

# Technical Information

43/20 ENU WLC7

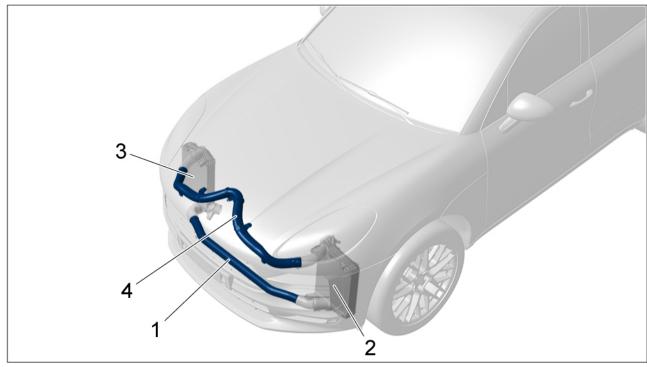
Service

### WLC7 - Replacing Lower Pressure Pipe (Workshop Campaign)

Vehicle Type:	Macan S (95B)
Model Year:	As of 2019 up to 2020
Subject:	Lower pressure pipe between the charge-air coolers
Information:	A pressure pipe, which does not comply with the specifications in terms of installation position and size, may be installed between the charge-air coolers on the affected vehicles.
	This can cause vibrations and noises in the medium rev range at high engine load.
Remedial Action:	Replace lower pressure pipe between the charge-air coolers with an optimized pressure pipe. Also check the installation position of the other components of the charge-air cooling system and correct it if necessary.
Affected Vehicles:	Only vehicles assigned to the campaign (see also PCSS Vehicle Information). There are 284 vehicles affected by this campaign.

### Installation

Position:



Installation position overview

- 1 Lower pressure pipe (**replace**)
- 2 Left charge-air cooler
- **3** Right charge-air cooler
- 4 Upper pressure pipe (check installation position)

### Parts required

Parts Info:	Part No.	Designation – Use	Qty.
	00004391196	$\Rightarrow$ Lower pressure pipe – Left charge-air cooler to right charge-air cooler	1 ea.
	N 10518901	$\Rightarrow$ Hose clamp, 50–70 x 12 mm – Pressure pipe to charge-air cooler	2 ea.
	PAF106322	$\Rightarrow$ Internal hexagon round-head bolt – Pressure pipe to holder	2 ea.

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PAB129669B	⇒ Sleeve – Pressure pipe to holder	2 ea.	
PAB129734B	⇒ Spacer – Pressure pipe to holder	2 ea.	
N 91173301	⇒ Hexagon nut – Pressure pipe to holder	2 ea.	

### **Required tools**

Tools:

- Torque wrench, 2–10 Nm (1.5–7.5 ftlb.), e.g. VAG 1783 Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)
  - Torque screwdriver, 1.5–3 Nm (1–2 ftlb.), e.g. VAS 6494 Torque screwdriver, 1.5-3.0 Nm (1-2 ftlb.)

### Replacing lower pressure pipe between the charge-air coolers

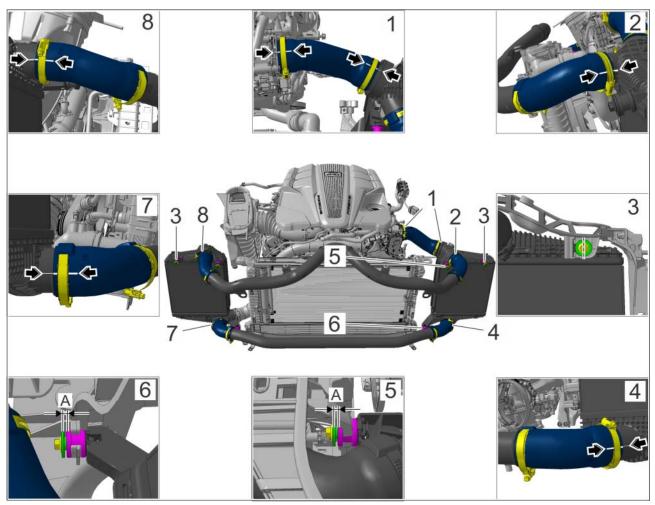
Work Procedure: 1 Raise the vehicle using a lifting platform  $\Rightarrow$  Workshop Manual '4X00IN Lifting the vehicle'.

- 2 Remove cover for front underbody  $\Rightarrow$  *Workshop Manual '519219 Removing and installing cover for front underbody'.*
- 3 Remove cover for front lock support ⇒ Workshop Manual '703919 Removing and installing cover for front lock support'.
- 4 Remove front apron  $\Rightarrow$  Workshop Manual '631519 Removing and installing front apron'.
- 5 Remove pedestrian protection.
  - 5.1 Remove ventilation guides at the left and right  $\Rightarrow$  *Workshop Manual '661319 Removing and installing ventilation guide'.*
  - 5.2 Remove pedestrian protection  $\Rightarrow$  Workshop Manual '697019 Removing and installing pedestrian protection'.

# i Information

To prevent vibrations and noises while driving, all components of the charge-air cooling system must always be installed without tension at normal position and in accordance with the installation specifications.

6 Remove lower pressure pipe and install new lower pressure pipe with optimized fastening concept. Always observe the following installation specifications:



Mounting specification for charge-air cooler and pressure hoses

- A Distance from sleeve on bearing to rubber sleeve at least **3.0 mm**
- Arrows Markings on the pressure hoses and charge-air cooler/throttle valve
- 1 Markings on the pressure hose must be aligned with the groove on the throttle valve and on the charge-air cooler.
- 2 Marking on the pressure hose must be aligned with the groove on the charge-air cooler.
- **3** The center point of the screw head must be centered in the bearing (deviation permitted only in the center of the vehicle)
- 4 Marking on the pressure hose must be aligned with the groove on the charge-air cooler.
- **5** Sleeve on the bearing must protrude forward from the rubber sleeve in idle state.
- 6 Sleeve on the bearing must protrude forward from the rubber sleeve in idle state.
- 7 Marking on the pressure hose must be aligned with the groove on the charge-air cooler.
- 8 Marking on the pressure hose must be aligned with the groove on the charge-air cooler.

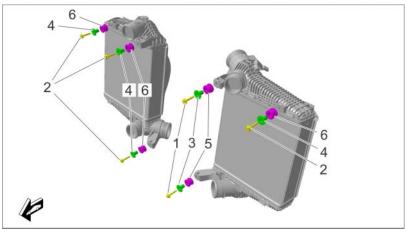
For instructions, see  $\Rightarrow$  Workshop Manual '214119 Removing and installing pressure pipe (V6 monoturbo)'.

# **AfterSales**

Part No.	Designation	Qty.
00004391196	Pressure pipe, bottom	1 ea.
N 10518901	Hose clamp, 50–70 x 12 mm	2 ea.
PAF106322	Internal hexagon round-head bolt	2 ea.
PAB129669B	Sleeve	2 ea.
PAB129734B	Spacer	2 ea.
N 91173301	Hexagon nut	2 ea.

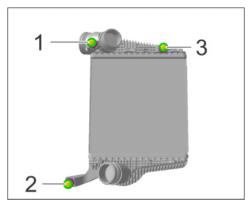
- 7 **Check installation position** of the following components according to the **installation specifications** listed above and correct it if necessary:
  - Pressure pipe, top
  - Left charge-air cooler
  - Right charge-air cooler
  - Pressure pipe between throttle valve and charge-air cooler

In addition to the installation specifications listed above, also observe the following specifications for installing the charge-air coolers:



Component overview of charge-air cooler - V6 monoturbo

- 1 Screws, M6 x 40
- 2 Screws, M6 x 35
- 3 Sleeve/total Length: 26.2 mm
- 4 Sleeve/total Length: 21.2 mm
- 5 Grommet
- 6 Grommet



Tightening sequence for charge-air cooler(shown on left charge-air cooler)1-3- Tightening sequence:

For instructions for loosening and securing the components, see:  $\Rightarrow$  Workshop Manual '214119 Removing and installing pressure pipe (V6 monoturbo)'  $\Rightarrow$  Workshop Manual '214319 Removing and installing charge-air cooler (V6 monoturbo)'

- 8 Install pedestrian protection.
  - 8.1 Install pedestrian protection  $\Rightarrow$  Workshop Manual '697019 Removing and installing pedestrian protection'.
  - 8.2 Install ventilation guides at the left and right  $\Rightarrow$  Workshop Manual '661319 Removing and installing ventilation guide'.
- 9 Install front apron  $\Rightarrow$  Workshop Manual '631519 Removing and installing front apron'.
- 10 Install cover for front lock support  $\Rightarrow$  Workshop Manual '703919 Removing and installing cover for front lock support'.
- 11 Install cover for front underbody  $\Rightarrow$  Workshop Manual '519219 Removing and installing cover for front underbody'.
- 12 Lower the vehicle and remove it from the lifting platform.
- 13 Enter the campaign in the Warranty and Maintenance booklet.

### Warranty processing



### Information

The specified working time was determined specifically for carrying out this campaign and may differ from the working times published in the Labor Operation List in PIWIS.

# **AfterSales**

## **Technical Information**

Scope 1:

-	ime:			
Replacing I Includes:	ower pressu Raising ar Removing Removing Removing Checking Checking Checking	re pipe nd lowering the vehicle g and installing cover for front underboo g and installing cover for front lock supp g and installing front apron g and installing pedestrian protection installation position of upper pressure g it if necessary installation position of the charge-air co g it if necessary	pipe and	Labor time: <b>199 TU</b>
Parts requ	uired:			
00004391	196	Pressure pipe, bottom	1 ea.	
N 105189	<b>D1</b>	Hose clamp, 50–70 x 12 mm	2 ea.	
	C			
PAF10632	Ζ	Internal hexagon round-head bolt	2 ea.	
PAF10632 PAB12966		Internal hexagon round-head bolt Sleeve	2 ea. 2 ea.	
	9B	-		

Replacing lower pressure pipe between the charge-air coolers

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**AfterSales**