homecare

e m e r g e n c y



ACCUVAC Basic

Aspirator

Description and Operating Instructions



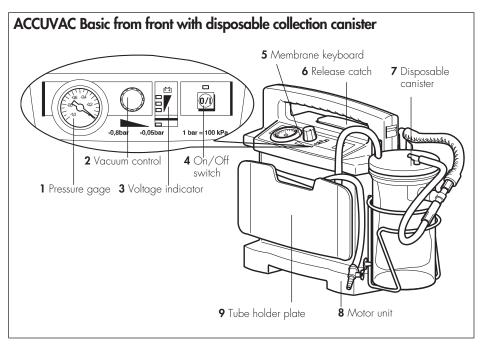
Contents

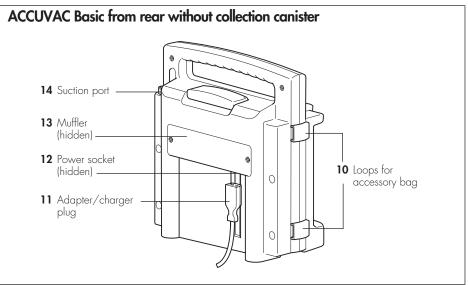
	rview	
1.1	Symbols on the rating plate	6
1.2	Symbols on the packaging	7
2. Desc	cription	8
	Purpose	
2.2	Function	9
3. Safe	ty instructions	.11
4. Asse	embly	. 14
4.1	Assembly with wall bracket	
4.2	Fitting a re-usable collection canister	16
4.3	Fitting an accessory bag	. 17
4.4	Fitting a rinsing glass	. 17
	ration	
5.1	Preparing for aspiration	
5.2	Aspiration	. 20
	– Disposal of disposable	
F 0	collection bag After aspiration	00
5.3 5.4		. 22
	ienic preparation	
6.2	Cleaning, disinfecting and	. 20
0.2	sterilizing	. 28
6.3	Reassembling the disposable collection canister	
7 Euro	tional check	
7.1	Intervals	. 31
7.2	Performing the	
	functional check	
	bleshooting	.34
8.1	1	
8.2	5 5	
8.3	0 0	
	ntenance	
9.1	Intervals	
7.Z	Dispusul	. 40

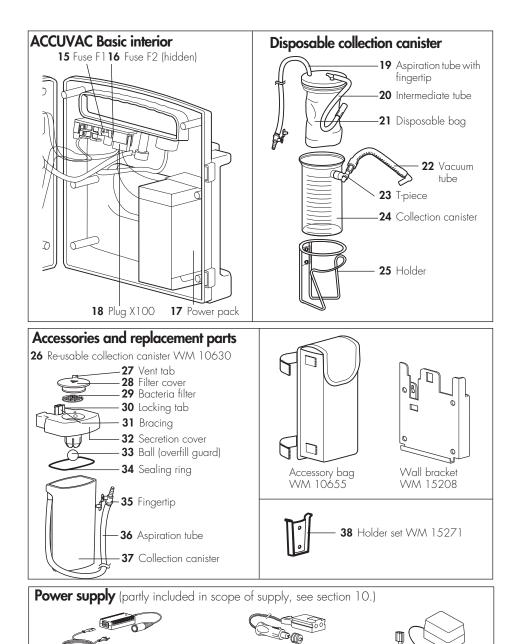
10. Scope of supply41
10.1 Standard scope of supply 41
 ACCUVAC Basic with
re-usable collection canister
 ACCUVAC Basic with
disposable collection canister
10.2Accessories
10.3Replacement parts
11. Technical Data
11.1Safe distances
12. Warranty
13. Declaration of conformity50

3

1. Overview





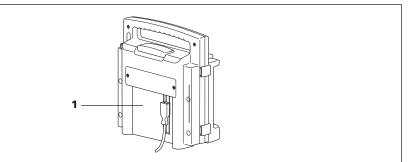




Connection cable WM 10650



1.1 Symbols on the rating plate



	Symbol	Meaning	
	SN	Serial number of device	
	М	Year of manufacture	
		Direct voltage	
	CE 0197	CE symbol (confirms that the product conforms to the applicable European directives)	
1	★	Degree of protection against electric shock: appliance type BF	
	IP X1	Protection against ingress of water	
	e1 024103	e 1 symbol (confirms that the product conforms to the applicable European EMC directives for use in vehicles).	
	X	Do not dispose of device in domestic waste	

1.2 Symbols on the packaging

Symbol	Meaning		
SN	Serial number of device		
-40 °C	Permitted temperature for storage: -40 °C to +70 °C		
CE 0197	CE symbol (confirms that the product conforms to the applicable European directives)		

2.1 Purpose

ACCUVAC Basic is a mobile, portable, electrically operated medical aspirator for temporary use with adults, children and infants:

- aspirating accumulations of blood, secretions and food from the oral cavity, the nose and throat region and the bronchial system;
- deflating vacuum matresses and inflatable splints.

In expert hands, the ACCUVAC Basic can eliminate obstructions in the airways and so prevent the risk of respiratory failure. It can be used in buildings, in the open air and during transport.

ACCUVAC Basic must **not** be used:



- in medical rooms where potential equalization is necessary (e.g. heart surgery);
- in explosion-risk areas.
- for drainage in low-vacuum conditions (e.g. drainage of wounds or the thorax).

8

0,8bar -0,05bar

An electrically operated diaphragm pump generates the vacuum necessary for aspiration.

The appliance can optionally be powered by a rechargeable internal power pack or can also be supplied by an external direct voltage source with 12.0 - 13.8 V.

Use the vacuum control to set the desired vacuum, which is continuously variable between -0.05 bar and -0.8 bar. You can read off the set value on the pressure gage.

The aspirated material passes via the aspiration tube into the collection canister.

Disposable collection canister

The disposable collection canister consists of the collection canister itself, the disposable collection bag, the aspiration tube with fingertip, the intermediate tube, the T-piece and the vacuum tube.

The disposable collection canister is inserted in the holder screwed on the side of the motor unit.

The vacuum tube of the disposable canister is pushed onto the suction port of the motor unit.

The aspirated material passes through the aspiration tube into the disposable collection bag. The disposable collection bag is intended for once-only use. When it is full, you can remove it from the collection canister and dispose of it complete with contents.



An overflow valve filter is integrated in the disposable collection bag. This prevents secretions and liquid from finding their way into the motor unit and passing into the environment via the muffler.

Power supply

Power for operating the appliance and charging the power pack can be drawn:

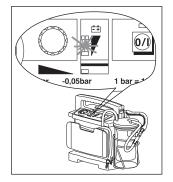
- from the built-in power pack.
- from the WM 10650 connection cable using an available 12 Volt vehicle power supply.
- from the FW7405M/14 mains/charger unit, complete WM 2610.

Important T

The AC adapter/charger plug is only designed for charging the power pack with the appliance switched off. It must not be used to operate the appliance itself, as this will overload it and cause it to overheat.

The voltage indicator shows the charge status of the power pack.

The plug-in charger is only intended for charging the power pack with the appliance switched off (see "11. Technical Data" on page 47).



3. Safety instructions

For your own safety and the safety of your patients and in accordance with the requirements of Directive 93/ 42/EEC, please note the following:

- Use the ACCUVAC Basic for the described purpose only (see "2.1 Purpose" on page 8).
- Please read these instructions for use through carefully. They are a constituent part of the device and must be available at all times.
- Before starting to work with ACCUVAC Basic, you must understand how to operate it.
- ACCUVAC Basic should be used only if you are medically qualified and have received training in aspiration techniques. Severe physical damage may be caused by incorrect use.
- Pay particular attention during aspiration to ensure that no injuries are caused to the patient's oropharyngeal cavities, e.g. to the mucous membranes. You can briefly interrupt suction, for example if the skin is aspirated, by opening the fingertip regulator.
- For bronchial aspiration, work under sterile conditions and use only sterile aspirating catheters.
- When working with the re-usable collection canister, the appliance must be upright because otherwise the ball in the overflow cutout cannot reliably block the connection to the aspirator and secretion may enter the aspirator. This may damage the appliance.
- When working with the disposable collection canister, the appliance must be upright. This prevents the overflow valve filter integrated in the disposable collection bag from being wetted with

fluid. If this occurs, the overflow valve filter becomes impermeable for air and you must replace the disposable collection bag.

- We recommend that you keep an alternative aspiration appliance on standby in case of an appliance failure.
- Follow the section entitled "6. Hygienic preparation" auf Seite 26 to prevent an infection or bacterial contamination.
- Dispose of fluids such as blood and secretions, as well as parts contaminated with these fluids, as per the guidelines in the Federal Health Gazette entitled "Anforderungen der Hygiene an die Abfallentsorgung" [Hygiene requirements when disposing of waste] (published by the Federal Office of Health and obtainable from Carl Heymanns Verlag, Cologne).
- If third-party items are used, functional failures and restricted fitness for use may result.
 Biocompatibility requirements may also not be met. In such cases, please be aware that any claim under warranty and liability will be voided if neither the accessories nor the genuine replacement parts recommended in the instructions for use are used.
- Have servicing and repair work performed only by the manufacturer, Weinmann, or by professional staff.
- The plug-in charger is only intended for charging the power pack with the appliance switched off. You may not use it for general operation, as this would overload and overheat it.
- To increase the service life of the battery, it must not be entirely discharged. Please charge the battery at the latest when the red LED of the voltage display lights up.

- To counter the risk of a complete discharge, you must ACCUVAC Basic never store the power pack when it is discharged. Charge the battery beforehand according to (see "5.4 Charging ACCUVAC Basic" on page 23).
- Lead batteries discharge even when they are not in use. This self-discharge increases with increasing temperature and amounts to approx. 20 % at 20 °C over 3 months without use. Therefore please comply with the intervals for functional checks (see "7. Functional check" on page 31).
- You must not sterilize the motor unit in an autoclave.
- You must not immerse the motor unit in a disinfectant solution.
- Do not use any cellphones in the immediate vicinity of ACCUVAC Basic. It is possible to operate the ACCUVAC Basic without any problems in the patient area of an ambulance, even if a cellphone is in use in the cab.

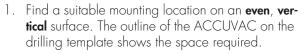
ACCUVAC Basic is supplied ready for use.

Important Before using ACCUVAC Basic for the first time, fully charge the power pack (see "5.4 Charging ACCUVAC Basic" on page 23).

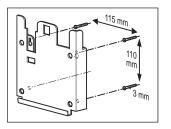
4.1 Assembly with wall bracket

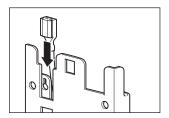
If the WM 15208 wall bracket is not included in the scope of supply of your appliance, you may order the wall bracket as a accessory.

Note Please use the sheet-metal screws enclosed with the wall bracket for metallic mounting surfaces only, e.g. in vehicles. If you wish to mount the wall bracket on other mounting surfaces, please use screws that are suitable for the relevant surfaces. Such screws are not included in the scope of supply of the wall bracket.



- Hold up the drilling template and level it with a spirit level.
- 3. Mark the required screw holes on the mounting location.
- 4. Drill the screw holes with a \emptyset 3 mm drill.
- 5. Screw the wall bracket on with the screws supplied.
- 6. Push the appliance plug of the connection cable or of the mains/charger unit into the guide rail of the wall bracket until it engages with the tongue.





Important: the mounting substrate must be sufficiently strong to hold the wall bracket and the ACCUVAC securely in accordance with EN 1789 Medical Vehicles and their Equipment - Road Ambulances.

Alternatively to the wall charger you can also use the connection line WM 10650, which is optional.

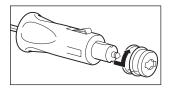
 Insert the AC adapter/charger plug in a 230 V/ 50 Hz power socket, or if using the connecting cable, insert the vehicle plug into a 12 volt DC power source.

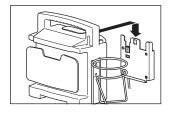
The vehicle plug is supplied complete with a red adapter ring. This is needed if you want to plug the vehicle plug into a cigarette lighter socket. To connect to the mains / charger unit FW7405M/ 14, complete WM 2610 or a 12 volt vehicle socket, remove the red adapter ring.

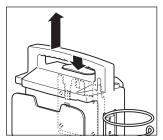
8. Slide ACCUVAC Basic downwards into the wall bracket.

If ACCUVAC Basic appliance is switched off, it will automatically be charged up from the DC power source.









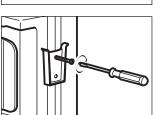
4.2 Fitting a re-usable collection canister

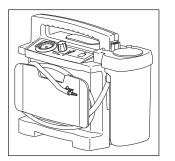
With the conversion kit WM 15261 you can also mount a re-usable collection canister instead of a disposable collection canister.

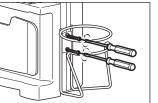
- 1. Remove the disposable collection canister from its holder.
- 2. Unscrew the holder from the motor unit.

3. In the same place, screw on the holder for the reusable collection canister.

4. Push the re-usable collection canister into the holder. Since the collection canister is directly connected to the suction port of the motor unit, there is no need for an intermediate tube.

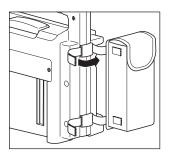






If the accessory bag WM 10655 is not included in the scope of supply of your appliance, you may order the accessory bag as an accessory. It is used to hold aspiration catheters and other small parts. The accessory bag cannot be fitted at the same time as a rinsing glass (see "4.4 Fitting a rinsing glass" on page 17).

1. Use the velcro-type strips to attach the accessory bag to the loops on the motor unit.

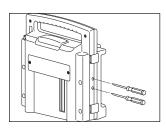


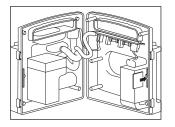
4.4 Fitting a rinsing glass

On the left side of the appliance it is possible to fit an additional collection canister in the form of a rinsing glass for holding a rinsing liquid, e.g. water.

The rinsing glass kit WM 15229 consists of:

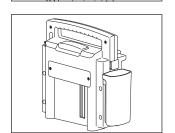
- Collection canister
 WM 10631
- Holder set
 WM 15271
- Mounting panel
 WM 10728
- 1. Use a pointed object to pierce the two closed drill holes on the left of the appliance case.
- 2. Open the appliance.





- 3. Insert the plate from the holder set into the guide.
- 4. Close the appliance.

5. Fix the holder to the left side of the appliance.



0

6. Push the rinsing glass into the holder.

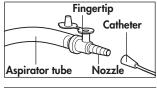
5. Operation

5.1 Preparing for aspiration

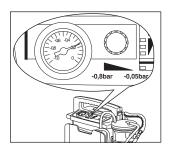
- **Tip:** When using the re-usable collection canister you will find it makes cleaning considerably easier if you place approx. 50 to 100 ml disinfectant or even water in the bottom of the canister before starting aspiration. This prevents the aspirated matter from adhering so firmly to the bottom of the canister.
 - 1. Unwind the aspiration tube from the tube holder plate.
 - If necessary, adapt an aspiration catheter of suitable size for tracheal or nasopharyngeal aspiration to fit the nozzle.
 - Press the button marked O/I. The lower green LED for the power indicator and the green LED for the O/I button lights up.

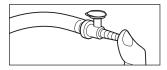
Do not switch on ACCUVAC Basic while there is still a vacuum. This would cause the pump motor to draw too much current when switching on, which could actuate fuse F2.

4. Set the desired vacuum at the vacuum control. Turn the controller to the right to increase the vacuum, or to the left to reduce it.









For this purpose, close the fingertip with the stopper and the suction opening with your thumb. Wait until the pressure gage shows a constant vacuum. Now use the vacuum control to set the desired vacuum.

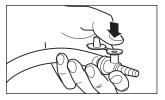
ACCUVAC Basic is now ready for operation, and you can start aspiration.

5.2 Aspiration



- During the aspiration process, take care not to cause any injury to the patient's mouth and throat region, and especially to mucous membrane.
- The appliance can run for 60 minutes in continuous operation (S2 mode). Switch the appliance off after 60 minutes continuous operation to prevent overheating. Allow the appliance to cool off for at least 2 hours.
- The fingertip can be opened to interrupt suction briefly, e.g. if the nozzle is clinging to the skin.

You can leave the fingertip open all the time and keep your thumb over it. To release the suction all you have to do is lift your thumb.



Important

- When working with the re-usable collection canister, the appliance must always be upright because otherwise the ball in the overflow cutout cannot reliably block the connection to the aspirator. This could result in secretion getting into the aspirator and damaging it.
- When working with the disposable collection canister, the appliance must always be upright so

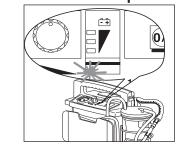
that the overflow valve filter integrated in the disposable collection bag is not wetted with secretion. If the overflow valve filter is wetted with secretion, it becomes impermeable and the disposable collection bag has to be replaced.

During aspiration, keep an eye on the fluid level in the disposable collection bag and replace it with a new one in good time.

Be sure to check the power pack charge level at regular intervals during aspiration. If the red LED on the voltage indicator lights up, aspiration should be continued with a second appliance. Using the appliance beyond this point can damage the power pack by discharging it completely, with the result that its full capacity will no longer be available.

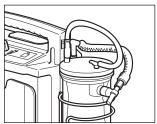
Disposal of disposable collection bag

- 1. Pull the end of the aspiration tube with fingertip off the port.
- 2. Detach the intermediate tube from the T-piece of the collection canister.
- Push the free end of the intermediate tube onto the connection for the aspiration tube. This closes the disposable collection bag and reduces the risk of fluid escaping.



Important

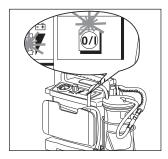




4. Remove the disposable collection bag and dispose of it together with the aspiration tube.

Important Be sure to observe the relevant rules for disposal (see "3. Safety instructions" on page 11).

5.3 After aspiration

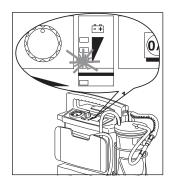


After aspiration:

 Switch off ACCUVAC Basic by pressing the button marked **O/I**.

- Fit a new disposable collection bag (see " Disposal of disposable collection bag" on page 21).
- 3. Clean ACCUVAC Basic (see "6. Hygienic preparation" on page 26).

5.4 Charging ACCUVAC Basic



We recommend you to charge ACCUVAC Basic as soon as the yellow voltage indicator LED lights up. By doing so you will ensure that it operates for an adequate period next time it is used.

The power supply for charging must deliver 12.0 V – 13.8 V DC and at least 0.3 ampere. A full charge takes a maximum of 14 hours.

Note: Even when ACCUVAC Basic is fully charged, only the central LED is lit when you switch on the appliance.

The following sources can be used for charging:

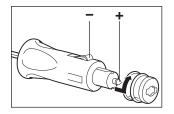
- The plug-in charger;
- The 12 Volt vehicle power supply using the VVM 10650 connection cable;
- The FW7405M/14 mains/charger unit, complete WM 2610.

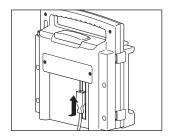
A red adapter ring is fitted to the vehicle connector. This is needed if you want to insert the vehicle connector in a cigarette lighter socket. To connect to the mains / charger unit FW7405M/14, complete WM 2610 or a 12-volt vehicle socket, you must remove the red adapter ring.

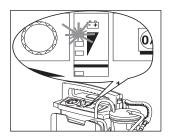
Caution: Check the vehicle plug for correct polarity. Reversed polarity can damage ACCUVAC Basic.

Charging without wall bracket

- 1. Switch off ACCUVAC Basic.
- 2. Place the plug at the appliance end of the connecting cable in the guide slot at the rear of the appliance and push it up behind the cover plate.







- 3. Switch on the power supply.
- 4. Charging starts as soon as you have switched on the power supply. When the top LED lights up, the power pack is approx. 75 % charged. Please charge the battery for another two 2 hours at least.

Charging using the WM 10750 charger plug

The WM 10750 charger plug has an LED on the front panel that shows the current status of the device:

- Orange: charging
- Green: refresher charging

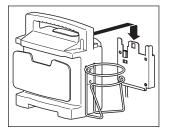
Because of the way the VVM 10750 charges, the charge LEDs on the ACCUVAC Basic show the status "full" very quickly, even though the battery will not be fully charged yet. You are therefore advised to refer to the charge LEDs on the charger plug.

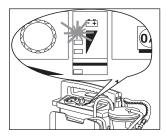
The enclosed primary adapters can be used if you are using the WM 10750 charger plug with different mains connections in other countries.

To change the primary adapter, gently push the adapter fitted to the charger plug away from the charger in the direction indicated by the arrow. Insert the required adapter into the free mounting and push firmly into place.

Charging with wall bracket

- 1. Switch off ACCUVAC Basic.
- 2. Insert ACCUVAC Basic in the wall bracket.





 Charging starts as soon as you switch on the current. When the top LED lights up, the power pack is approx. 75 % charged. Please charge the battery for another two 2 hours at least.

Refresher charging

Regular refresher charging extends the service life of the power pack. Leave ACCUVAC Basic connected to the external power supply even after the power pack is fully charged. This cannot overcharge the power pack provided the charging voltage is kept within the range 12.0 – 13.8 V.

6. Hygienic preparation

This product contains disposable items. Disposable items are intended to be used only once. So use these items only once and do **not** reprocess them. Reprocessing disposable items may impair the functionality and safety of the product and lead to unforeseeable reactions as a result of ageing, embrittlement, wear, thermal load, the effects of chemical processes, etc.

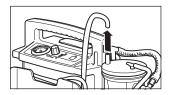
Hygienic preparation of ACCUVAC Basic and the accessories used must be carried out daily during use and before every change of patient. Observe the instructions for the disinfectant used. We recommend GIGASEPT FF for immersion disinfection and TERRALIN® for wipe disinfection.



Never immerse the ACCUVAC Basic motor unit in disinfectant or other liquids. Always disinfect simply by wiping with disinfectant. Otherwise you may damage the device and thereby endanger users and patients (see "6.2 Cleaning, disinfecting and sterilizing" on page 28).

Be sure to carry out a functional check after every hygienic preparation (see "7.2 Performing the functional check" on page 33).

6.1 Preparations



1. Pull off the aspiration tube.

- 2. Remove the intermediate tube from the T-piece of the collection canister.
- Push the free end of the intermediate tube onto the aspiration tube port. This closes the disposable collection bag and thereby reduces the risk of secretion escaping.
- 4. Remove the disposable collection bag and dispose of it together with the aspiration tube.

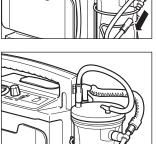
Be sure to observe the relevant rules when disposing of the collection bag (see "3. Safety instructions" on page 11).

5. Remove the vacuum tube.

- 6. Lift the disposable canister from its holder.
- 7. Remove the tube holder plate by pushing it to the left until it disengages and then pulling it towards you.







Important

Allena Mar



Hygienic preparation of the ACCUVAC Basic and the accessories used should be performed as described in the following table.

Observe the instructions regarding use of disinfectant. For immersion disinfection we recommend GIGASEPT FF and TERRALIN® for wipe disinfection.

You are recommended to wear suitable gloves (e.g. household or disposable gloves) during disinfection procedures.

Part		Cleaning	Disinfecting	Rinse in washing machine	Sterilization	
Disposable collection canister	Collection canister	In warm water with mild house- hold cleaner	Immerse in dilute solution ⁽³⁾	Rinse at up to 95 °C	Hot steam sterilization up to 121 °C (4)	
Disp	Vacuum tube			Not permitted		
Aspiration tube with fingertip		Disposable item, re-use not permitted. Use new part for every patient				
	Collection canister		Immerse in dilute	Rinse at up to 95 °C	Hot steam sterilization up to 134 °C	
5	Secretion cover	In warm water with mild house- hold cleaner				
aniste	Overfill ball					
L CO	Filter cover					
ctio	Aspiration tube					
Re-usable collection canister	Filter ⁽¹⁾	In clear warm water ⁽²⁾	Niet permitted ⁽²⁾ sterili		Hot steam sterilization up to 134 °C (5)	
	Nozzle with fingertip	Disposable item, re-u	sposable item, re-use not permitted. Use new part for every patient.			
Motor unit		Wipe with damp cloth	Disinfectant wipe	Not perm	iitted	
Tube holder plate		Twith mild house.	Immerse in dilute solution ⁽³⁾	Rinse at up to 40 °C	Not permitted	
Accessory bag						

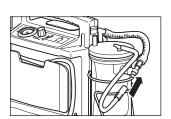
- Always dry the filter before using it again. A damp filter reduces the pump's suction capacity.
- (2) Do not use any surfactants or alcohol for cleaning, as they can adversely affect the hydrophobic properties of the filter.
- (3) After disinfection, rinse the parts thoroughly with distilled water and let them dry.
- (4) Sterilization with superheated steam at 121 °C in units complying with EN 285, residence time 20 minutes.
- (5) Sterilization with superheated steam at 134 °C in units complying with EN 285, residence time 5 minutes.

6.3 Reassembling the disposable collection canister

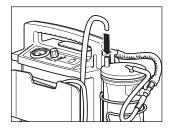
After cleaning, disinfection or sterilization, reassemble the parts as follows:

1. Refit tube holder plate by sliding it to the right.

- 2. Insert the collection canister in its holder.
- Use the vacuum tube to connect the T-piece of the collection canister to the suction port on the motor unit.
- 4. Insert a new disposable collection bag.
- 5. Push the intermediate tube onto the T-piece.







6. Push a new aspiration tube onto the connection port of the disposable collection bag.

7. Functional check

If the functional check reveals defects or deviations from the specified values, ACCUVAC Basic must not be used again until the faults have been rectified.

We therefore recommend that you always keep a stock of the following:

- Disposable collection bag
 WM 10732
- Aspiration tube with fingertip WM 10733

7.1 Intervals

To ensure that a properly functioning ACCUVAC Basic is always available, it is essential to observe the following intervals.

Before every use

• Perform a functional check (see "7.2 Performing the functional check" on page 33).

After every use

- Clean, disinfect and/or sterilize the unit and its parts (see "6. Hygienic preparation" on page 26);
- Perform a functional check (see "7.2 Performing the functional check" on page 33).

Every 3 months

• Check the charge level of the power pack by switching on ACCUVAC Basic and reading the voltage indicator. If the top LED of the voltage indicator does not light up, the power pack should be recharged (see "5.4 Charging ACCUVAC Basic" on page 23).

At least every 6 months

- Perform a functional check (see "7.2 Performing the functional check" on page 33).
- Make a visual inspection of the muffler for clogging. If it is clogged, fit a new muffler (see "8.3 Changing the muffler" on page 39).

After all repairs

- Clean, disinfect and/or sterilize the unit and its parts (see "6. Hygienic preparation" on page 26);
- Perform a functional check (see "7.2 Performing the functional check" on page 33).

7.2 Performing the functional check

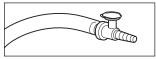
- Check that all tubes and the individual parts of the disposable collection canister are in perfect condition. Any damaged or worn parts must be replaced.
- 2. Check that all tubes are securely connected and the disposable collection bag is firmly installed.
- 3. Switch on ACCUVAC Basic.
- Check the charge level on the voltage indicator. Always recharge the power pack without delay if the yellow LED on the voltage indicator lights up (see "5.4 Charging ACCUVAC Basic" on page 23).
- 5. Insert the stopper in the fingertip.



 Switch on the aspirator and select the maximum vacuum of -0.8 bar by turning vacuum control fully to the right. ACCUVAC Basic must reach this vacuum in not more than 20 seconds.

If the aspirator takes more than 20 seconds to reach this vacuum, its suction capacity is reduced. Check for possible faults (see "8. Troubleshooting" on page 34).

8. Switch ACCUVAC Basic off again.



8. Troubleshooting

Fault	Cause	Remedy
Appliance does not start, O/I indicator and voltage indicator show ready for operation	Faulty pump	Have repairs carried out by factory or by expert personnel.
	Fuse F1 or F2 in appliance defective	Fit new fuse (8.2, Seite 37)
	Fuse in vehicle plug defective	Fit new fuse (8.2, Seite 37)
Appliance does not start, O/I indicator does not	Power pack fully discharged	Perform several charge/discharge cycles. If unsuccessful, fit new power pack (8.1, Seite 35)
show ready for operation	Incorrect polarity of vehicle power socket	Correct polarity and if necessary replace fuse F1 (8.2, Seite 37)
	Snap-in connection between circuit board and power pack not properly engaged	Make sure connection snaps in
Appliance does not switch on or off	Electronic fault	Have it repaired
Appliance does not reach maximum vacuum of	Leak in suction side of appliance	Check that all tubes are firmly connected and disposable bag is securely installed
–0.8 bar in 20 seconds, but voltage indicator	Power pack not sufficiently charged	Charge power pack (5.4, Seite 23)
shows ready for operation	Fault in pump	Have repairs carried out at factory or by expert personnel.
	AC adapter/charger plug defective	Have repairs carried out at factory or by expert personnel
	Inadequate external power supply	External power supply must be between 12.0 and 13.8 volt.
Not charging	Fuse F1 or F2 defective	Fit new fuse (8.2, Seite 37)
	Fuse in vehicle plug defective	Fit new fuse (8.2, Seite 37)
	Snap-in connection between circuit board and power pack not properly engaged	Make sure connection snaps in

Fault	Cause	Remedy	
Power pack is not fully	Charger does not meet specifications	Use AC adapter/charger plug WM 10750 or mains / charger unit FW7405M/14, complete WM 2610	
charged up despite charging for 14 hours (top LED in voltage indicator does not light up)	Vehicle electrical system is not supplying 12.0 – 13.8 V	Check vehicle electrical system	
	Power pack damaged by being fully discharged	Fit new power pack (8.1, Seite 35)	
	Power pack at end of service life		
Top LED of voltage indicator lights up after charging, but pump does	Internal connection faulty	Check internal connection between printed circuit board (X100) and power pack	
not run when powered by power pack	Fuse F2 defective	Fit new fuse (8.2, Seite 37)	
Fuse F2 frequently blows	Pump is often switched on under vacuum conditions	Do not switch on pump under vacuum	
Trose i z nequeliny blows	Pump defective	Have repair carried out at factory or by expert personnel	

8.1 Power pack

ACCUVAC Basic is fitted with a high-grade lead cell power pack.

Changing power pack

Important Never touch the circuit board, as this can damage the electronic system.

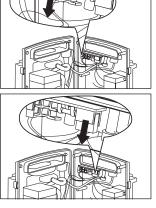
- 1. Switch off ACCUVAC Basic.
- 2. Disconnect the aspirator from the external power supply.
- 3. Remove collection canister and any accessories.

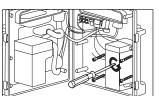
4. Unscrew the holder for the disposable collection canister.

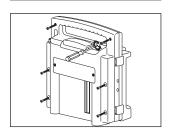
- 5. Open the case by unscrewing the 6 cross-head screws. When opening the case, be careful not to damage the silicone sealing cord.
- 6. Carefully disconnect the **X101** plug connector from the main circuit board.

7. Carefully disconnect the **X100** electrical power pack plug connector from the main circuit board.

- 8. Unscrew the power pack holder (4 cross-head screws).
- 9. Detach both leads from the power pack.
- 10. Remove and dispose of the defective power pack (see "9.2 Disposal" on page 40).



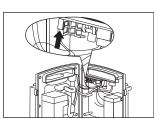




11. Attach the two cables to the connections on the new power pack: red to plus; black to minus.

If you accidentally reverse the connections, the electronic system will be protected by fuse (F2), which will then have to be replaced.

- 12. Fit the new power pack with its holder, making sure you do not jam any cables.
- 13. Carefully connect the **X100** electrical power pack plug connector.



- 14. Carefully connect the **X101** electrical plug connector.
- 15. Screw the case together again, making sure that the silicone sealing cord is correctly inserted and is not jammed or otherwise damaged.
- 16. Perform a functional check (see "7.2 Performing the functional check" on page 33).

8.2 Changing fuses

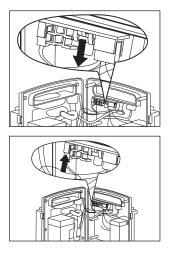
Changing fuse F1 or F2 Important Never touch the circuit bo

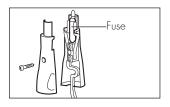
Never touch the circuit board, as this can damage the electronic system.

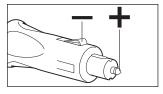
- Unscrew the case of ACCUVAC Basic (see " Changing power pack" on page 35).
- Carefully disconnect the X101 plug connector from the main circuit board.



is not jammed or 16. Perform a function







- 3. Remove the defective fuse. The fuses are labeled on the main circuit board.
- 4. Insert a new fuse. Always use approved fuses (see "11. Technical Data" on page 47).
- 5. Carefully connect the **X101** electrical plug connector.
- 6. Screw the case together again, making sure that the silicone sealing cord is correctly inserted and is not jammed or otherwise damaged.
- 7. Perform a functional check (see "7.2 Performing the functional check" on page 33).

Changing fuse in vehicle plug

1. Use a screwdriver to open the vehicle plug.

Note:

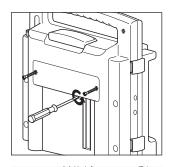
The central contact of the plug is the plus pole. The plus lead of the cable has either a square crosssection or colored markings.

The outer contact of the plug is the minus pole. The minus lead of the cable is round and black.

Caution: Check the vehicle plug for correct polarity. Reversed polarity can damage ACCUVAC Basic.

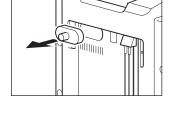
- 2. Change the faulty fuse. Use only approved fuses (see "11. Technical Data" on page 47).
- 3. Screw the vehicle plug together again.
- 4. Perform a functional check (see "7.2 Performing the functional check" on page 33).

8.3 Changing the muffler

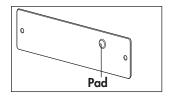


1. Use a screwdriver to unscrew the cover plate (2 cross-head screws).

2. Remove the old muffler.



3. Insert a new muffler.



- 4. Refit the cover plate. Make sure that the pad stuck to the cover plate is pressing against the muffler.
- 5. Perform a functional check (see "7.2 Performing the functional check" on page 33).

9.1 Intervals

The ACCUVAC Basic requires no maintenance, but please observe the intervals specified for regular functional checks (see "7.1 Intervals" on page 31).

We recommend that you have any servicing, such as inspections and repair work, carried out by the manufacturer – Weinmann – or by expert personnel.

9.2 Disposal



To dispose of the unit properly, please contact a licensed and certified electronic waste disposal merchant. Names and addresses can be obtained from your Environmental Officer or municipal authorities. The unit packaging (cardboard box and inserts) can be disposed of as waste paper.

Disposing of batteries / rechargeable batteries



Used batteries/rechargeable batteries may not be disposed of in domestic waste. Contact Weinmann or your local authority waste disposal department.

10.1 Standard scope of supply

ACCUVAC Basic with re-usable collection canister

1.	ACCUVAC Basic with re-usable collection canister consisting of:	WM 10709
	 ACCUVAC Basic, basic device Re-usable collection canister, complete Plug-in charger, complete Filter, complete 	WM 10630 WM 10750 WM 10675
2.	ACCUVAC Basic with re-usable collection canister and accessories consisting of:	WM 10715
	 ACCUVAC Basic, basic device Re-usable collection canister, complete Filter, complete Connection cable Accessories bag Set, wall bracket incl. assembly set 	WM 10630 WM 10675 WM 10650 WM 10655 WM 15208
3.	ACCUVAC Basic with re-usable collection canister consisting of:	WM 10727
	 ACCUVAC Basic, basic device Re-usable collection canister, complete Filter, complete Connection cable Mains/charger unit, complete 	WM 10630 WM 10675 WM 10650

ACCUVAC Basic with disposable collection canister

1.	ACCUVAC Basic with disposable collection canister, complete consisting of:	WM 10700
	0	
	- ACCUVAC Basic, basic device	e
	- Disposable collection canister,	
	complete	WM 10730
	- Canister holder for	
	Disposable collection canister	WM 10735
	Disposable aspiration tube	WM 10733
	 Disposable collection bag Vacuum tube 	WM 10732
		WM 10740
	 Plug-in charger, complete 	WM 10750
2.	ACCUVAC Basic with disposable	
	collection canister and accessories,	
	complete	WM 10705
	consisting of:	
	– ACCUVAC Basic, basic device	
		, ,
		2
	- Disposable collection canister,	WM 10730
	 Disposable collection canister, complete Canister holder for 	WM 10730
	 Disposable collection canister, complete Canister holder for Disposable collection canister 	
	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube 	WM 10730 WM 10735
	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube 	WM 10730 WM 10735 WM 10733
	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube Disposable collection bag 	WM 10730 WM 10735 WM 10733 WM 10732
	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube Disposable collection bag Vacuum tube 	WM 10730 WM 10735 WM 10733 WM 10732 WM 10740
	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube Disposable collection bag Vacuum tube Connection cable 	WM 10730 WM 10735 WM 10733 WM 10732 WM 10740 WM 10650
	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube Disposable collection bag Vacuum tube Connection cable Accessories bag 	WM 10730 WM 10735 WM 10733 WM 10732 WM 10740 WM 10650
3.	 Disposable collection canister, complete Canister holder for Disposable collection canister Disposable aspiration tube Disposable collection bag Vacuum tube Connection cable Accessories bag Set, wall bracket 	WM 10730 WM 10735 WM 10733 WM 10732 WM 10740 WM 10655 WM 10655 WM 15208

_	Disposable collection canister,	
	complete	WM 10730
_	Canister holder for	
	Disposable collection canister	WM 10735
_	Disposable aspiration tube	WM 10733
_	Disposable collection bag	WM 10732
_	Vacuum tube	WM 10740
_	Connection cable	WM 10650
-	Mains/charger unit, complete	WM 2610

10.2 Accessories

The following accessories are not included in the scope of supply and may be ordered separately:

1.	Mains/charger unit FW7405M/14,		
	complete	WM 2610	
2.	Connection cable	WM 10650	
3.	Plug-in charger, complete	WM 10750	
4.	Accessories bag	WM 10655	
5.	Wall bracket incl. Assembly set	WM 15208	
6.	Wall bracket for mains and charger unit WM 2610	WM 15844	
7.	Retaining plate for appliance rail Additionally required for clipping i rail on wall bracket for ACCUVAC and wall bracket for mains and ch (VVM 15844).	nto appliance (WM 15208)	
8.	Attachment set for standard hospita with 1 adapter Additionally required for fastening rail of wall bracket for mains and a (WM 15844).	WM 1 <i>57</i> 95 on appliance	

 Attachment set for standard hospita with 2 adapters Additionally required for fastening rail of wall bracket ACCUVAC (W 	WM 15805 on appliance
10. Attachment set for rail bracket Can be used with wall bracket AC (WM 15208) or wall bracket for r charger unit (WM 15844) for faste Ø 19-40 mm	nains and
1 1. Conversion kit Re-usable collection canister consisting of:	WM 15261
 Re-usable collection canister, complete Holder set Instructions for use Re-usable collection canister 	WM 10630 WM 15271 WM 16235
 Holder set for re-usable collection canister consisting of: 	WM 15271
– Holder – Mounting elements	WM10640
13. Conversion kit for disposable collection canister consisting of:	WM 15262
 Set, disposable collection canister Set, canister holder 	WM 15268 WM 15172
14. Set, disposable collection canister consisting of:	WM 15268
 Disposable collection canister Collection canister Disposable collection bag Aspirating tube with fingertip 	WM 10730 WM 10731 WM 10732
regulator	WM 10733

		Vacuum tube Instructions for use		10740 16233
15.	can	canister holder for disposable ister sisting of:	WM	15172
		Canister holder Mounting elements	WM	10735
16.		rinsing glass sisting of:	WM	15229
	-	Collection canister Holder set Mounting panel	WM	10631 15271 10728

10.3 Replacement parts

1.	Disposable collection canister	WM 10730
	consisting of:	
	 Collection canister Disposable collection bag Set I: 10 x WM 10732 Set II: 20 x WM 10732 Set III: 50 x WM 10732 T-piece Aspirating tube with fingertip regulator 	WM 10731 WM 10732 WM 15226 WM 15227 WM 15228 WM 10738
	Set I: 10 x WM 10733 Set II: 20 x WM 10733 Set III: 50 x WM 10733 – Vacuum tube	WM 15327 WM 15328 WM 15329 WM 10740
2.	Holder set for disposable collection canister consisting of:	WM 15172
	Canister holderMounting elements	WM 10735 WM 51091

3.	Reset button set, green	WM 15397
4.	Tube holder panel, green	WM 10723
5.	Lead battery	WM 10747
6.	Sound insulation	WM 10665
7.	Instructions for use	WM 16138
8.	Fuse for vehicle plug	WM 10673
9.	Fuse for external power supply (F1)) WM 2692
10	. Fuse for power pack (F2)	WM 2692

11. Technical Data

	ACCUVAC Basic		AC
Appliance class 93/42/EEC	ll b	Classification accord – Protection against e	electric
Dimensions	385x280x140 (with disposable collection canister)	 Degree of protectio Degree of protectio (drip-water) 	n agai
WxHxD in mm	370x280x140 (with re- usable collection canister)	Classification accordi – high vacuum/high	
Weight	approx. 5.4 kg		EN 6
Canister volume	1000 ml	Standards applied	EN 61 EN IS
Suction capacity at 12 V with free flow	> 20 l/min		EN 1.
Max. vacuum at 12 V	0.8 bar (80 kPa)	Vehicle plug fuse	8 A, [identil
Aspiration tube	Ø 5 mm, length 1800 mm (disposable collection canister)	Internal fuse F1 external power supply	4 A sl low b G fuse confo
	Ø 10 mm, length 1300 mm (re-usable collection canister)	Internal fuse F2 power pack	4 A sl low b G fuse
Overflow valve filter	at least 99.8 % for particle size 2.8 µm		confo
Motor output	50 W	Power pack type	Lead
Rated voltage	12 V	Charging voltage	12.0
Maximum current consumption	3.5 A	Operating time after charging for 14 hours	30 mi
Temperature range		Operating mode	S2 60
– Operation – Charging – Storage	-18 °C to +40 °C + 0 °C to +40 °C -40 °C to +70 °C	Service life of power pack	400 a cycles
Humidity	30 % – 75 % rel. humidity	Battery charging time	14 h
Electromagnetic compatibility: - Radio interference	EN 60601-1-2 EN 55011	Average sound pressure level at -0.8 bar	≤ 63,
suppression – Radio interference resistance	IEC 1000-4 Parts 2–5 & 11	AC adapter/ charger	prima secon 0.3 A

CCUVAC Basic EN 60601-1: shock: class II ainst electric shock: BF inst water: IPX 1 EN ISO 10079-1: 50601-1 50601-1-2 SO 10079-1 789 DIN 72581, ification color white slow-acting, breaking capacity se links 5x20 mm, orms to IEC 127 slow-acting, breaking capacity se links 5x20 mm, orms to IEC 127 cell, 3.4 Ah to 13.8 V=== nin at maximum suction 0 min charge/discharge es in approx. 3 years ,5 dB(A) ary: 230 V/50 Hz ndary: 13.8 V--- / Ą

	ACCUVAC Basic
I	Materials
Disposable collection canister: – Collection canister: PC – Disposable collection bags, tubes: PVC – Nozzle with fingertip: PE	
Case	PC/ABS
Tube holder plate	ABS

11.1 Safe distances

CE 0197

e1 From serial no. 10735/2004

Subject to technical change without notice.

The ACCUVAC Basic is intended for operation in an electromagnetic environment in which high-frequency interference variables are controlled. The customer or user of the ACCUVAC Basic can help avoid electromagnetic interference by maintaining the minimum safe distance between portable and mobile high-frequency telecommunication devices (transmitters) and the ACCUVAC Basic depending on the rated output of the transmitter as given below.

Recommended safe distances between portable or mobile HF telecommunication devices (e.g. mobile phones) and the ACCUVAC Basic

Rated output of HF device	Safe distance depending on transmission frequency in m			
in W	150 kHz - 80 MHz d=(3,5/V1) x √P	80 MHz - 800 MHz d=(3,5/V1) x √P	800 MHz – 2,5 GHz d=(3,5/V1) x √P	
0.01	0.12	0.12	0.23	
0.1	0.37	0.37	0.74	
]	1.17	1.17	2.33	
10	3.69	3.69	7.38	
100	11.67	11.67	23.33	

- Weinmann offers a warranty that the product, when used in accordance with requirements, will remain free from defects for a period of two years from date of purchase. For products whose durability is clearly indicated as less than two years, the warranty expires on the expiration date indicated on the packaging or in the user's manual.
- Claims against the warranty can be made only when accompanied by the sales receipt, which must show salesperson and date of purchase.
- We offer no warranty in the case of:
 - Disregard of usage instructions
 - Operating errors
 - Improper use or improper handling
 - Third-party intervention by non-authorized persons for the purpose of device repair
 - Acts of God, e.g., lightning strikes, etc.
 - Transport damage as a result of improper packaging of returned items
 - Lack of maintenance
 - Operational and normal wear and tear, which includes, for example, the following components.
 - Filter
 - Batteries and recheargable batteries
 - Articles for one-time usage, etc.
 - failure to use original spare parts.
- Weinmann is not liable for consequential harm caused by a defect if it is not based on intention or gross negligence. Weinmann is also not liable for minor physical injury to life or limb resulting from negligence.
- Weinmann reserves the right to decide whether to eliminate defects, to deliver a defect-free item or to reduce the purchase price by a reasonable amount.
- If Weinmann rejects a claim against the warranty, it assumes no expense for transport between customer and manufacturer.
- Implied warranty claims remain unaffected by these changes.

13. Declaration of conformity

Weinmann Geräte für Medizin GmbH + Co. KG declares herewith that the product complies fully with the respective regulations of the Medical Device Directive 93/42/EEC. The unabridged text of the Declaration of Conformity can be found on our website at www.weinmann.de

Veinmann Seräte für Medizin Gn

P.O.Box 540268 • D-22502 Hamburg Kronsalsweg 40 • D-22525 Hamburg T: +49-(0)40-5 47 02-0 F: +49-(0)40-5 47 02-461 E: info@weinmann.de www.weinmann.de

Center for Production, Logistics, Service

weinmann Geräte für Medizin GmbH+Co.KC Siebenstücken 14 D-24558 Henstedt-Ulzburg T: +49-(0)4193-88 91-0 F: +49-(0)4193-88 91-450

