### PORSCHE'

# **Technical Information**

Service 199/21 ENU WMP5

8

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

Model Line:	Taycan (Y1A/Y1B)
Model Year:	As of 2020 up to 2022
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: **No parts** are required for **checking** the pressure hose.

The following parts are required for replacing the pressure sensors:

Part No.	Designation	Number
V04015800AR	$\Rightarrow$ Pressure sensor	up to 3 ea. (as required)
Additional parts requ	ired for scopes 4, 6, 7 and 8:	
PAF912040	$\Rightarrow$ Hexagon-head bolt, M8 x 50 – Strut	4 ea.
N 10261307	⇒ Hexagon nut, M10 – Wiper arm	2 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 <sup>1)</sup>	approx. 15 ml/ 0.50 fl oz (Only if required)
		Refrigerant R134a <sup>2)</sup>	approx. 110 g/ 3.88 oz (Only if required)
	or		
		Refrigerant R1234yf <sup>3)</sup>	approx. 100 g/ 3.53 oz (Only if required)

<sup>1)</sup> 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

<sup>2)</sup> For warranty processing, enter Part No. WMP50000002 with the designation 'Refrigerant R134a' **as a sublet part** in the warranty claim; maximum cost:\$2.50

<sup>3)</sup> For warranty processing, enter Part No. WMP50000003 with the designation 'Refrigerant R1234yf' **as a sublet part** in the warranty claim; maximum cost:\$7.50

#### **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:

Service 199/21 ENU WMP5



New type of pressure sensor

- 1 green dot
- 2 lasered dot
- **3** Production date as of \_13121 (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. $\Rightarrow$ Continue with Step 10	
		[Scope 1]	
(X)	At least one of the pressure sensors corresponds to the old type.	Replace the relevant pressure sensors. $\Rightarrow$ Continue with <b>Step 9</b>	
		[Scope 2-8]	

9 Replace pressure sensors with old component type individually one after the other.

 $\Rightarrow$  Workshop Manual '878319 Removing and installing pressure sensor (PT1)'  $\Rightarrow$  Workshop Manual '878319 Removing and installing pressure sensor (PT1)'

#### and/or

 $\Rightarrow$  Workshop Manual '878319 Removing and installing pressure sensor (PT2)'  $\Rightarrow$  Workshop Manual '878319 Removing and installing pressure sensor (PT2)'

#### and/or

 $\Rightarrow$  Workshop Manual '878319 Removing and installing pressure sensor (PT3)'  $\Rightarrow$  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.  $\Rightarrow$  *Workshop Manual '4X00IN Lifting the vehicle'*
- 13 Enter the campaign in the Warranty and Maintenance booklet.

#### Invoicing

### **i** 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 ti	me:	
Check pres Includes:	sure sensors Removing and installing luggage compartment liner Removing and installing cowl panel cover Raising and lowering the vehicle	Labor time: <b>124 TU</b>

#### $\Rightarrow$ 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.			
<b>Required materials</b> (usually already available at the Porsche dealer):			
WMP50000001 <sup>1)</sup> Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container) 1 ea.			
WMP50000002 <sup>2</sup> )         Refrigerant R134a         1 ea.			
or			
WMP50000003 <sup>3</sup> )         Refrigerant R1234yf         1 ea.			
<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50			
<sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' <b>as a sublet part</b> in the warranty claim; maximum cost:\$2.50			
<sup>3)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50			
$\Rightarrow$ Damage code WMP5 066 000 2			

8

Scope 3:	Checking pressure sen	nsors and replacing pressure sensor PT2	
	Working time:		
	Removi Removi Raising Isolating high-vol Draining	nsor PT2 pressure sensors ng and installing luggage compartment liner ng and installing cowl panel cover and lowering the vehicle g high-voltage system from power supply/Starting ltage system g and filling refrigerant pressure sensors using the PIWIS Tester	Labor time: <b>173 TU</b>
	Parts required:		
	V04015800AR	Pressure sensor	1 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 <sup>2)</sup>	Refrigerant R134a	1 ea.
	or		
	WMP50000003 3)	Refrigerant R1234yf	1 ea.
	<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50		
	<ul> <li><sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrige R134a' as a sublet part in the warranty claim; maximum cost:\$2.50</li> <li><sup>3)</sup> For warranty processing, enter corresponding part number with the designation 'Refrige R1234yf' as a sublet part in the warranty claim; maximum cost:\$7.50</li> </ul>		tion 'Refrigerant oil
			tion 'Refrigerant oil
	$\Rightarrow$ Damage code WI	MP5 066 000 2	

Scope 4:

#### Checking pressure sensors and replacing pressure sensor PT3

Working time:				
Replace pressure sensor PT3       Labor time: 231 T         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.		
PAF912040	Hexagon-head bolt, M8 x 50 – Strut	4 ea.		
N 10261307	Hexagon nut, M10	2 ea.		
Required materia	als (usually already available at the Porsche dealer):			
WMP50000001 1)	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.		
WMP50000002 <sup>2)</sup> or	Refrigerant R134a	1 ea.		
WMP50000003 <sup>3)</sup>	Refrigerant R1234yf	1 ea.		
<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
<sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' <b>as a sublet part</b> in the warranty claim; maximum cost:\$2.50				
<sup>3)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
⇒ Damage code	WMP5 066 000 2			

8

Scope 5:

### Checking pressure sensors and replacing pressure sensors PT1 and PT2

Working time:				
Replacing pressure sensors PT1 and PT2 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.		
Required materia	Is (usually already available at the Porsche dealer):			
WMP50000001 1)	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.		
WMP5000002 <sup>2)</sup>	Refrigerant R134a	1 ea.		
or				
WMP50000003 3)	Refrigerant R1234yf	1 ea.		
<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
<sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' <b>as a sublet part</b> in the warranty claim; maximum cost:\$2.50				
$^{3)}$ For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
$\Rightarrow$ Damage code WMP5 066 000 2				

### 8 Service WMP5 ENU 199/21

# **Technical Information**

Scope 6:

#### Checking pressure sensors and replacing pressure sensor PT1 and PT3

Working time:				
Replacing pressure sensor PT1 and PT3 Labor time: 238 T 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.		
PAF912040	Hexagon-head bolt, M8 x 50 – Strut	4 ea.		
N 10261307	Hexagon nut, M10	2 ea.		
Required materia	als (usually already available at the Porsche dealer):			
WMP50000001 1)	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.		
WMP50000002 <sup>2)</sup>	Refrigerant R134a	1 ea.		
WMP50000003 <sup>3)</sup>	Refrigerant R1234yf	1 ea.		
<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
<sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' <b>as a sublet part</b> in the warranty claim; maximum cost:\$2.50				
<sup>3)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
⇒ Damage code WMP5 066 000 2				

Service 199/21<sub>ENU</sub> WMP5

8

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

Working time:				
Includes: Che Rer Rai Isol hig Dra Rer	Ceplacing pressure sensors PT2 and PT3 Labor time: 261			
Parts required:				
V04015800AR	Pressure sensor	2 ea.		
PAF912040	Hexagon-head bolt, M8 x 50 – Strut	4 ea.		
N 10261307	Hexagon nut, M10	2 ea.		
Required mater	ials (usually already available at the Porsche dealer):			
WMP50000001	Refrigerant oil SP-A2 (250 ml/ 8.45 fl oz container)	1 ea.		
WMP50000002	<sup>2)</sup> Refrigerant R134a	1 ea.		
or WMP50000003	<sup>3)</sup> Refrigerant R1234yf	1 ea.		
<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
<sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' <b>as a sublet part</b> in the warranty claim; maximum cost:\$2.50				
<sup>3)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50				
$\Rightarrow$ Damage cod	e WMP5 066 000 2			

#### Service ENU 199/21 WMP5

### **Technical Information**

Scope 8:

#### Checking pressure sensors and replacing pressure sensors PT1, PT2 and PT3

Working time:		
Includes: Check Remov Remov Raising Isolatin high-vo Drainin Remov	sensors PT1, PT2 and PT3 pressure sensors ving and installing luggage compartment liner ving and installing cowl panel cover g and lowering the vehicle ng high-voltage system from power supply/Starting oltage system ng and filling refrigerant ving and installing wiper linkage pressure sensors using the PIWIS Tester	Labor time: <b>268 TU</b>
Parts required:		
V04015800AR	Pressure sensor	3 ea.
PAF912040	Hexagon-head bolt, 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 <sup>2)</sup>	Refrigerant R134a	1 ea.
or		
WMP50000003 <sup>3)</sup>	Refrigerant R1234yf	1 ea.
<sup>1)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil SP-A2' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50		
<sup>2)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R134a' <b>as a sublet part</b> in the warranty claim; maximum cost:\$2.50		
<sup>3)</sup> For warranty processing, enter corresponding part number with the designation 'Refrigerant oil R1234yf' <b>as a sublet part</b> in the warranty claim; maximum cost:\$7.50		
$\Rightarrow$ Damage code WMP5 066 000 2		

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2022 Porsche Cars North America, Inc.

Jan 28, 2022 Page 14 of 14