⇒ *Workshop Manual '878319 Removing and installing pressure sensor (PT2)' ⇒ Workshop Manual '878319 Removing and installing pressure sensor (PT2)'*
and/or
⇒ *Workshop Manual '878319 Removing and installing pressure sensor (PT3)' ⇒ Workshop Manual '878319 Removing and installing pressure sensor (PT3)'*
- 10 Install cowl panel cover . ⇒ *Workshop Manual '508719 Removing and installing cowl panel cover'*
- 11 Install luggage compartment liner. ⇒ *Workshop Manual '501919 Removing and installing luggage compartment liner'*
- 12 Lower the vehicle and remove it from the lifting platform. ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
- 13 Enter the campaign in the Warranty and Maintenance booklet.

Invoicing



Information

The specified working times were determined specifically for carrying out this campaign and include all necessary preliminary and subsequent work.
The working times may differ from the working times published in the Labor Operation List in PIWIS.

Scope 1: **Check pressure sensors****Working time:**

Check pressure sensors

Labor time: **124 TU**

Includes: Removing and installing luggage compartment liner
 Removing and installing cowl panel cover
 Raising and lowering the vehicle

⇒ **Damage code WMP5 066 000 1**Scope 2: Checking pressure sensors and **replacing pressure sensor PT1****Working time:**

Replace a pressure sensor PT1

Labor time: **224 TU**

Includes: Check pressure sensors
 Removing and installing luggage compartment liner
 Removing and installing cowl panel cover
 Raising and lowering the vehicle
 Draining and filling refrigerant
 Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	1 ea.
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Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
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WMP50000002 ²⁾	Refrigerant R134a	1 ea.
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or

WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.
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¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

Scope 3: Checking pressure sensors and **replacing pressure sensor PT2**

Working time:

Replace pressure sensor PT2

Labor time: **173 TU**

- Includes:
- Check pressure sensors
 - Removing and installing luggage compartment liner
 - Removing and installing cowl panel cover
 - Raising and lowering the vehicle
 - Isolating high-voltage system from power supply/Starting high-voltage system
 - Draining and filling refrigerant
 - Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	1 ea.
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Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
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WMP50000002 ²⁾	Refrigerant R134a	1 ea.
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or

WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.
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¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

Scope 4: Checking pressure sensors and **replacing pressure sensor PT3**

Working time:

Replace pressure sensor PT3

Labor time: **231 TU**

Includes: Check pressure sensors
 Removing and installing luggage compartment liner
 Removing and installing cowl panel cover
 Raising and lowering the vehicle
 Draining and filling refrigerant
 Removing and installing wiper linkage
 Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	1 ea.
PAF106825	Cheese head screw M8 x 50 – Strut	4 ea.
N 10261307	Hexagon nut, M10	2 ea.

Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
WMP50000002 ²⁾	Refrigerant R134a	1 ea.
or		
WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.

¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

Scope 5: Checking pressure sensors and replacing **pressure sensors PT1 and PT2**

Working time:

Replacing pressure sensors PT1 and PT2

Labor time: **253 TU**

- Includes:
- Check pressure sensors
 - Removing and installing luggage compartment liner
 - Removing and installing cowl panel cover
 - Raising and lowering the vehicle
 - Isolating high-voltage system from power supply/Starting high-voltage system
 - Draining and filling refrigerant
 - Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	2 ea.
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Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
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WMP50000002 ²⁾	Refrigerant R134a	1 ea.
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or

WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.
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¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

Scope 6: Checking pressure sensors and replacing **pressure sensor PT1 and PT3**

Working time:

Replacing pressure sensor PT1 and PT3

Labor time: **238 TU**

Includes: Check pressure sensors
 Removing and installing luggage compartment liner
 Removing and installing cowl panel cover
 Raising and lowering the vehicle
 Draining and filling refrigerant
 Removing and installing wiper linkage
 Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	2 ea.
PAF106825	Cheese head screw M8 x 50 – Strut	4 ea.
N 10261307	Hexagon nut, M10	2 ea.

Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
WMP50000002 ²⁾	Refrigerant R134a	1 ea.
or		
WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.

¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

Scope 7: Checking pressure sensors and **replacing pressure sensor PT2 and PT3**

Working time:

Replacing pressure sensors PT2 and PT3

Labor time: **261 TU**

- Includes:
- Check pressure sensors
 - Removing and installing luggage compartment liner
 - Removing and installing cowl panel cover
 - Raising and lowering the vehicle
 - Isolating high-voltage system from power supply/Starting high-voltage system
 - Draining and filling refrigerant
 - Removing and installing wiper linkage
 - Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	2 ea.
PAF106825	Cheese head screw M8 x 50 – Strut	4 ea.
N 10261307	Hexagon nut, M10	2 ea.

Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
WMP50000002 ²⁾	Refrigerant R134a	1 ea.
or		
WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.

¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

Scope 8: Checking pressure sensors and **replacing pressure sensors PT1, PT2 and PT3**

Working time:

Replacing pressure sensors PT1, PT2 and PT3

Labor time: **268 TU**

Includes: Check pressure sensors
 Removing and installing luggage compartment liner
 Removing and installing cowl panel cover
 Raising and lowering the vehicle
 Isolating high-voltage system from power supply/Starting high-voltage system
 Draining and filling refrigerant
 Removing and installing wiper linkage
 Teach pressure sensors using the PIWIS Tester

Parts required:

V04015800AR	Pressure sensor	3 ea.
PAF106825	Cheese head screw M8 x 50 – Strut	4 ea.
N 10261307	Hexagon nut, M10	2 ea.

Required materials (usually already available at the Porsche dealer):

WMP50000001 ¹⁾	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.
WMP50000002 ²⁾	Refrigerant R134a	1 ea.
or		
WMP50000003 ³⁾	Refrigerant R1234yf	1 ea.

¹⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' **as a sublet part** in the warranty claim; maximum cost:\$7.50

²⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' **as a sublet part** in the warranty claim; maximum cost:\$6.25

³⁾ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$18.75

⇒ **Damage code WMP5 066 000 2**

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