Porsche

Special Tools & Equipment

VAS581005P R1234yf Air Conditioning Service Unit Support

Technical Support **1913** USA Only

In an effort to ensure better service for our customers, Porsche Special Tools and Equipment has compiled some helpful information regarding your VAS581005P R1234yf Air Conditioning Service Unit. In the coming weeks, you will be direct mailed a decal containing Technical Support contact information and the VAS581005P Best Practice Guide from Mahle Service Solutions (MSS). The decal is to be permanently affixed to your VAS581005P machine and instructions will be included in the mailing. If you have any questions about the Mahle Technical Support, please feel free to contact Porsche Special Tools & Equipment at askthetoolguy@porsche.us.

Model line	Mode
	718 Boxster/Cayman (982)
	911 (992)
	Macan (95B)
	Panamera (971)
	Cayenne (9YA)

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This document contains the VAS581005P Best Practice Guide and valuable MSS contact information that you will be receiving direct mail.



Example of MSS contact decal:





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Issue	Result / Corrective Action
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Using an extension cord less than #14 AWG that is ungrounded.	Will cause current draw issues and intermittent operation. False flow sensor errors could also trigger with inadequate AC system current. Connect unit to dedicated power source when possible.
Technicians connect hose and open valves too soon and prior to being instructed by the VAS unit.	Delays operation and possible errors to appear. Unit will automatically run a hose evacuation which has a predetermined maximum capacity issue at 300 g. Technicians must follow screen prompts when to connect hoses and open valves.
Oil in the refrigerant identifier filter and sample hose.	It is typical that oil will migrate into the VAS581005 unit. Change filter and sample hose immediately to avoid damage to the refrigerant identifier. See attached images.
Unit process time is slower than prior AC recycle and recharge systems.	Due to SAE specifications and requirements, processes will be longer to ensure vehicle- A/C systems are safe and sealed for vacuum and pressure prior to charging.
Minimum required amount of refrigerant in VAS581005 internal cylinder.	VAS581005 unit requires minimum refrigerant to operate efficiently and effectively. Longer charge processes can also be shown if internal cylinder refrigerant is low. Recommendation is 4kg to 5kg inside the VAS581005 unit for best performance.
Slow fill cylinder process.	Virgin refrigerant tanks must be inverted to allow liquid refrigerant filling. The tank adapter must not be too tight as to restrict the flow of refrigerant.
Smoke from under the unit during vacuum process.	While a minimum amount smoke is normal operation, excessive vacuum pump oil mist (smoke) results from a significant vehicle system leak. Fix the A/C system leak and attempt a vacuum process again.
Building pressure process runs several times prior to completing the refrigerant charge.	Minimum refrigerant amount in the internal cylinder should be 4kg to 5kg for best performance and to avoid pressure build processes from occurring. Also vacuum process must be run >20 mins to ensure the A/C system is empty and moisture is removed.
Error stating filter drier must be changed.	Standards for units require that after a known quantity of refrigerant is processed, the machine will lock out further operations and require a new filter to be installed. This ensures recycled refrigerant meets purity specifications.
Error codes show unstable weight scale.	To achieve precise refrigerant charging per SAE standards, unit should be placed on a level floor away from other shop equipment which can affect accurate charging.
Recycle process is too long.	Check hose screen filters for debris and replace if particulates are discovered. This will improve refrigerant system recovery/recycle service times.
Unit has excessive purging.	Check A/C system for internal refrigerant leaks and correct.
Unit seems to be charging inaccurately.	Use calibration check feature and calibration ball to verify unit is calibrated within +/- 8 g.
	If check fails, a scale calibration must be performed.

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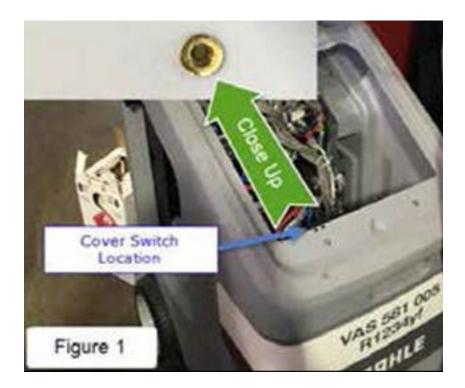
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Tips on Operation

- 1. Be sure to always follow the unit on-screen instructions to ensure processes perform as expected.
- **2.** Accessories in-line UV Dye injectors have been evaluated and are known to be sources of leaks. Remove injector if VAS581005P self-leak test will not pass.
- 3. Spare parts and maintenance items are listed in the operational manual for convenience.
- 4. Always park couplers to the unit when not in use to prevent damage or contamination.
- **5.** If the unit does not power on, the breaker may have tripped. To reset, push the white breaker button on the lower rear of cabinet.
- **6.** If the service door is removed or opened, the unit will automatically stop all processes. The ventilation fan will remain in operation to ensure any R1234yf vapors are removed. See Figure 1.



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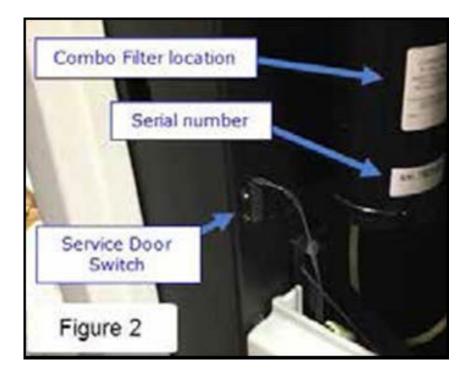
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Tips on Operation (continued)

7. The VAS581005P is locked and disabled after 150 lbs of refrigerant is processed. A new filter and 6 digit code must be installed before service can resume. See Figure 2.



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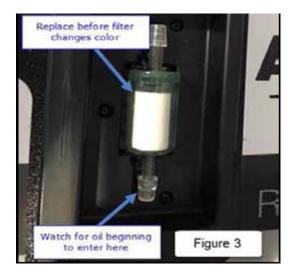
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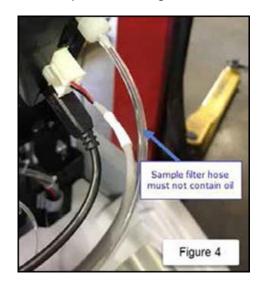
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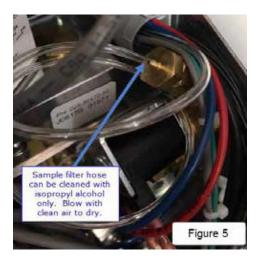
Tips on Operation

8. Replace the white sample filter and hose on the refrigerant identifier if oil is present. See Figure 3 and 4.





9. Sample hose and brass restrictor can be cleaned with isopropyl alcohol as shown in Figure 5.



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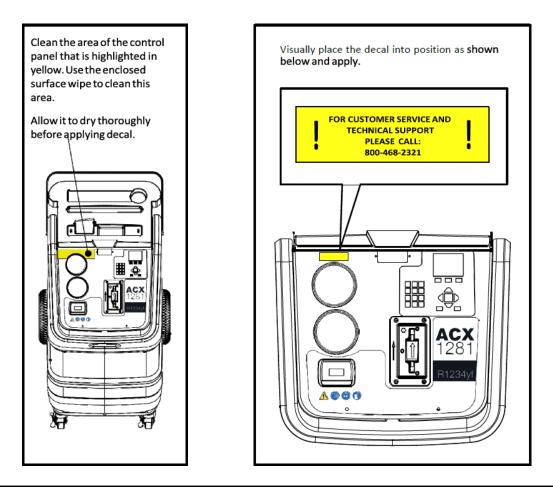
Service Information

VAS581005P Technical Support

NOTE: Decal will be sent to you directly from Mahle Service Solutions.

Placement instructions:

- **1.** Clean the surface area of the control panel as shown in Figure 1. Use the enclosed surface wipe to clean the surface. The surface must be cleaned before applying the decal.
- 2. After surface has been cleaned and is thoroughly dry, position and apply the decal as shown in Figure 2.



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Mahle Service Solutions Contact Information



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— General Information ——

Ordering process

The listed workshop equipment will not be sent automatically to the importers. You must order this equipment yourself from the relevant sales channel for your market and in the quantities you need for your market. when ordering PAG tools, please order through POLARIS.

Workshop Equipment Classification		Contact person	
*	Servicing and maintenance	E-mail: askthetoolguy@porsche.us	
**	Replacement of units and assemblies	All After Sales Circulars can also be found at:	
***	Disassembly of units and assemblies	PPN □Aftersales □Workshop □Special Tools & Equipment	
****	Tool hire		
	Body & Paint		
-0- 4	High-voltage (HV)		
	All prices are factory hand-over prices (WAP) and are correct at time of publication.		
	Prices subject to change without notice.		