PORSCHE'

Technical Information

Service 123/22 ENU

8

WNH7

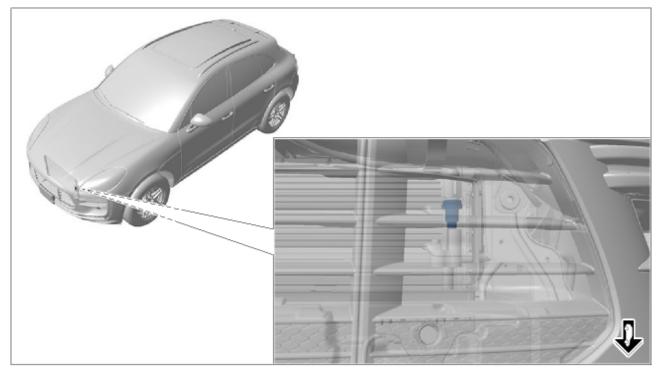
WNH7 - Replace Pressure Sensor for Air- Conditioning System (Workshop Campaign)

| Model Line: | Macan (95B) |
|------------------|---|
| Model Year: | As of 2021 up to 2022 |
| Concerns: | Pressure sensor for air-conditioning system |
| Information: | A pressure sensor, which does not meet the required specifications, may have been installed on the condenser for the air-conditioning system on the affected vehicles. This can result in restricted function of the air conditioning system. |
| Action required: | Replace pressure sensor on the condenser. Information Every vehicle is assigned just one campaign scope. To find out which scope is assigned to the vehicle, see PCSS Vehicle Information. |
| Affected | Only vehicles assigned to the campaign (see also PCSS Vehicle Information). |

Vehicles:

Installation

Position:



Installation position of pressure sensor

- Pressure sensor (replace)

Required parts and materials

| Parts Info: | Part No. | Designation - Location | Number |
|-------------|-------------|--|---------|
| | V04015800AT | ⇒ Pressure sensor - Condenser | 1 piece |
| | V04015800CA | ⇒ 0-ring - Pressure sensor | 1 piece |

| Required materi | Required materials (usually already available at the Porsche dealer): | | |
|------------------------|--|---|--|
| Part No. | Designation | Number | |
| | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) Corresponds to Part No. 9A757390010. Alternatively, commercially available refrigerant oil – ND12 ¹⁾ | approx. 15 ml/ 0.5 fl oz (Only if required) | |
| | Refrigerant R134a ²⁾ | approx. 220 g/ 7.76 oz (Only if required) | |
| or | | | |
| | Refrigerant R1234yf ³⁾ | approx. 200 g/ 7.05 oz (Only if required) | |

¹⁾ For warranty processing, enter Part No. WNH70000001 with the designation 'Refrigerant oil ND12' **as an external part** in the warranty claim; maximum cost: \$7.50

²⁾ For warranty processing, enter Part No. WNH70000002 with the designation 'Refrigerant R134a' **as an external part** in the warranty claim; maximum cost: \$6.25

³⁾ For warranty processing, enter Part No. WNH70000003 with the designation 'Refrigerant R1234yf' **as an external part** in the warranty claim; maximum cost: \$18.75

i 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 tool

Tools:

Materials:

- Socket wrench, a/f 24, e.g. T40363 socket wrench, a/f 24
 - 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.)
 - 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 90 A 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

Replacing air-conditioning system pressure sensor

i Information

- For all work on the air-conditioning system that necessitates opening the refrigerant system, the system contents must first be disposed of in accordance with regulations.
- Dirt and moisture must be kept out of the air-conditioning system's pipes and hoses.
- Cleanliness must be ensured during all work.
- System components must never be cleaned on the inside with hot steam.
- Only use nitrogen for cleaning.
- When replacing a component, all openings must be closed off using suitable stoppers immediately after opening the system.

Work Procedure: 1 Move the vehicle onto a lifting platform and raise it. ⇒ Workshop Manual '4X00IN Lift vehicle'

- 2 Drain refrigerant. ⇒ Workshop Manual '870317 Draining and filling R1234yf refrigerant'
- 3 **Only for Turbo and S vehicles:** Remove pressure pipe. *⇒ Workshop Manual '214119 Removing and installing pressure pipe'*

Observe all necessary preliminary work in accordance with the Workshop Manual that applies to the respective vehicle type.

- 4 Remove main headlight. ⇒ Workshop Manual '941519 Removing and installing main headlights'
- 5 Remove front bumper. \Rightarrow Workshop Manual '631519 Removing and installing front bumper'
- 6 Remove front retaining strips. ⇒ Workshop Manual '631719 Removing and installing front retaining strip'
- 7 Remove lower part of front lid lock. \Rightarrow Workshop Manual '551719 Removing and installing lower part of front lid lock'
- 8 Remove upper part of lock carrier. *⇒ Workshop Manual '503819 Removing and installing upper part of lock carrier'*
- 9 Remove pressure switch. ⇒ Workshop Manual '878319 Removing and installing pressure switch'

| Technical Information | S | ervice | | Ο |
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| | 12 | 23/22 ENU | WNH7 | Ŏ |
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- 10 **Install new** pressure switch with the part number V04015800AT and **new** O-ring with the part number V04015800CA. *⇒ Workshop Manual '878319 Removing and installing pressure switch'*
- 11 Install upper part of lock carrier. ⇒ Workshop Manual '503819 Removing and installing upper part of lock carrier'
- 12 Installing lower part of front lid lock. ⇒ Workshop Manual '551719 Removing and installing lower part of front lid lock'
- 13 Installing front retaining strips. \Rightarrow Workshop Manual '631719 Removing and installing front retaining strip'
- 14 Install front bumper. \Rightarrow Workshop Manual '631519 Removing and installing front bumper'
- 15 Install main headlights. ⇒ Workshop Manual '941519 Removing and installing main headlights'
- 16 **Only for Turbo and S vehicles:** Installing pressure pipe. *⇒ Workshop Manual '214119 Removing and installing pressure pipe'*
- 17 **If installed:** Adjust control unit for distance measuring sensor. For instructions, see ⇒ Workshop Manual '278515 Adjusting control unit for distance measuring sensor'
- 18 If installed: Calibrate Surround View camera. For instructions, see ⇒ Workshop Manual '917225 Calibrating Surround View camera'
- 19 Add refrigerant. ⇒ Workshop Manual '870317 Draining and filling R1234yf refrigerant'
- 20 Lower the vehicle and remove it from the lifting platform. ⇒ Workshop Manual '4X00IN Lift vehicle'
- 21 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

i Information

The specified labor time was determined specifically for carrying out this campaign and includes all necessary preliminary work and rework.

The labor time may differ from the working times published in the Labor Operation List in the PCSS.

Scope 1: Replacing air-conditioning system pressure sensor

Only relevant for vehicles **without** adaptive cruise control **(8T1, 8T6)** and **without** Surround View camera **(KA0, KA2, 7X8)**.

Service WNH7 ENU 123/22

| Labor time: | | | |
|--|-------------------|---|---------------------------|
| Replacing air Includes: | Drainin Remov | oning system pressure sensor g and filling refrigerant ing and installing front bumper ing and installing upper part of lock carrier | Labor time: 329 TU |
| Parts requir | ed: | | |
| V04015800/ | AT | Pressure sensor | 1 piece |
| V040158000 | CA | O-ring | 1 piece |
| Required m | aterials | (usually already available at the Porsche dealer): | |
| WNH700000 |)01 ¹⁾ | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece |
| WNH700000 |)02 ²⁾ | Refrigerant R134a | 1 piece |
| or | | | |
| WNH700000 |)03 ³⁾ | Refrigerant R1234yf | 1 piece |
| | 5. | essing, enter the corresponding part number with the des al component in the warranty claim; maximum cost: \$7 | 0 |
| ²⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil R134a' as an external component in the warranty claim; maximum cost: \$6.25 | | | |
| ³⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil R1234yf' as an external component in the warranty claim; maximum cost: \$18.75 | | | |
| ⇒ Damage | code W | NH7 066 000 2 | |

Scope 2: Replacing air-conditioning system pressure sensor

Only relevant for vehicles with **adaptive cruise control (8T3)** and **without** Surround View camera **(KAO, KA2, 7X8)**.

| Labor time | 2: | |
|--------------------------|--|---------------------------|
| Replacing a Includes: | ir-conditioning system pressure sensor Draining and filling refrigerant Removing and installing front bumper Removing and installing upper part of lock carrier Adjusting control unit for distance measuring sensor | Labor time: 394 TU |
| Parts requ | lired: | |

Technical Information

123/22 ENU WNH7

Service

| V04015800AT | Pressure sensor | 1 piece | |
|--|---|---------------|--|
| V04015800CA | O-ring | 1 piece | |
| | | | |
| Required materials | (usually already available at the Porsche dealer): | | |
| WNH70000001 ¹⁾ | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece | |
| WNH70000002 ²⁾ | Refrigerant R134a | 1 piece | |
| or | | | |
| WNH70000003 ³⁾ | Refrigerant R1234yf | 1 piece | |
| | | | |
| | ssing, enter the corresponding part number with the designation 'Re al component in the warranty claim; maximum cost: \$7.50 | frigerant oil | |
| ND12 as all extern | ar component in the warranty claim, maximum cost. \$7.50 | | |
| | ssing, enter the corresponding part number with the designation 'Re | frigerant oil | |
| R134a as an extern | nal component in the warranty claim; maximum cost: \$6.25 | | |
| ³⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil | | | |
| R1234yf' as an exte | rnal component in the warranty claim; maximum cost: \$18.75 | | |
| i i i i i i i i i i i i i i i i i i i | | | |

 \Rightarrow Damage code WNH7 066 000 2

Scope 3: Replacing air-conditioning system pressure sensor

Only relevant for vehicles with **Surround View camera (KA6, 8A4)** and **without** Adaptive cruise control **(8T1, 8T6)**.

| Labor time: | | | |
|---|--|---------------------------|--|
| Includes: Drain Remo Remo | tioning system pressure sensor ing and filling refrigerant oving and installing front bumper oving and installing upper part of lock carrier rating Surround View camera | Labor time: 391 TU | |
| Parts required: | | | |
| V04015800AT | Pressure sensor | 1 piece | |
| V04015800CA | O-ring | 1 piece | |
| Required materials (usually already available at the Porsche dealer): | | | |
| WNH70000001 1) | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece | |
| WNH7000002 ²⁾ | Refrigerant R134a | 1 piece | |

or

WNH70000003³⁾ Refrigerant R1234yf

1 piece

¹⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil ND12' **as an external component** in the warranty claim; maximum cost: \$7.50

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

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

 \Rightarrow Damage code WNH7 066 000 2

Scope 4: Replacing air-conditioning system pressure sensor

Only relevant for vehicles with **adaptive cruise control (8T3)** and with **Surround View camera (KA6**, **8A4)**.

| Labor time: | | | | |
|---|--|---------------------------|--|--|
| Replacing air-conditioning system pressure sensor Includes: Draining and filling refrigerant Removing and installing front bumper Removing and installing upper part of lock carrier Adjusting control unit for distance measuring sensor Calibrating Surround View camera | | Labor time: 446 TU | | |
| Parts required: | | | | |
| V04015800AT | Pressure sensor | 1 piece | | |
| V04015800CA | O-ring | 1 piece | | |
| Required materi | als (usually already available at the Porsche dealer): | | | |
| WNH70000001 1 | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece | | |
| WNH70000002 2 | Refrigerant R134a | 1 piece | | |
| or | | | | |
| WNH70000003 3 | Refrigerant R1234yf | 1 piece | | |

| Technical Information | Service | | Ο |
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| | 123/22 ENU | WNH7 | Ŏ |

¹⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil ND12' **as an external component** in the warranty claim; maximum cost: \$7.50

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

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

 \Rightarrow Damage code WNH7 066 000 2

Warranty processing



Information

The specified labor time was determined specifically for carrying out this campaign and includes all necessary preliminary work and rework.

The labor time may differ from the working times published in the Labor Operation List in the PCSS.

Scope 1 to 4: Not relevant for this vehicle type.

Scope 5: Replacing air-conditioning system pressure sensor

Only relevant for vehicles without adaptive cruise control (8T1, 8T6) and without Surround View camera (KAO, KA2, 7X8).

| Labor time: | | |
|---------------------------|---|---------------------------|
| Includes: Drain Remo | tioning system pressure sensor ing and filling refrigerant oving and installing front bumper oving and installing upper part of lock carrier | Labor time: 357 TU |
| Parts required: | | |
| V04015800AT | Pressure sensor | 1 piece |
| V04015800CA | O-ring | 1 piece |
| Required materia | Is (usually already available at the Porsche dealer): | |
| WNH70000001 1) | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece |
| WNH70000002 ²⁾ | Refrigerant R134a | 1 piece |
| or | | |

WNH70000003³⁾ Refrigerant R1234yf

1 piece

¹⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil ND12' **as an external component** in the warranty claim; maximum cost: \$7.50

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

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

 \Rightarrow Damage code WNH7 066 000 2

Scope 6: Replacing air-conditioning system pressure sensor

Only relevant for vehicles with **adaptive cruise control (8T3)** and **without** Surround View camera **(KAO, KA2, 7X8)**.

| Labor time | : | | |
|---------------------------|---|--|---------|
| Replacing ai Includes: | ir-conditio Drainin Remov Remov Adjusti | Labor time: 422 TU | |
| Parts requ | ired: | | |
| V04015800 | DAT | Pressure sensor | 1 piece |
| V04015800 | OCA | O-ring | 1 piece |
| Required n | naterials | ${f s}$ (usually already available at the Porsche dealer): | |
| WNH70000 | 001 ¹⁾ | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece |
| WNH70000 | 002 ²⁾ | Refrigerant R134a | 1 piece |
| or | | | |
| WNH70000 | 003 ³⁾ | Refrigerant R1234yf | 1 piece |

| Technical Information | Service | 8 |
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| | 123/22ENU WNH7 | |

¹⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil ND12' **as an external component** in the warranty claim; maximum cost: \$7.50

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

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

 \Rightarrow Damage code WNH7 066 000 2

Scope 7: Replacing air-conditioning system pressure sensor

Only relevant for vehicles with **Surround View camera (KA6, 8A4)** and **without** Adaptive cruise control **(8T1, 8T6)**.

| Labor time: | | | | | | |
|--|--|---|---------|--|--|--|
| Replacing ai Includes: | -conditioning system pressure sensor Draining and filling refrigerant Removing and installing front bumper Removing and installing upper part of lock carrier Calibrating Surround View camera | | | | | |
| Parts requi | red: | | | | | |
| V04015800 | TAC | Pressure sensor | 1 piece | | | |
| V04015800 | CA | O-ring | 1 piece | | | |
| Required materials (usually already available at the Porsche dealer): | | | | | | |
| WNH70000 | 001 ¹⁾ | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece | | | |
| WNH70000 | 002 ²⁾ | Refrigerant R134a | 1 piece | | | |
| or | | | | | | |
| WNH70000 | 003 ³⁾ | Refrigerant R1234yf | 1 piece | | | |
| ¹⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil ND12' as an external component in the warranty claim; maximum cost: \$7.50 | | | | | | |
| ²⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil R134a' as an external component in the warranty claim; maximum cost: \$6.25 | | | | | | |
| ³⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil R1234yf' as an external component in the warranty claim; maximum cost: \$18.75 | | | | | | |
| \Rightarrow Damage code WNH7 066 000 2 | | | | | | |

Scope 8: Replacing air-conditioning system pressure sensor

Only relevant for vehicles with adaptive cruise control (8T3) and with Surround View camera (KA6, 8A4).

| Labor time: | | | | | | |
|--|--|---|---------|--|--|--|
| Replacing air- Includes: | -conditioning system pressure sensor Draining and filling refrigerant Removing and installing front bumper Removing and installing upper part of lock carrier Adjusting control unit for distance measuring sensor Calibrating Surround View camera | | | | | |
| Parts requir | ed: | | | | | |
| V04015800A | ΑT | Pressure sensor | 1 piece | | | |
| V04015800CA | | O-ring | 1 piece | | | |
| Required ma | aterials | (usually already available at the Porsche dealer): | | | | |
| WNH700000 | 01 ¹⁾ | Refrigerant oil ND12 (250 ml/ 8.45 fl oz container) | 1 piece | | | |
| WNH700000 | 02 ²⁾ | Refrigerant R134a | 1 piece | | | |
| or | | | | | | |
| WNH700000 | 03 ³⁾ | Refrigerant R1234yf | 1 piece | | | |
| ¹⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil ND12' as an external component in the warranty claim; maximum cost: \$7.50 | | | | | | |
| | | ssing, enter the corresponding part number with the design al component in the warranty claim; maximum cost: \$6.2 | | | | |
| ³⁾ For warranty processing, enter the corresponding part number with the designation 'Refrigerant oil R1234yf' as an external component in the warranty claim; maximum cost: \$18.75 | | | | | | |
| ⇒ Damage o | code W | NH7 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.

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