VAS581005

Welcome to the VAS581005

The VAS581005 is for use with vehicles equipped with R1234yf refrigerant. This document contains recommended Do's and Don'ts for best practices when using the VAS581005 unit.

Issue	Result / Corrective Action
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 evac-uation which has a predetermined maximum capacity issue at 300g. 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 immedi-ately 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 refriger- ant 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. Recommenda-tion 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 perfor- mance 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 ma- chine will lock out further operations and require a new filter to be installed. This ensures recycled refrigerant meet 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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Tips on Operation

See below for tips and operational information.

- Be sure to always follow the unit on-screen instructions to ensure processes perform as expected.
- Accessory in-line UV Dye injectors have been evaluated and are known to be sources of leaks. Remove injector if VAS581005 self-leak test will not pass.
- Spare parts and maintenance items are listed in the operational manual for convenience.
- Always park couplers to the unit when not in use to prevent damage or contamination.
- If the unit will not power on, the breaker may have tripped. To reset, push the white breaker button on the lower rear of cabinet.
- 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.
- The VAS581005 is locked and disabled after 150Lbs of refrigerant is processed. A new filter and 6 digit code must be installed before service can resume. See Figure 2.
- See Figure 3 and 4. Replacing the white sample filter and hose on the refrigerant identifier if oil is present. Sample hose and brass restrictor can be cleaned with isopropyl alcohol as shown in Figure 5.







Replacement Parts Information: Combo Filter P/N 3608273900 Refrigerant ID Filter P/N 0268012800 ID Hose restrictor filter P/N RTI0288053700