## User manual Flushing device VAS 6337/1a





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## **Safety Warnings**

- Wear protective equipment, including safety goggles and gloves, when working with refrigerants and solvents. Refrigerants and solvents can cause injuries.
- Equipment must be operated by qualified, certified A/C service professionals. Operator must be familiar with air conditioning and refrigeration systems, solvents, and the dangers of working with pressurized systems and components.
- Operator is responsible for complying with any and all applicable laws and regulations governing the use of this equipment, as well as the disposal of used solvents, waste oils, the equipment, and any of its components.
- This equipment should only be used in locations with mechanical ventilation that provides at least four air changes per hour.
- Avoid breathing A/C refrigerant, lubricant, and flush vapor or mist. Exposure may irritate eyes, nose, and throat. To remove HFC-134a from the A/C system, use service equipment certified to meet the requirements of SAE J2210 (HFC-134a recycling equipment). Additional health and safety information may be obtained from the refrigerant, lubricant, and flush manufacturers.
- **Caution!** Do not pressure test or leak test HFC-134a service equipment and or vehicle air conditioning systems with compressed air. Some mixtures of air and HFC-134a have been shown to be combustible at elevated pressures. These mixtures, if ignited, may cause injury or property damage. Additional health and safety information can be obtained from refrigerant manufacturers.
- This flushing device should be used with HFC-134a refrigerant only.
- Operating pressure of flushing device: 117–176 psi (8-12 bar).
- Use this flushing device in conjunction with service equipment certified to meet the requirements of SAE J2210 or J2788.



## Flushing with R134A refrigerant

Ensure that all relevant safety regulations are met. Always wear safety glasses and gloves when handling refrigerant.

#### 1.0 Preparing the Vehicle AC System

- Recover the Vehicle AC System refrigerant using a recovery & recharge unit.
- After you have recovered the Vehicle AC System, the corresponding adapters can be used.

The various systems are described in the following.

#### Vehicle with expansion valve

#### **Preparation:**

- **1** Disassemble compressor and use the adapter of adapter kit VAS 6338/1.
- 2 Disassemble the expansion valve and replace it with an open expansion valve.
- 3 Disassemble the dryer cartridge and connect via the adapter system.
- 4 Disassemble the dryer cartridge on vehicles with a condenser module.
- 1 Recovery Unit
- 2 Hose
- Adapter connection on the connector (low-pressure compressor hose)
- 4 Evaporator
- **5** Expansion valve
- 6 Adapter for dryer
- Condenser
- 8 Flushing unit





#### Vehicles with fixed orifice tube

#### Preparation:

- 1 Disassemble compressor
- 2 Disassemble fixed orifice
- 3 Disassemble the dryer cartridge and connect via the adapter system.



**Please note:** Flushing is always done in the opposite direction of the flow.



#### 1.1 Connecting the recovery recharge unit

Install the Behr VAS 6337/1a flushing unit on the back of the recovery recharge unit.

Connect the yellow low-pressure hose (1800 mm) between the adapter connection (compressor high pressure hose) and the inlet to the flushing unit VAS 6337/1a.







Connect the red high-pressure hose to the adapter (line to the evaporator).



Connect the blue low-pressure hose to the adapter on the outlet of the flushing unit.







### 1.2 Flush procedure

After you have prepared the emptied vehicle AC system, use the appropriate adapter (VAS 6338-1) and connected the unit, you can start the flush.



Open both the red and blue charge coupler valves and the valve on the adapter hose.

- Power on the recovery and recharge machine.
- Press "Menu"
- Press "Down Arrow" until "System Flush" is displayed.
- Press "Start" to begin the process.

#### The following steps now work automatically:

- **1** Evacuate (5 min.)
- **2** Vacuum test (3 min)
- 3 Liquid charging (no entry of filling quantity necessary)
- 4 Recover
- 5 Evacuate
- 6 Liquid charging
- 7 Recover
- 8 Evacuate
- **9** Liquid charging
- 10 Recover

After the procedure is finished, check the flushing cylinders to assure no liquid refrigerant remains. This could indicate a plugged filter on the flusher. If this is the case, enter the recovery mode and recover the refrigerant and proceed to page 8 and follow 2.0 Cleaning instructions.

If successfully completed, the flushing procedure will be documented by pressing the "Print" key and following the screen prompts.

The refrigerant hoses can then be removed from the vehicle.

The system is now free of contaminant particles and oil residues.

Reassemble the climate-control system after the flush, and empty and refill the system according to the manufacturer's instructions.







# Cleaning instructions and filter change intervals

If it shows that the filter system is clogged or the refrigerant is not free of particles after 3 flushing cycles, there are a couple of possible contingent steps to follow:

- Start further flushing cycles until the cylinders show transparent as well as until the refrigerant is free of particles (self cleaning procedure).
- 2 If flushing is no longer possible, replace the black filter which is installed between the two cylinders.





- 1 Remove the lid.
- 2 Screw off the filter on both sides and detach the red hose.
- 3 Take off the filter and replace it.





Behr Service recommends replacing the filter on the flushing device VAS 6337/1a after servicing no more than 5 vehicles, depending on the amount of contaminant material recovered.

