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infection control  
since 1830



# PG 8581 Washer Disinfector

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## Supplementary Information Document

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Eschmann design, manufacture and supply a range of market leading products including benchtop autoclaves, accessories, washer disinfectors and surgical suction.

For further information visit our website: [www.eschmann.co.uk](http://www.eschmann.co.uk).

## About this Supplementary Information Document

Please read the Miele PG 8581 Operating Instructions and this Supplementary Information Document before installing or using the product for the first time. Keep the Operating Instructions and Supplementary Information Document handy for quick reference. Always make sure that they are available for the next user/owner of the product.

The product(s) described in this Supplementary Information Document must only be operated and used by medically qualified personnel trained in the use of this equipment. Contact Eschmann with your training requirements.

Pay particular attention to the safety notes, cautions and warnings provided in the text, and also to those displayed on the product labels.

This product must be used, installed and serviced in accordance with the procedures given in this Supplementary Information Document and the Miele PG 8581 Operating Instructions. Failure to do so could result in injury to patients and/or users, or damage to the equipment.

Confirm the service interval for the product. Eschmann products must be serviced and maintained by Eschmann trained engineers only. Failure to do so may invalidate the warranty.

To avoid the risk of accidents or damage to the machine, it is **essential** to read this Supplementary Information Document before the product is installed and used for the first time.

This Supplementary Information Document provides sufficient information for everyday use and details the UK specific configuration for the PG 8581. This includes daily use, daily/ weekly checks and tests required for safe operation.

The PG 8581 will have been installed in accordance with the Site Preparation Plan, MUW216742, and be ready to use in the UK configuration. You should have received training on how to use your PG 8581.

For all other information regarding settings and configurations, consult the Miele PG 8581 Operating Instructions, as supplied.

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# 1. Introduction

## 1.1. UK Distributor Information

This machine has been supplied by Eschmann Technologies Ltd. who are the appointed distributor for the Miele Company in the UK. All equipment supplied by Eschmann is supported by its nationwide network of fully trained engineers, providing prompt and reliable maintenance and repairs, using only high quality original spare parts.

## 1.2. About this Supplementary Information Document

This Supplementary Information Document has been created to supplement the Miele PG 8581 Operating Instructions supplied with this machine and covers the UK requirements of HTM 01-05 and SDCEP.

It provides **essential information** to help you with routine tasks and minor issues you may encounter. This Supplementary Information Document is not intended to replace the Miele PG 8581 Operating Instructions which contains all the information you might require to operate your PG 8581 Washer Disinfector.

# 2. Intended Use

## 2.1. Introduction

This PG 8581 Washer Disinfector is a Class IIb medical device (Medical Device Regulation (EU) 2017/745). It complies with EN ISO 15883 for validation purposes.

The Washer Disinfector can be used to clean, rinse and thermally disinfect and dry a wide range of reusable medical devices for dental use.

Examples of instruments suitable for cleaning and disinfecting in the washer disinfector include:

Stainless steel scalers, spatulas and haemostats, stainless steel retractors, needle holders, skin hooks, tissue forceps, scissors, curettes, and other stainless steel instruments free of deep cavities.

For best results, instruments processed in the washer disinfector should have the following properties:

- Heat resistance to a temperature up to 95 °C
- Corrosion resistance in the presence of heat and alkalinity

The Eschmann Dental or W T D programme must be chosen to ensure effective cleaning of instruments.

The cleaning result must ensure that items can be disinfected correctly and subsequent sterilisation can be carried out.

The use of a suitable carrier (basket, module, insert, etc) is important to ensure the adequate cleaning of the load.

Only medical and dental instruments displaying the thermo-washer symbol or possessing a manufacturer's statement of suitability can be processed in this washer disinfector.

## 2.2. Liquid Chemicals & Water Softener

The use of liquid chemicals and a water softener helps to ensure that the water in the cleaning process is free from deposits.

Only use approved chemicals formulated for use in Washer Disinfectors. We only recommend and supply liquid chemicals.

The recommended chemicals have been carefully selected to provide excellent cleaning and outstanding material compatibility with a wide range of metals and coatings.

Take care when handling chemicals as they may contain irritant or corrosive ingredients. Always wear protective gloves and goggles.

With all chemicals and specialised products, always observe the manufacturer's safety conditions and follow the manufacturer's instructions.

Using unsuitable chemicals could adversely affect items being cleaned and components in the machine. Where a cleaning agent is recommended on technical application grounds (e.g. a chemical), it does not imply that Eschmann or Miele takes responsibility for the effect of the chemicals on the items being cleaned. Be aware that changes in formulation, storage conditions, etc. can have a negative effect on the cleaning result. Chemicals must only be used for the purpose they are designed for and in the situation specified. Avoid mixing with other chemicals to avoid dangers such as chemical reactions and material damage.

The machine is designed for operation with water, salt, and additive chemicals only. Organic solvents must not be used in the machine as under certain circumstances there is a danger of explosion.

(Although this is not the case with all organic solvents, other problems could arise with their use, for example damage to rubber and synthetic materials).

If the chemicals are changed to a different type, it is important to flush out the original chemicals from the machine's system. If this is not performed, cross contamination could occur and this may cause damage to the machine.

## 2.3. User Profiles

### Daily Operators

Daily operators must be instructed in operating and loading the washer-disinfector and trained regularly to guarantee safe use..

They require knowledge of automated reprocessing of medical devices and the relevant daily and weekly testing regimes. Refer to Appendix 5.

### Administration

More advance tasks, e.g. interrupting or cancelling a programme, require more detailed knowledge about the machine reprocessing of medical devices.

Alterations of adaptations of the washer-disinfector, e.g. components used or on-site conditions require additional specific knowledge of the washer-disinfector.

Validation processes assume specialised knowledge about machine reprocessing of medical devices, the processes involved and applicable standards and legislation.

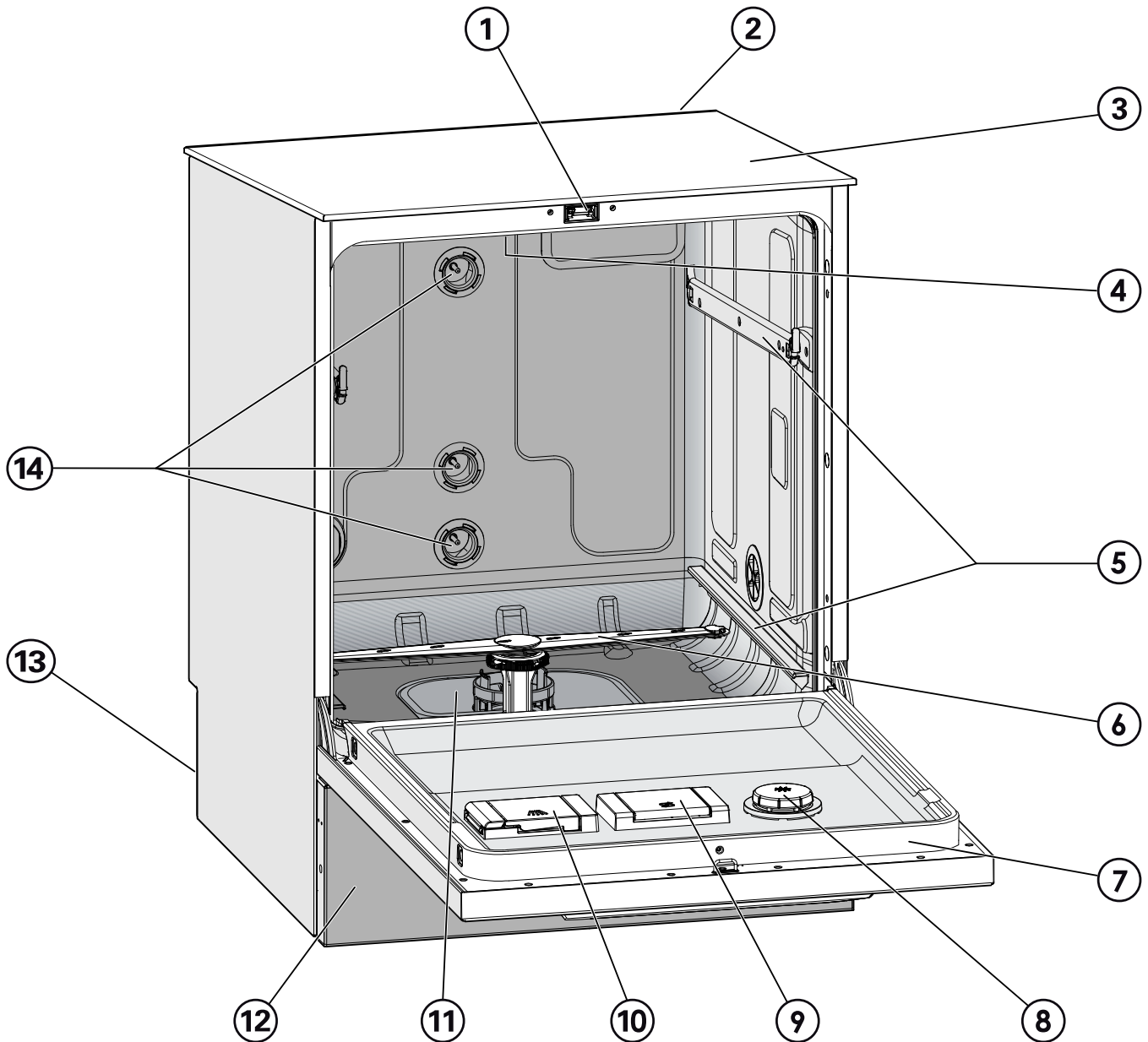
Administrative settings are located in the Settings menu.

## 2.4. Warning & Safety Instructions

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- The standard of cleaning and disinfection in the disinfection programmes must be routinely confirmed by the user.
- Make sure items being washed are suitable for machine reprocessing and are in good condition. Plastic items must be thermally stable. Nickel plated items and aluminium items can be machine processed using special procedures only. Items containing iron, and soiling containing residual rust must not be placed in the cabinet.
- Instrument care products based on paraffin oils (white oils) can damage the elastomers and plastic in the machine. Such care products must not be dispensed as chemical agents in this machine, even if they are recommended for machine use by the care product manufacturer.
- Abrasive substances (e.g. prophylactic paste) must not be placed in the machine as they will cause damage to the mechanical components of the water circulation system. Any residues of abrasive substances on items to be washed must be removed without trace before reprocessing in the machine. We recommend using Eschmann recommended wipes at the point of use to remove these residues.
- Cements used at the chairside must be wiped away immediately after their application to protect the instrument and to ensure effective cleaning in the washer disinfectant. We recommend using Eschmann recommended wipes at the point of use to remove these residues.
- Pre-treatment with chemical agents can create foam, as can certain types of soiling. Foam can have an adverse effect on the disinfection and cleaning result and may lead to machine issues.
- Processes must be set up such that foam or chemicals that can create foam do not enter the wash cabinet. It would hinder the correct functioning of the machine.
- The process used must be monitored on a regular basis by the supervisor to check foaming levels.
- Where a chemical is recommended on technical application grounds (e.g. a cleaning agent), this does not imply that the manufacturer of the machine accepts liability for the effect of the chemical on the items being cleaned. Please be aware that changes in formulation, storage conditions etc. which may not be publicised by the chemical manufacturer, can have a negative effect on the cleaning result.
- When using a chemical agent it is essential that the manufacturer's instructions are followed. The chemical agent must only be used for the application it is designed for and in the situation specified, to avoid material damage and such dangers as a severe explosive chemical reaction (e.g. an explosive oxyhydrogen gas reaction).
- Always follow the relevant manufacturer's instructions on storage and disposal of chemical agents.
- In critical applications where very stringent requirements have to be met, it is strongly recommended that all the relevant factors for the process, such as chemical agents, water quality etc. are discussed with Eschmann.
- Baskets and carriers should only be used for the purpose they are designed for. Hollow items must be thoroughly cleaned, internally and externally.
- Secure small and light items in a mesh tray meant for small items, so that they do not block the spray arms.
- Empty any liquid and/or paste from containers or utensils before loading them.
- The amount of residual solvents and acids on items going into the cabinet should be minimal. There should be no more than a trace of any solvents with a flash point of below 21°C.
- Chloride solutions, in particular hydrochloric acid, must not be placed in the cabinet.
- Ensure that solutions or steam containing chlorides or hydrochloric acid do not come into contact with the stainless steel outer casing of the machine in order to avoid any damage through corrosion.

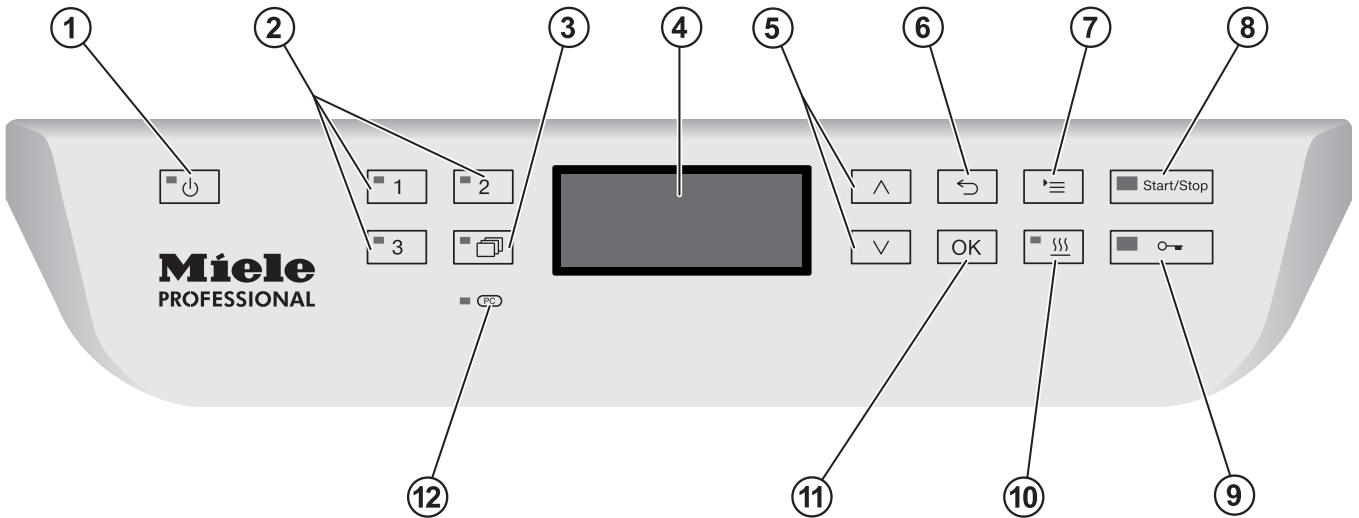
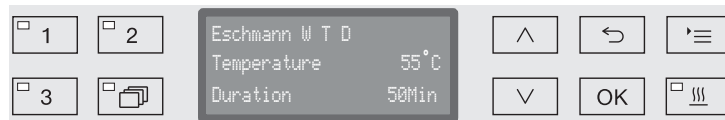
### 3. Overview



- ① Comfort door locking mechanism
- ② Module slot for a communication module (Back, top right)
- ③ Test point for validation (Top, front right; only visible with lid removed)
- ④ Upper machine spray arm
- ⑤ Rails for baskets and mobile units
- ⑥ Lower machine spray arm
- ⑦ Data plate
- ⑧ Rinsing agent reservoir
- ⑨ Salt reservoir
- ⑩ Dispenser for powder cleaning agent (optional)
- ⑪ Filter combination
- ⑫ Plinth
- ⑬ On the back:
  - Second data plate
  - Electrical and plumbing connections
  - Siphon(s) for external supply containers
  - Connections for external dispensing modules (DOS modules)
- ⑭ Plumbing connections for mobile units and baskets

### Available Cycles

Either Eschmann Dental or Eschmann W T D will be available for use.



- ① **On/Off button**  
For switching the washer-disinfector on and off.
- ② **1, 2 and 3 buttons**  
Programme selection buttons.  
Can be configured.
- ③ **Programme list button**  
For accessing the list of all programmes.
- ④ **Display**  
User interface and programme sequence display
- ⑤ **^ and v arrow buttons**  
For navigating within the display
- ⑥ **↶ Cancel button**  
For cancelling a process  
(not for cancelling programmes)
- ⑦ **☰ Settings button**  
For accessing the system settings menu.
- ⑧ **Start/Stop button**  
For starting or cancelling a programme
- ⑨ **⏪ Door release button**  
For opening the door before or after a programme
- ⑩ **☰ button (drying assistance)**  
For switching Drying assistance on and off
- ⑪ **OK button**  
For selecting or confirming entries in the user interface.
- ⑫ **PC / Optical interface**  
This is used by Miele service technicians to run diagnostic checks and can also be used to update programming data in the future.


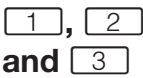



### Control panel

The machine is operated exclusively by the buttons located on the stainless steel surfaces either side of the display. The display is not a touch screen.

A light touch on the relevant button is sufficient to operate the functions.

### 3.1. Guide to the machine

The buttons on the control panel have LEDs (Light Emitting Diodes) that indicate the status of the washer-disinfector.

Button	LED	Status
 <b>button</b>	<b>ON</b>	The washer disinfecter is switched on.
	<b>OFF</b>	The washer disinfecter is switched off.
<b>Programme selection buttons</b> 	<b>ON</b>	The respective programme has been selected. At the end of the programme the LED will remain lit until a different programme is selected.
	<b>OFF</b>	The programme is not selected or the programme settings are being selected.
 <b>button</b>	<b>ON</b>	A programme has been selected from the programme list. At the end of the programme the LED will remain lit until a different programme is selected.
	<b>OFF</b>	No programme has been selected from the list or the programme settings are being selected.
 <b>button</b>	<b>ON</b>	The additional "Drying assistance" function has been activated for the selected programme (not available for all programmes; see "Programme chart").
	<b>OFF</b>	The additional "Drying assistance" function has been deactivated.
<b>Start/Stop button</b>	<b>ON</b>	Programme running
	<b>FLASHES GREEN</b>	A programme has been selected but not yet started.
	<b>FLASHES RED</b>	A fault has occurred (see "Problem solving guide").
	<b>OFF</b>	A programme has finished.
 <b>button</b>	<b>ON</b>	The door is closed (locked) and there is no programme running.
	<b>FLASHES</b>	A programme has finished and the door is closed (locked).
	<b>OFF</b>	A programme is running or the door is open (unlocked).



## 3.2. Using the machine

### Switching on

The machine must be connected to the electrical supply.

Press  the button until the LED lights up.

When the machine is ready for operation, the display changes to show the last selected programme.

### Switching off

Press  the button.

The time of day can optionally be displayed when the machine is switched off. Refer to the Miele Operating Instructions.






### Menus

The machine is controlled by menus. The menus are displayed in a 3-line display on the control panel.

The name of the menu (top line) and up to two options are shown. The currently selected option is highlighted e.g.

 Settings button

For accessing the system settings menus.

UP  and DOWN 	The   buttons are used to navigate up and down by row within a menu. Press and hold the button automatically scroll through the list to the end of menu. Press the button again to continue navigating.
OK button	The OK button is used for confirming (acknowledging) a selection or for saving input. The display then moves to the next menu or, when entering parameter values, to the next input position. Instructions for this can be found in the relevant sections.
 Cancel button	Before the OK button has been pressed, a process can be cancelled at any time by pressing the Cancel button. The menu is then ended early and the display changes to the next menu level up. Any setting changes made will not be saved.

**Note:** Further settings are accessible using this Menu but are not needed in normal use. Refer to the Miele Operating Instructions for further information.

### Opening and closing the door

#### Electronic door locking

The washer-disinfector is equipped with a Comfort door lock. When the door is closed, the Comfort door lock automatically pulls the door into the correct position, electronically locking the door.

#### Opening the door

An electronically locked door can only be opened if:

- The washer disinfector is connected to the electrical supply and is switched on (LED 9, DOOR OPEN, is lit).
- There is no programme running.
- The temperature in the wash cabinet is less than 70°C and,
- LED 9, DOOR OPEN, is lit on opening the door.

Press the DOOR OPEN button to open the door.

The underside of the washer disinfector control panel is also a door handle.



Grasp the handle underneath the control panel and lower the door to open it.

**Note:** The Comfort door lock opens the door approximately 100mm for drying to occur at the end of the cycle. The LED goes out as soon as the door is unlocked.

#### Closing the door

Ensure that there are no objects or items in the load obstructing the door.

Close the door manually until it engages with the door lock. The door is automatically pulled into the correct position by the Comfort door lock.

 **WARNING!**

**PERSONAL INJURY HAZARD**

**DO NOT** put your hand inside the door as it is closing.

### Opening the door using the emergency release

The emergency release may only be used when it is no longer possible to open the door normally, e.g. in the event of a power cut.

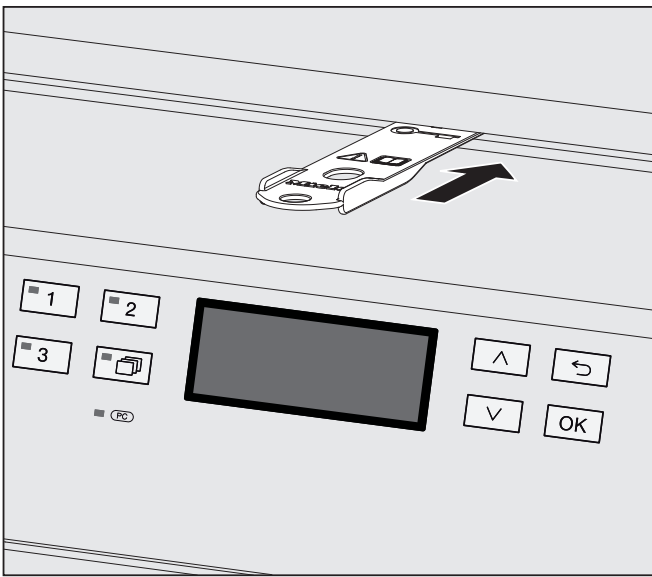
**⚠ WARNING!**

**PERSONAL INJURY HAZARD**

**If the emergency release is operated during a program cycle, hot water and cleaning agents can escape.**

**Risk of scalding, burning and chemical burns.**

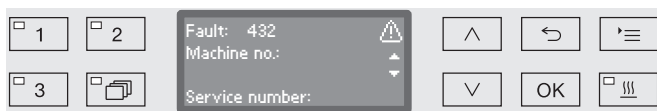
Push against the door so that less force is needed to operate the emergency release.



Push the tool supplied in the accessory pack horizontally into the gap between the door and lid or worktop. The right hand edge of the tool must align with the right hand edge of the display.

Push inwards against the unlocking mechanism with the tool until you hear the door unlock. The door can now be opened.

If the washer disinfectant is switched on, activation of the emergency release can be recorded in the process documentation and the following message will appear in the display:



Switch the washer-disinfectant off and then back on again with the **⏻** button.

Acknowledge the fault message by entering your lock code. Refer to Section 6.4 Advisory codes (cycle interrupts).

### Water Hardness & Internal Water Softener

This machine can have its water softener optimised by configuring it to the hardness of the incoming mains water. This will have been set by the engineer at installation.

Please refer to the Miele Operating Instructions.

### Filling the salt reservoir

The machine has an internal water softener, which requires special regeneration salt to help it refresh the softening beads. Only special, tablet regeneration salt is to be used.

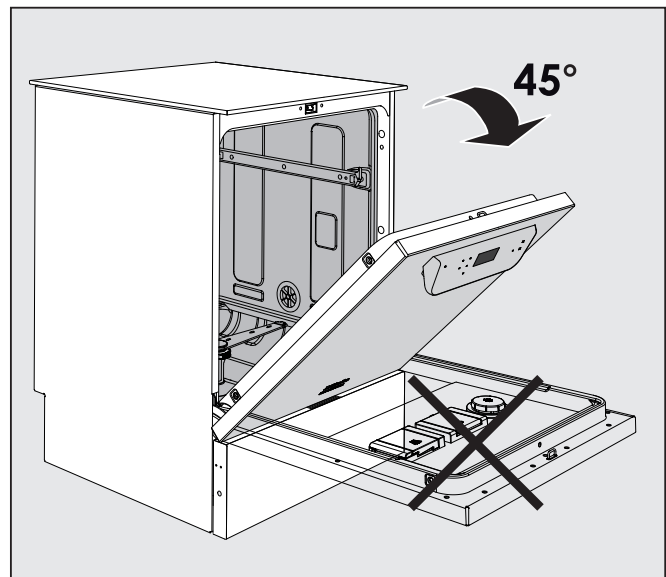
Do not under any circumstances use other types of salt such as table salt, agricultural or gritting salt. These may contain insoluble additives which can impair the functioning of the water softener.

**⚠ WARNING!**

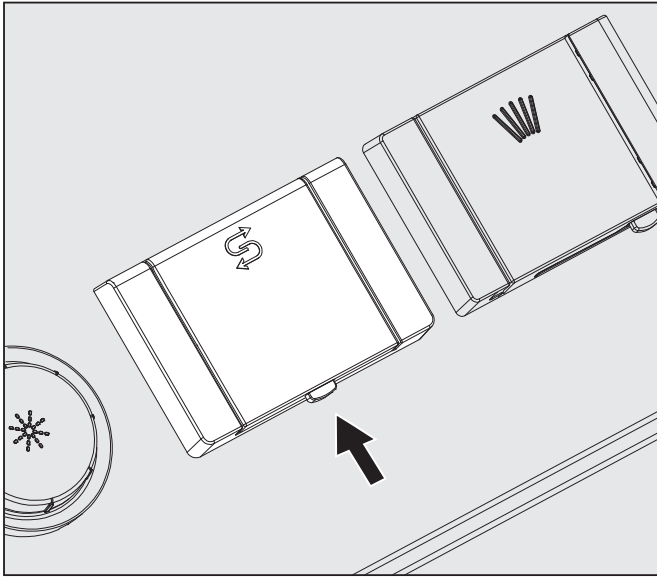
**EQUIPMENT DAMAGE HAZARD**


**Inadvertently filling the salt reservoir with cleaning agent will cause serious damage to the water softener.**

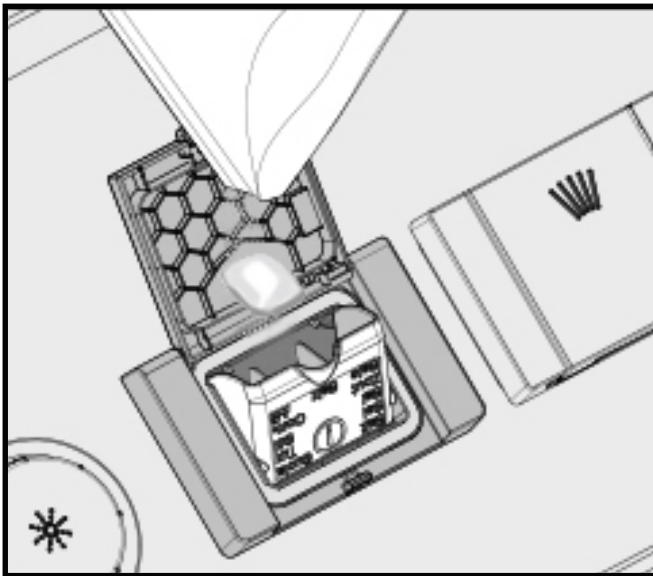
**Before filling the salt container, make sure that you have picked up the right packet of reactivation salt.**



1. Open the door to an angle of approx. 45°. This ensures that the salt flows into the reservoir more easily.



2. Press the yellow button on the salt reservoir with the  in the direction of the arrow. The flap will spring open.
3. Lift up the funnel.
4. The reservoir takes approx. 1.4 - 2 kg of salt, depending upon how much is left in.



**⚠ WARNING!**  
**EQUIPMENT DAMAGE HAZARD**  
 DO NOT fill the reservoir with water.  
 The reservoir could overflow when filled with salt.

5. Add salt only until the funnel of the salt reservoir is full, so that it can close properly. Do not add more than 2 kg of salt.
6. As the salt reservoir is being filled, displaced water (saline solution) may run out.

7. Clean any excess salt from the area around the salt reservoir and especially from the seal using Eschmann recommended wipes. Do not use running water as this can cause the salt reservoir to overflow.
8. Close the funnel and the flap.
9. Run the Rinsing programme after refilling salt. This will ensure that any traces of salt and saline solution are dissolved and rinsed away.

**⚠ CAUTION**

**POSSIBLE EQUIPMENT DAMAGE**

**Salt and saline solution which has overflowed can cause corrosion damage if not rinsed away.**

**Add Salt reminder**

If the salt level in the reservoir is low, the following reminder will appear.



Confirm the message with the OK button and fill the reservoir as described.

The message may reappear, but it will stop soon once the salt has dissolved

### 3.3. Adding & Dispensing Chemicals

**Dosing of Chemicals**

This machine uses two types of chemical, a cleaning agent that is used to clean the instruments, and a rinse aid used in the final rinse (disinfection stage) to prevent water residues clinging to the instruments and allow better drying.

The chemicals used form part of a UK validated system of cleaning instruments. Using other types or different volumes may prevent cleaning or cause issues with your instruments or the machine itself (Only use validated chemicals). Refer to Appendix 4 for chemicals.

Dosage volumes are pre-set by an Eschmann engineer as part of the cycle validation and ongoing testing. This machine will always use liquid chemicals for cleaning, as this protects delicate devices during processing (Powder chemicals are not suitable and should not be used).

**⚠ CAUTION**

**POSSIBLE EQUIPMENT DAMAGE**

**Use only chemicals that are suitable for washer disinfectors. Do not use chemicals for domestic dishwashers as they will not clean effectively.**

### 3.4. DOS Venting

**Note: Instruments are NOT to be processed during DOS venting.**

The dispensing system for liquid chemical agents can only dispense reliably if the system has been purged of air.

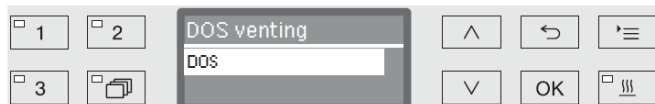
The DOS system must be vented:

- if the dispensing system is being used for the first time
- if the liquid cleaning agent container was not refilled or replaced in time and the DOS system was sucked dry (giving F518 or F519).

Before venting, ensure that the liquid chemical agent container is sufficiently full and the siphons are securely screwed to the containers. Push the suction tub/float down towards the bottom of the container. Only one DOS system can be vented at a time.

Open the menu as follows:

- ☰ button
  - ▶ Settings
    - ▶ DOS venting
      - ▶ DOS...(name of dispensing system)

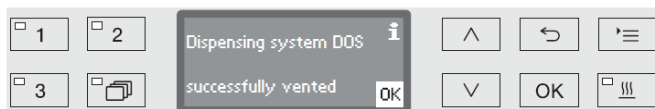


Automatic venting will start when the dispensing system is selected. Once started, the automatic venting process can no longer be cancelled.

Select a dispensing system using the UP and DOWN buttons (^ v).

Press OK to start the venting process.

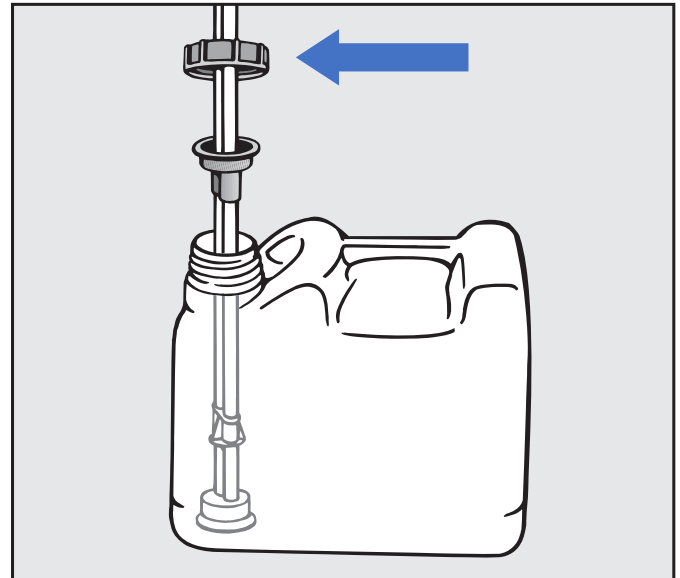
Automatic venting is successfully completed when the following message appears in the display:



If the DOS3 system is vented, it is important to run at least one rinse cycle, otherwise foaming will occur.

### Detergent dispensed via dosing system DOS 1 - Marked blue

Liquid detergent is dispensed from a 5 litre container via the dosing system (DOS 1). The cap or lines on the tubing are marked in blue. The 5 litre container is connected to the machine by screwing on the blue marked suction tube.



Once fitted ensure the tube is pushed to the bottom of the container. When the container is nearly empty the screen will display 'DOS refill' and it is time to replace it with a new container to the blue suction tube.

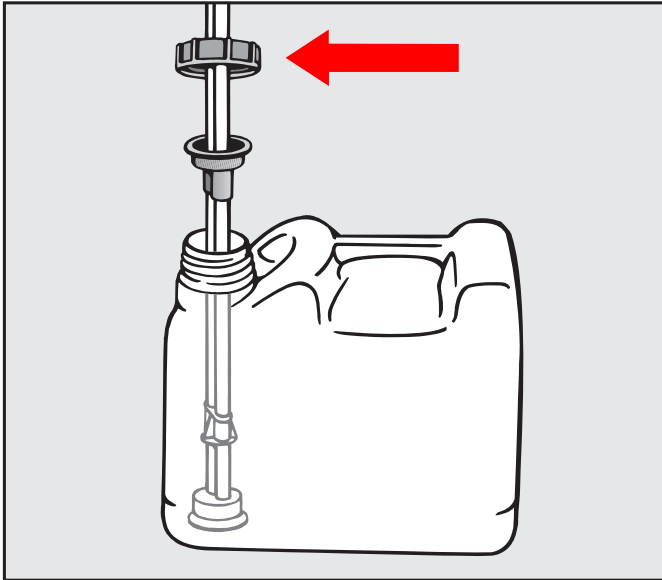
**If the chemical is renewed immediately there is no need to vent, but if delayed for more than one cycle venting becomes necessary.**

Place the container on the floor next to the machine or in an adjacent cupboard. Make sure that the dispensing hose is not kinked or trapped.

Vent the dispensing system as necessary.

### Rinse aid dispensed via dosing system DOS 3 - Marked red

Rinse aid is dispensed from a 5 litre container via the dosing system called DOS 3. The cap or lines on the tubing are marked in red. The 5 litre container of rinse aid is connected to the machine by screwing on the red marked suction tube. Push the suction tub/float down towards the bottom of the container



Once fitted ensure the tube is pushed to the bottom of the container. When the container is nearly empty the screen will display 'DOS refill' and it is time to replace it with a new container to the red suction tube.

**If the chemical is renewed immediately there is no need to vent, but if delayed for more than one cycle venting becomes necessary.**

Place the container on the floor next to the machine or in an adjacent cupboard. Make sure that the dispensing hose is not kinked or trapped.

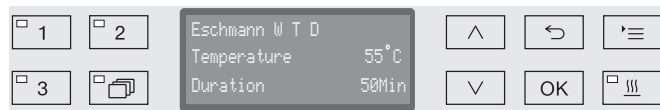
Vent the dispensing system as necessary.

If the DOS3 system is vented, it is important to run at least one rinse cycle, otherwise foaming will occur.

## 4. Operation

### 4.1. Selecting a programme

Using the shortcut buttons 1, 2 or 3 from the programme list, select the Eschmann Dental or W T D programme (Wash, Thermal & Disinfect).



The LED in the button selected will light up and the relevant programme will appear in the display. The LED Start/Stop button also starts to flash.

Another programme can be selected at any time before a programme has started. Once it has started, programme selection is locked.

- Always select the Eschmann Dental or W T D (Wash, Thermal & Disinfect) programme for processing instruments requiring cleaning.
- The Rinse programme is used only for "wetting" instruments, or to flush out the cabinet.
- The Drain programme is used only to drain away residual water.

#### Cycle overview

1. Eschmann Dental or W T D Programme (Wash, Thermal & Disinfect)
  - Pre-Wash – 30°C / 3min
  - Main Wash – 55°C / 5min (detergent applied at 40°C)
  - Interim Rinse – Cold / 4min
  - Disinfection – 90-95°C / 1min provides an  $A_0$  value of 600 minimum (rinse aid applied at 90°C)
2. Rinse – Cold / 1min
3. Drain – Drain only

### 4.2. Starting a programme

Close the door. When the door is closed, the LED in the door button will light up.

Press the Start/Stop button. The LED in the Start/Stop button will light up constantly and the LED in the door button will go out.

**Note:** The automatic drying feature will open the door at the end of the cycle. Eschmann recommend to always use this drying feature.

### 4.3. Automatic Drying

The Automatic Drying Function ensures instruments are dry at the end of the programme.

The Automatic Drying Function can be pre-selected for the Eschmann Dental or W T D programme but can be retrospectively switched on or off every time this programme is selected.

The drying function is switched on or off by pressing the button before starting the programme. The LED in the button will indicate whether the additional function is switched on or off.

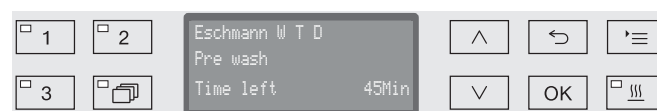
When the drying function is activated, the programme duration will be longer. However, the drying duration is not calculated in the programme time left shown in the display. It will be displayed during the drying phase only.

### 4.4. Drying

When the automatic drying starts, the door will automatically open by approximately 100mm. DO NOT open the door as this will stop the cycle. Allow the cycle to complete and then... open the door.

### 4.5. Programme sequence indicator

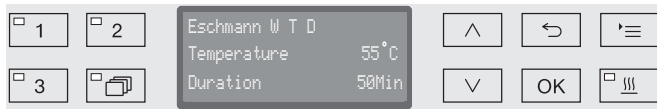
After the programme has started the programme sequence can be followed in the three-line display. The display could be either the Eschmann Dental or WTD cycle.




Top line	Programme name.
Middle line	The following parameters can be checked using the UP and DOWN buttons ( $\wedge$ $\vee$ ): <ul style="list-style-type: none"> <li>• Current programme block e.g. Main wash 1</li> <li>• Actual temperature</li> <li>• <math>A_0</math> value</li> <li>• Cycle number</li> </ul>
Bottom line	Approximate time left in minutes, or hours (if over one hour)

## 4.6. At the end of the programme

Note: The Eschmann Dental or Eschmann W T D programme will be available.



A programme is usually completed successfully when the following parameters and messages are shown in the display:

Display line	Display content
Top line	Programme name.
Middle line	Continuously alternating between: <ul style="list-style-type: none"> <li>• (Parameter achieved)</li> <li>• A<sub>0</sub> value</li> <li>• Cycle number</li> </ul>
Bottom line	Programme finished. The LED in the Start/Stop button also goes out and the LED in  button begins to flash. An acoustic tone also sounds for approximately 10 seconds.

Select Yes using the UP and DOWN buttons (Λ ∇).

The programme is cancelled when the OK button is pressed. Entry of a code will also be required. Refer to 6.4 Advisory codes (Cycle interrupts).

If no button is pressed for several seconds, or if the process is cancelled using the OK button, the display will revert to the programme sequence display.

### Restarting the programme

Start the programme again or select a new programme.

## 4.7. Cancelling a programme

### WARNING!

#### HEALTH HAZARD

If the programme is cancelled, the items in the washer disinfector must be reprocessed again.

### WARNING!

#### PERSONAL INJURY HAZARD

Be careful when opening the door.

The wash load could be hot. Danger of scalding, burning and chemical burns.

### Programme cancelled due to a fault

The programme stops and an error message appears in the display.

Take appropriate steps to resolve the fault, depending on its cause (see 'Problem solving guide').

### Cancelling a programme manually

A programme which is already running should only be cancelled if strictly necessary, e.g. if the wash load is moving about significantly.

Press and hold the Start/Stop button until the display changes to the following view



## 5. User Maintenance

### 5.1. Routine Checks

Before the start of each working day the user must carry out a number of routine checks including any Daily/Weekly Testing (Refer to Appendix 5).

The following need to be inspected:

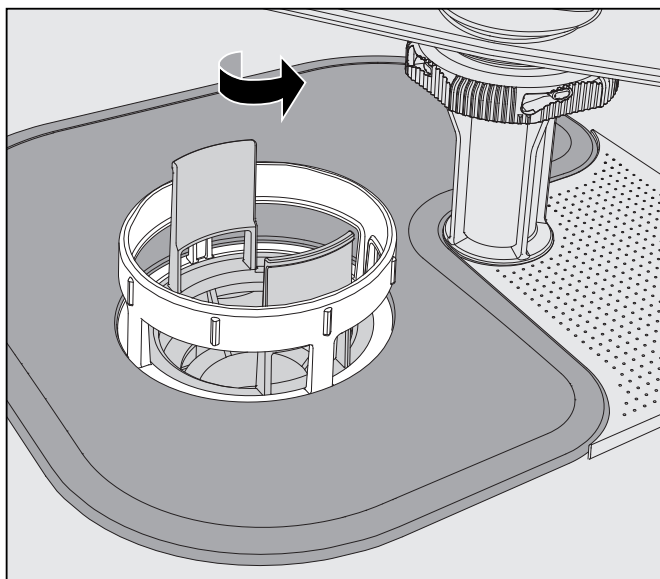
- All filters in the wash cabinet
- The spray arms in the machine, and baskets
- The wash cabinet and the door seal
- The dispensing systems.

#### Cleaning the filters in the wash cabinet

The filters in the floor of the wash cabinet prevent coarse soiling from coming into contact with the circulation system. Filters can become blocked by soiling, so they need to be checked every day and cleaned as necessary

#### **CAUTION**

**This machine must have all filters in place before being used.**



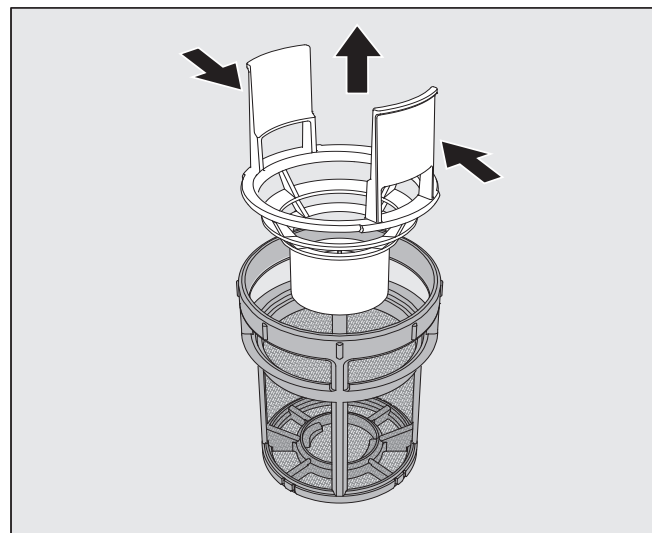
#### **WARNING!**

#### **PERSONAL INJURY HAZARD**

**Danger of injury from glass shards & needles etc, which are retained in the filter.**

**Wear appropriate personal protective equipment.**

1. Turn the microfine filter in the direction of the arrow and remove together with the coarse filter.
2. Press the catches towards each other and pull the coarse filter upwards and remove it.
3. Remove the fine filter which sits loosely between the coarse filter and the microfine filter.



4. Remove the flat filter last.
5. Clean the filters in the manual wash sink.
6. Re-insert the filter combination in the reverse order. Ensure:
  - that the flat filter sits flat in the base of the wash cabinet.
  - that the coarse filter has securely clicked into place in the microfine filter
  - that the microfine filter is tightly screwed in as far as it will go.

#### Cleaning the spray arms

The spray arms can become blocked, especially if the filters are not inserted correctly in the wash cabinet. This can cause coarse particles of soiling to get into the wash fluid circulation.

Spray arms must be visually checked daily for soiling and blocked jets, and for ease of turning.

#### **CAUTION**

**Immobile or blocked spray arms must not be used again. In this case contact Eschmann for advice.**

#### **CAUTION**

**Do not allow any magnetic objects or wash items to stick to the magnets on the spray arms. Any metallic objects on the magnets can cause a false reading of spray arm rotation. Remove all metallic objects from the magnets.**

#### **CAUTION**

**Visible wear on the bearings can adversely affect the long-term functioning of the spray arms. In this case, contact Eschmann**

#### **CAUTION**

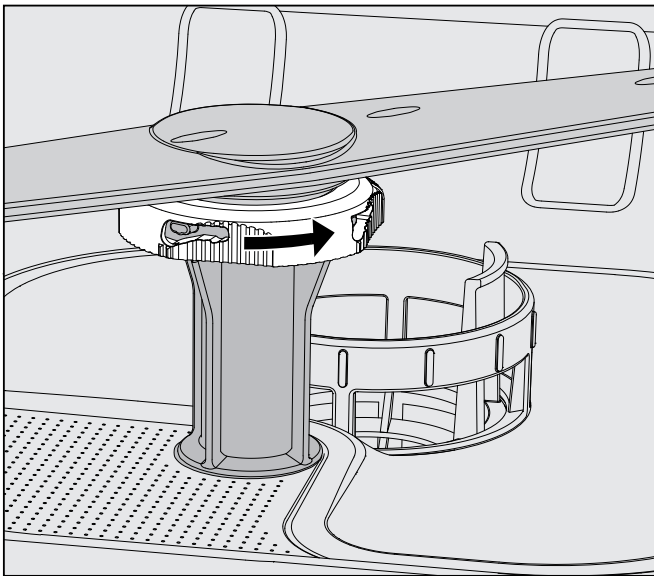
**Some spray arms and baskets are marked with a number. When refitting, ensure that the numbers on the spray arms correspond with the numbers on the baskets.**



### To remove the spray arms for cleaning:

Only remove one spray arm at a time so that they are fitted into the same location. DO NOT swap around the spray arms, as they will not function correctly.

1. Remove baskets from the machine.
2. The machine upper spray arm is connected by a push-fit connector.  
Pull the machine upper spray arm downwards to remove it.
3. The machine lower spray arm and those on the baskets are secured with bayonet fittings.  
To release the knurled bayonet fittings, turn them in the direction of the arrow as far as they will go.
4. Remove the spray arms by pulling them upwards or downwards.



5. Use a pointed object to push particles into the spray arm.
6. Rinse the spray arm thoroughly under running water in the manual wash sink.
7. Checks the spray arm bearings for visible signs of wear.
8. Refit the spray arms - spray arm marked 12 fits to the centre carrier, also marked 12.

**Make sure the spray arms can rotate easily after they have been fitted.**

## 5.2. Cleaning the machine

### **⚠ CAUTION**

**Never clean the machine or near vicinity with a water hose or a pressure washer.**

### **⚠ CAUTION**

**Do not use cleaning agents containing ammonia or thinners on stainless steel surfaces! The agents can damage the surface material.**

### **⚠ CAUTION**

**Do not use any abrasive materials or general-purpose cleaners to clean the control panel. These can cause considerable damage to the glass and plastic surfaces and to the onset control buttons.**

Clean the control panel with Eschmann approved cleaning and disinfection wipes.

Wipe the door seal regularly to remove soiling using Eschmann recommended wipes for cleaning and disinfection.

Remove any soiling from the door sides and hinges.

Regularly clean the groove in the plinth panel under the door using Eschmann recommended wipes for cleaning and disinfection.

### **Cleaning the wash cabinet**

The wash cabinet is largely self-cleaning. However, if deposits should start to build up add 250ml of Washer Disinfection Maintenance Solution (part no. 118311) to the cabinet and, without a load, run the RINSE cycle. This will help to remove any deposits from the system. Refer to 8.2 Spares.

### **Cleaning the door front user interface**

To clean the stainless-steel front, use Eschmann recommended wipes.

## 6. Problem Solving Guide

### WARNING!

#### PERSONAL INJURY AND EQUIPMENT DAMAGE HAZARD

Repairs may only be carried out by Eschmann. Repairs and other work by unqualified persons could be dangerous for the user.



#### For all fault messages:

If the cause is not remedied and the machine is switched off, when it is switched back on again the fault message must be acknowledged with the code. The machine will be locked for further use until this is done.

The following guide may help you find the reason for a fault and correct it.

To avoid unnecessary service call-outs, check that the fault has not been caused by incorrect operation when an error message first appears.

### 6.1. Messages

Problem	Cause and remedy
The display is dark and all the LEDs are out	The machine is not switched on. Switch the machine on using the  button. A fuse is defective or has tripped Minimum fuse rating – see data plate Reset the trip switch If the mains fuse trips again, call Eschmann.
The machine has switched itself off	This is not a fault If activated, the Auto-Off function switches the machine off automatically after a pre-set duration to save energy. Switch the machine on using the  button.
Next service due on	This is not a fault Eschmann has recommended a date for the next service visit. Please contact Eschmann to arrange a service visit.

### 6.2. Dispensing/ Dispensing Systems

Problem	Cause and remedy
DOS refill	During a programme sequence a low level of liquid chemicals in a container has been identified. Exchange it for a full container before the start of the next programme.
DOS Vent at the end of the programme	During a programme sequence a low level of chemicals has been identified. There may be air in the dispensing system. Allow the programme to continue to the end. Vent the dispensing system at the end of the programme.
Programme could not be started. Vent DOS	A programme cannot be started because... <ul style="list-style-type: none"> <li>• there is air in the dispensing system</li> <li>• the dispensing system has been sucked completely dry.</li> </ul> Check level in the supply container and refill or replace it with a full container as necessary. Vent the dispensing system.

Problem	Cause and remedy
Venting DOS cancelled. Venting must be repeated.	Venting of the dispensing system was cancelled because an insufficient flow rate has been identified. A dispensing hose may be kinked or the siphon blocked. Check the dispensing hose for kinks or leaks. Position it so that it cannot be kinked. Check the suction aperture on the siphon for blockages and remove these as necessary. Start the venting process again. Contact Eschmann if there are leaks in the dispensing hose or a fault with the siphon in the 5 litre container.
Check container/siphon DOS	Little or no flow has been identified. Check the level in the supply container and replace if necessary. Check the suction aperture of the siphon for deposits. Vent the dispensing system. The dispensing hose is blocked. Remove any kinks from the dispensing hose. Position it so it cannot become kinked. Check the dispensing hose for leaks Vent the dispensing system. Contact Eschmann if there are leaks in the dispensing hose or a fault with the siphon.

**Highly viscous (thick) chemicals can affect the dispenser monitoring and lead to inaccurate data. In this instance please contact Eschmann for advice. The viscosity does not affect dosage concentration levels.**



### 6.3. Insufficient Salt/Water Softener

Problem	Cause and remedy
Refill salt	Salt is running low in the water softener Refill the reactivation salt before starting the next programme
Machine locking out insufficient salt	Salt in the water softener is completely depleted and reactivation is no longer possible. The machine is locked for further use. Refill the reactivation salt.
Salt container empty, programme locked out	The water softener cannot reactivate because there is insufficient salt. The machine is locked for further use. Refill the reactivation salt. The lock is lifted a couple of seconds after refilling the salt reservoir. Reactivation will occur automatically during the next programme.
Salt container lid not correctly closed	Salt residues are preventing it from closing. Remove the residues from the refilling funnel, the lid and the seal. Close the container properly.


## 6.4. Advisory Codes (cycle interrupts)

You can correct for many of the advisory codes designed to protect your washer disinfecter. The advisory codes listed below can be cleared

In the event of a cycle being interrupted, an advisory code is displayed e.g. Fault XXX, (where XXX represents a number):

1. Switch the machine off using the  button.
2. Wait approximately 10 seconds before switching the machine on again with the  button.
3. Acknowledge the advisory code by entering your lock code.
4. Correct any issue.
5. Start the previously selected cycle again.

If the same message appears again:


1. Make a note of the advisory code.
2. Switch the machine off using the  button.
3. Review the information below:

Please also read the notes regarding the following advisory codes:

Advisory code	Cause and remedy
Fault 403-405	<p>A programme has been cancelled because water intake by the machine was insufficient or severely restricted.</p> <p>Open the stopcocks fully</p> <p>Follow the further information given in the Check water inlet message in the Miele Operating Instructions.</p>
Fault 406-408	<p>A programme was cancelled because the water intake volume is insufficient.</p> <p>Check whether the stopcocks are fully opened.</p> <p>Contact Eschmann for advice.</p>
Fault 412-414	<p>A programme was cancelled because the water intake volume is too high.</p> <p>Contact Eschmann for advice.</p>
Fault 432	<p>The door was opened using the emergency release.</p> <p>See 'Opening the door using the emergency release'.</p>
Fault 433	<p>Protruding wash load items are preventing the door from being closed properly by the Comfort lock.</p> <p>Arrange the wash load so that it does not obstruct the door.</p> <p>Close the door.</p>






Advisory code	Cause and remedy
Fault 440	<p>The float switch in the sump of the machine has not been activated. The switch may be blocked.</p> <p>Remove the filter combination.</p> <p>Check the float switch to make sure it moves freely. The float switch is located in the sump of the machine behind the spray arm</p>
Spray arms: Fault 460 - top Fault 461 - middle Fault 462 - bottom	<p>The programme has been cancelled because of a blocked spray arm.</p> <p>Arrange the load so that the spray arms can turn easily.</p> <p>Clean cabinet and filters if dirty and gritty. <b>Abrasive pastes should not be processed in this machine.</b></p> <p>Foaming can cause these Advisory codes. Check that instruments have been rinsed before loading into the washer disinfectant. Chemical residues may cause foaming. To clean foam from the washer disinfectant, remove the majority using a container and then run one or more rinse cycles.</p>
Fault 518 (For DOS1) Fault 519 (For DOS3)	<p>No flow was detected when dispensing from an external supply container.</p> <hr/> <p style="text-align: center;"><b>⚠ CAUTION</b></p> <p style="text-align: center;"><b>Handling of chemicals</b></p> <p style="text-align: center;"><b>For all chemicals, the safety instructions given in the manufacturer's safety data must be observed.</b></p> <hr/> <p>Check the level of the container and refill or replace it as necessary.</p> <p>Check the suction apertures of the siphons and remove any deposits.</p> <p>Check the hose connections on the siphons, the machine and any DOS modules.</p> <p>Remove any kinks from the dispensing hoses and check the hoses for leaks. Position the dispensing hoses so they cannot kink.</p> <p>Vent the dispensing system.</p> <p>If you identify any leaks in the dispensing hoses or defects on the siphons, contact Eschmann.</p>
Fault 526	<p>Minimum flow pressure was not reached because one or more free water connections in the back panel of the wash cabinet is not properly secured.</p> <p>Check the washers in the water connectors in the back panel of the wash cabinet and remove any blockages.</p> <p>Foaming can cause this Advisory code. Check that instruments have been rinsed before loading into the washer disinfectant. Chemical residues may cause foaming. To clean foam from the washer disinfectant, remove the majority using a container and then run one or more rinse cycles.</p>

## 6.5. Process Related Faults & Messages

Problem	Cause and remedy
Drying during programme deactivated	Drying cannot be selected at the start of a programme because drying is not available for the selected programme. Start the programme without drying. Or Have the drying parameters for this programme adjusted by Eschmann
Wrong code entered	The code entered is not the same as the code saved. Enter the code again. Report the loss of the code to Eschmann
Programme cancelled	This is not a fault. A programme which was running was cancelled by the user. <div style="text-align: center;"> <b>WARNING!</b> <b>PERSONAL INJURY HAZARD</b> The wash cabinet can be very hot. When the door is opened, hot steam and chemical agents can escape. Protective measures for personal safety must be observed.</div>
Programme continued	This is not a fault. The process of cancelling a programme was not completed. The programme which was running continued without interruption.
All settings reset	This is not a fault. A user has restored factory default settings. Confirm the message with OK*.
All programme settings reset	This is not a fault. A user has restored the factory default setting for the programme. Confirm the message with OK*.

**\* The act of resetting causes the machine to lose critical data and so prevents it from cleaning effectively. Call Eschmann for advice.**

## 6.6. Door

Problem	Cause and remedy
Door not closed properly	<p>Protruding wash load item obstructing the door.</p> <p>Sort the wash load so that it does not obstruct the door. Close the door.</p> <p>Slamming the door can result in problems with the Comfort door lock. Open and close the door.</p> <p>If the same message appears again contact Eschmann.</p>
Warning : Cabinet hot! Open anyway?	<p>When the  button is pressed, the temperature in the wash cabinet is over 70°C.</p> <div style="background-color: #f4a460; padding: 10px; text-align: center;"> <p> <b>WARNING!</b></p> <p><b>PERSONAL INJURY HAZARD</b></p> <p><b>When the door is opened, hot steam and chemical agents can escape.</b></p> </div>
Door blocked	<p>Heavy objects in front of the washer disinfecter can impede the automatic opening of the door by the Comfort lock.</p> <p>Do not place heavy objects in front of the washer disinfecter door.</p> <p>The door's Comfort locking is blocked:</p> <p>Try to open the door carefully (without using force) by pulling on the door handle. If the door is still blocked:</p> <p>Open the door using the emergency released.</p> <p>Close the door and try to open it again using the  button.</p>
<b>The door is open a fraction and cannot be closed using the  button</b>	<p>This is not a fault.</p> <p>The Comfort door lock has opened the door slightly at the end of the programme.</p> <p>Open the door. The door can now be closed completely using the  button.</p>

## 6.7. Unsatisfactory Cleaning & Corrosion

Problem	Cause and remedy
There are white deposits on the wash load	<p>The water softener is set too low:</p> <ul style="list-style-type: none"> <li>• Set the water softener to the correct water hardness. Refer to the Miele Operating Instructions.</li> <li>• There is no salt in the salt reservoir. Refill the reactivation salt.</li> <li>• The cabinet needs cleaning. Refer to 5.2 Cleaning the machine.</li> </ul>
The wash load is flecked	<p>The rinse aid concentration is set too low</p> <ul style="list-style-type: none"> <li>• Increase the dispensing concentration.</li> </ul>
<p>The cleaning result is unsatisfactory. (Conduct a Cleaning Test - Refer to Appendix 5)</p>	<ul style="list-style-type: none"> <li>• The baskets and carrier used were not suitable for the load. Select those which are suitable for the task.</li> <li>• Overloaded! Arrange the wash load correctly according to Appendixes 1 or 2. Avoid overloading the baskets, carriers and inserts.</li> <li>• Soiling has been left to dry on the load prior to cleaning for too long. Soiling should not be left on the load for more than 2 hours before machine reprocessing.</li> <li>• A spray arm is blocked. Ensure the spray arms are not obstructed when arranging the wash load.</li> </ul>
Stainless steel items are showing signs of corrosion or discolouration	<ul style="list-style-type: none"> <li>• The stainless steel is of insufficient quality for machine reprocessing. Only use stainless steel items made of high quality stainless steel and follow the instructions of the manufacturer regarding machine reprocessing.</li> <li>• The chloride content in the water is too high. Have a water analysis check carried out. Connections to an external water processing unit and the use of demineralised water may be necessary.</li> <li>• Rust or superficial rust has built up in the wash cabinet, e.g. due to an excessively high iron content in the water or rust on other wash load items - check the installation; discard any rusty items.</li> </ul>



## 6.8. Spray Arm Monitoring/Wash Pressure

Problem	Cause and remedy
Spray arm monitoring - upper wash cabinet: Spray arm blocked or excessive foaming or Spray arm monitoring - lower wash cabinet: Spray arm blocked or excessive foaming or Spray arm monitoring - mobile unit spray arm 1: Spray arm blocked or excessive foaming	The rotation speed set has not been reached because: <ul style="list-style-type: none"> <li>• Items are obstructing the machine or basket spray arms. Arrange the load so that the spray arms can turn easily and start the programme again.</li> <li>• The relevant spray arm nozzles are blocked. Clean the spray arm. Check whether the filters in the wash cabinet are clean and correctly inserted.</li> <li>• Start the programme again - wash pressure is too low due to a heavy build-up of foam.</li> <li>• Follow the instructions regarding foam build-up below.</li> </ul>
Foam build-up	If there is foam in the wash cabinet, physically remove it into a container and run a RINSE cycle.  Foaming can be caused by foam-inducing pre-treatments that have not been rinsed from the cabinet, or by excessive dosing of chemicals.
Spray pressure exceeds tolerance	The spray pressure has deviated by more than 20% from the mean value. Reasons for fluctuations in wash pressure are e.g.: <ul style="list-style-type: none"> <li>• Defective water connections,</li> <li>• Open adapters,</li> <li>• Foam build-up.</li> </ul> Identify and resolve the cause of this. The programme was not interrupted, however the wash load must be reprocessed again.

## 6.9. Water Inlet & Drainage

Problem	Cause and remedy
Check water inlet	<ul style="list-style-type: none"> <li>• One or more stopcocks are closed. Open the stopcocks.</li> <li>• There was insufficient water in the machine. Clean the water intake filters. Open the stopcocks fully.</li> <li>• Flow pressure at the water connection is less than 0.3bar (30kPa). Contact a suitably qualified plumber as the water pressure is too low.</li> </ul>
Check drainage	The water drains away slowly or cannot drain away: <ul style="list-style-type: none"> <li>• The drain hose is blocked. Remove any kinks or large loops in the drain hose. Start the programme again.</li> <li>• The filters in the wash cabinet are blocked. Clean the filters in the wash cabinet. Protective measures for personal safety must be observed. Start the programme again.</li> <li>• The drain pump or non-return valve may be blocked. Clean the access to the drain pumps and the non-return valve. Protective measures for personal safety must be observed. Start the programme again.</li> <li>• The drainage system cannot take sufficient water. Contact a suitably qualified plumber.</li> </ul>

## 6.10. Noises

Problem	Cause and remedy
Knocking noise in the wash cabinet	<ul style="list-style-type: none"> <li>• One or more spray arms are knocking against the wash load. Cancel the programme. To do this follow the instructions in Section 4.7, Cancelling a Programme.</li> <li>• Arrange the wash load so it cannot obstruct the spray arms. Make sure the spray arms can rotate freely. Start the programme again.</li> </ul>
Rattling noise in the wash cabinet	<ul style="list-style-type: none"> <li>• Items are insecure in the wash cabinet. Cancel the programme. To do this follow the instructions in Section 4.7, Cancelling a Programme. Rearrange the load so that items are secure. Start the programme again.</li> </ul>
Knocking noise in the water pipes	<ul style="list-style-type: none"> <li>• This may be caused by the on-site installation or the cross-section of the piping. It has no influence on the function of the machine. Contact a suitably qualified plumber.</li> </ul>

## 6.11. Printer/ Serial Interface

Problem	Cause and remedy
Serial printer fault: no paper	<p>The printer has run out of paper.</p> <ul style="list-style-type: none"> <li>• Replenish the paper.</li> </ul>
Serial printer fault: offline	<p>The washer-disinfector cannot connect to the printer.</p> <ul style="list-style-type: none"> <li>• Switch the printer on. Check the connection between the washer-disinfector and the printer. If in doubt, have the configuration of the interface checked by a suitably qualified person.</li> </ul> <p>If the printer has been replaced, the printer type must be adjusted in the interface configuration.</p>
Serial printer fault: general fault	<p>The printer is not ready for operation.</p> <ul style="list-style-type: none"> <li>• Check the printer for fault messages.</li> <li>• Change the printer cartridge if necessary.</li> </ul>
Fault F559	<p>Fault with printer or connecting cables</p> <ul style="list-style-type: none"> <li>• Check connecting cables</li> <li>• Close the printer door</li> </ul>

# 7. Specification

## 7.1. Technical Specification

ENVIRONMENT			
Maximum Relative Humidity	80% for temp up to 31°C 50% for temp up to 40°C	Maximum Altitude	1500m
Operating Temperature Range	5°C to 40°C		
MECHANICAL			
Height	84cm	Depth	60cm
Width	60cm	Depth with door open	120cm
Weight	IWD7881 : 74kg	Instrument Capacity	90 litres
ELECTRICAL - 32A Single Phase			
Voltage	230V a.c.	Rated Load	6.3kW
Fuse Rating (distribution board)	30A	Mains Connection Cable	2.0m with plug
ELECTRICAL - 3 Phase			
Voltage	400V a.c.	Rated Load	9.3kW
Fuse Rating (distribution board)	3 x 16A	Mains Connection Cable	2.0m with plug
WATER			
RO and Cold Water Connections	G 3/4"	Drain	22mm (will fit into 32 or 40 mm standpipe)
Inlet Water Pressure	1-10 bar		
ENCLOSURE RATING			
Equipment Pollution Degree	Pollution Degree 2	Equipment Installation Category	Installation category II
MAINS WATER PROTECTION			

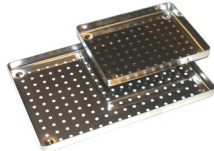



The Washer Disinfector is a Category 5 Medical device and has an integral Type AB Air Gap to prevent back-flow of medical waste into the mains water, WRAS & NSF Certified (certificate available).

## 8. Components & Spares

### 8.1. Components

For prices and ordering call Eschmann, telephone 01903 753322

Also refer to Appendixes 1 and 2 for specific components applicable to Dental Centres and Veterinary Centres.

Large perforated stainless steel tray (280mm x 180mm)	8725450	
Small perforated stainless steel tray (140mm x 180mm)	8725460	
SES2000/LS3 EIMS Carrier	8727001	
The SES2000/LS3 EIMS replaces the standard (short chamber) furniture carrier supplied with Eschmann SES2000 or Little Sister 3 autoclaves to allow the use of HFIT cassettes. For other autoclaves contact Eschmann.		
Printer	8721367	
Autolog Wireless Cycle Data Manager - for more advanced automated logging and digital generation of daily/weekly testing, upgrade to the Autolog	8701027	
5 Litre Container Spanner	8742782	
Protein Test (10 tests) Wash Clean Strips (20 strips) Wash Clean Holder (1 holder) Washer Disinfectant Log Book PG 8581 Wall Chart (A3 laminated)	3371 (Refer to Appendix 5) 8793193 (Refer to Appendix 5) 8793228 (Refer to Appendix 5) 119859 MUW216744	
Eschmann Recommended Wipes	Contact Eschmann	

### 8.2. Spares

Dr Weigert Neodisher MediClean Dental Detergent 5 Litres (Blue top)	8742785
Dr Weigert Neodisher Z Dental Neutraliser 5 Litres (Red top)	8743896
Dr Weigert Neodisher MediKlar Rinse Aid 5 Litres (Black top)	407333
Reactivation Salt 10kg, in tablet form	113419
Washer Disinfectant Maintenance Solution	118311
Printer rolls (5) for 87-213-67	8727078

## 9. Product Disposal

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### 9.1. Waste Electrical & Electronic Equipment (WEEE) Regulations 2006

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The aim of the WEEE Regulations is to reduce the amount of waste going to landfill.



All Eschmann products that must be recycled in accordance with the WEEE Regulations are marked with the “wheelie bin” symbol opposite.

#### What To Do

Please contact Eschmann when one of our products, marked with the symbol, reaches the end of its working life. We will be able to advise on how to recycle and dispose of the product correctly.

Note: If we request that the product is returned to Eschmann, it must be decontaminated first. We will request a certificate.

The WEEE Regulations 2006 came into force on 1 July 2007. Manufacturers are held responsible for recycling electrical and electronic equipment (EEE) placed on the market after 13 August 2005 that has reached the end of its working life. Older equipment is unaffected. The regulations also place obligations to comply on distributors, retailers and end users of the equipment.

# Appendix 1

## PG 8581 Dental - Components, Full Loads and Load Configurations

Note: The recommended programme to use for dental accessories is the Eschmann Dental cycle.

HFIT 5 Cassette (95mm x 180mm, external)

8722808	White
8722802	Blue
8722803	Red

8722804	Green
8722805	Yellow
8722806	Silver

HFIT 10 Cassette (136mm x 180mm, external)

8722818	White
8722812	Blue
8722813	Red

8722814	Green
8722815	Yellow
8722816	Silver

HFIT 20 Cassette (258mm x 180mm, external)

8722828	White
8722822	Blue
8722823	Red

8722824	Green
8722825	Yellow
8722826	Silver



### Load Carriers:

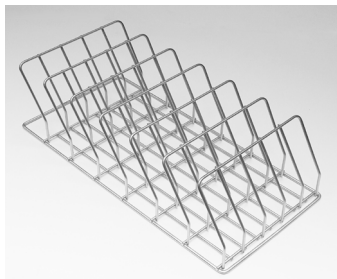


#### Wire Basket

Part No: 8732035

W 180, D 450, H 80mm

- Wire gauge, 4mm mesh size
- Suitable for hinged instruments, i.e. forceps and needle holders



#### E523 Insert for tray & HFITs (6 Positions)

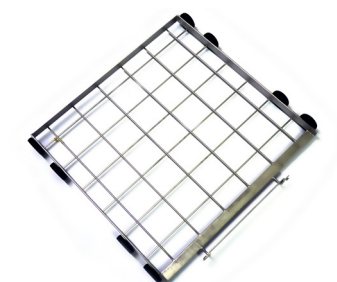
Part No: M5649700

- W 220, D 450, H 150mm
- 6 Positions, spaced 50mm apart
- Suitable for HFITs and trays



#### A102 Upper load carrier

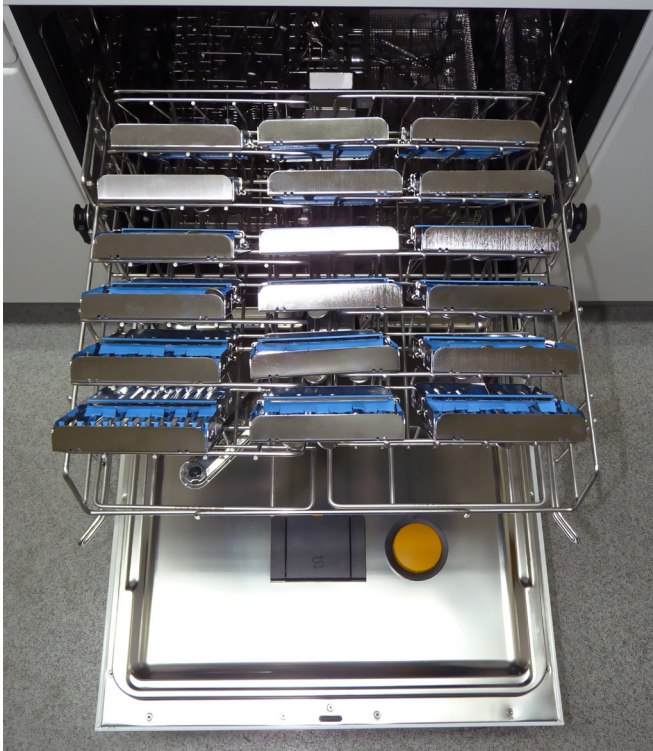
Part No: M9862360



#### A151 Lower load carrier

Part No: M9862410

## Load Configuration 1 : 346 Instruments



Upper load carrier A102

Showing positions for:  
2 x E523 carrier  
18 x 8722812 HFiT 10 cassettes for 180  
general instruments

Detail showing cassette loaded  
such that water drains away



Lower load carrier A151

Showing positions for:  
2 x E521/1 carrier with 14 extraction forceps each  
1 x E337 carrier for approx. 140 general instruments  
1 x 8732035 basket for up to 12 hinged instruments  
(i.e. scissors and needle holders)

## Load Configuration 3 : 376 Instruments



Showing positions for:  
2 x E521/1 carrier with 14 extraction forceps each  
1 x E337 carrier for approx. 140 general instruments  
1 x 8732035 basket for up to 12 hinged instruments  
(i.e. scissors and needle holders)

Upper load carrier A102



Showing positions for:  
2 x E523 carrier  
18 x 8722812 HFiT 10 cassettes for 180  
general instruments  
6 x 8722802 HFiT 5 cassettes for 30  
general instruments

Detail showing cassette loaded  
such that water drains away

Lower load carrier A151

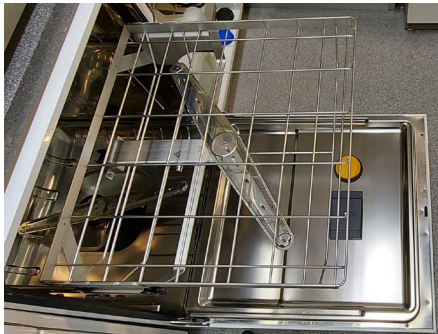


# Appendix 2

## PG 8581 Veterinary - Load Carrier and Basket Configurations

### Load Carriers:

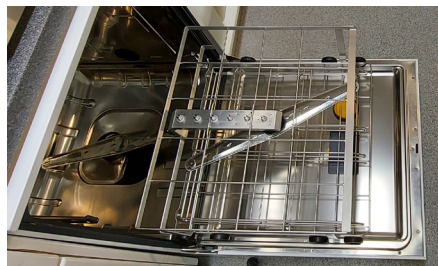
Load Carrier	Usable Space
A103 Upper carrier, top load area	Width 510mm x Depth 470mm x Height 90mm.
A202 Lower carrier, middle load area	Width 510mm x Depth 470mm x Height 140mm.
A202 Lower carrier, bottom load area	Grille fitted: Width 510mm, x Depth 490mm x Height 80mm
	Grille removed: Width 490mm, x Depth 490mm x Height 120mm



#### A103 Upper Carrier with 1x Load Level

**Part No: M09862370**

The upper carrier is the top loading area.



#### A202 Lower Carrier with 2 x Load Levels

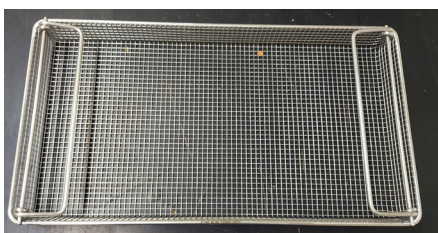
**Part No: M09862440**

The lower level has a removable grille insert, to increase load height for 2x E142s.

The grille Insert is supplied with A202, and is only required for the E142, for the other baskets, this should be removed.

The higher level of this carrier is the middle loading area.

The lower level of this carrier is the bottom loading area.



#### E142 ½ Basket

**Part No: MS3830300**

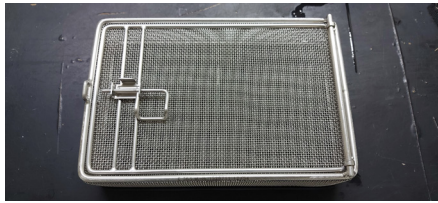
2 x Baskets can be placed in all 3 levels (6 in total). The grille Insert for A202 must be FITTED in the bottom loading area.



#### Wire Basket, 4mm mesh size, (L450 x W180 x H80)

**Part No: 8732035**

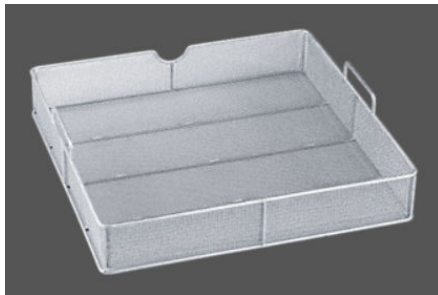
2 x Baskets can be placed in all 3 levels (6 in total). The Grille Insert for A202 must be REMOVED from the bottom loading area.



**E363 - 1/6 Wire Basket**

**Part No: M3149790**

6 x Baskets can be placed in all 3 levels (18 in total). The Grille Insert for A202 must be REMOVED from the bottom loading area.

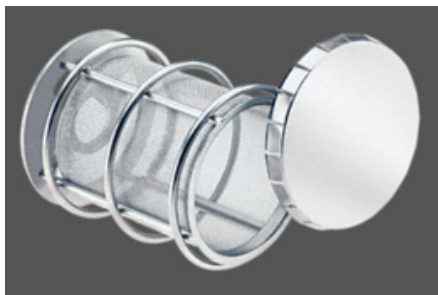


**E378 - 1/1 Wire Basket**

**Part No: M3203530**

1 x Basket can be placed in the bottom level only. The grille Insert for A202 must be removed from the bottom loading area.

The Basket CANNOT be fitted into the other loading levels due to its height blocking the spray arms.



**E473/1 - Small Basket for Micro Components**

**Part No: M10623720**

This basket can be located virtually anywhere around the system, along with the other baskets.

## Basket Configurations:



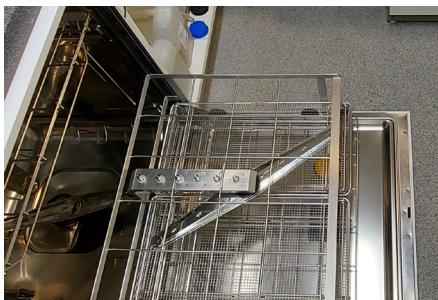
A103 with 2 x E142s on top level



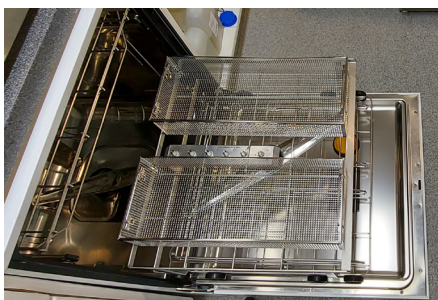
A103 with 2 x 8732035s on top level



A202 with 2 x E142s on middle level



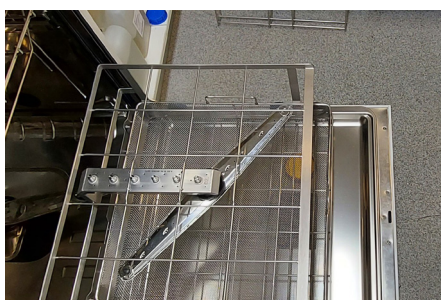
A202 with 2 x E142s on bottom level  
(Grille insert MUST be FITTED)



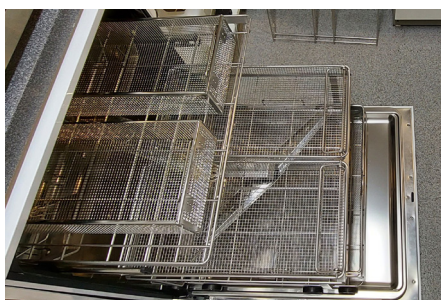
A202 with 2 x 8732035s on middle level



A202 with 2 x 8732035s on bottom level  
(Grille MUST be REMOVED)



A202 with 1x E378 on bottom level  
(Grille MUST be REMOVED)



Fully Loaded.  
A103 with 2x 8732035s on top level, 2x E142s on  
middle level, & 1x E378 on bottom level  
(Grille MUST be REMOVED)

# Appendix 3

## Machine Settings Table

Changes made to programmes or dispensing systems must be documented below.

Initial installations settings are to be added by the Eschmann Engineer (or 'disabled' if a feature is disabled).

Item	Cycle Setting 'Eschmann Dental or Eschmann W T D' cycle	Confirmed By	Date
Water Softener			
Detergent Volume at Wash			
Rinse Aid Volume at Disinfection			
Pre-wash Time and Temperature			
Main Wash Time and Temperature			
Interim Rinse Time and Temperature			
Main Rinse/ Disinfection Time and Temperature			

# Appendix 4

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## Recommended Detergents & Rinse Aids

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It is important to use only the recommended and validated solutions with these washer disinfectors.

Each solution will work differently, and volume settings may require amending to ensure effective decontamination.

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 **CAUTION**

**Some chemicals not recommended by Eschmann may have a detrimental effect on the washer disinfectant and/or instruments.**

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Recommended Solutions for the Eschmann Dental or Eschmann W T D cycle.
Dr. Weigert - Neodisher Mediclean Dental Detergent (57ml)
Dr. Weigert - MediKlar (rinse aid) (3ml)

Refer to 8.2 Spares, for ordering details.

You can record the details of your equipment below:

Washer Disinfectant:

Model \_\_\_\_\_

SN \_\_\_\_\_

Printer/AutoLog:

Model \_\_\_\_\_

SN \_\_\_\_\_

# Appendix 5

## Daily/Weekly Testing

Manufacturer's testing **MUST** be conducted as outlined below. We recommend the completion of our Washer Disinfectant Log Book (Part number: 119858) - refer to 8.2 Spares, for ordering details.

### Daily testing

- Clean the door seal and cabinet face using Eschmann recommended wipes (Contact Eschmann).
- Check spray arm nozzles for blockages.
- Check spray arms rotate freely (This test should also be conducted every cycle).
- Clean the cabinet strainer and filters face using Eschmann recommended wipes (Contact Eschmann).
- Perform a visual check of load cleanliness (This test should also be conducted every cycle).

### Weekly testing

- Check that the door locks and microswitch are operating correctly.
- Check the physical condition of the door seal.
- Perform a test for cleaning efficacy and residual proteins:
  1. Place a wash clean indicator (8793193) into the wash clean holder (8793228).
  2. Place the wash clean test device into the washer disinfectant as shown below. A normal load can be processed at the same time as the test takes place, but make sure that the load does not obstruct the flow of water from the spray arms to the wash clean test device.
  3. Run either the Eschmann Dental or W T D cycle.
  4. When the cycle has completed, remove the wash clean test device.
  5. Check the wash clean indicator - it should be visibly clean. Swab this indicator with a protein test pen (3371) to check if any protein is present on the indicator.
- 6. Review and store the cycle printouts (Paper or digital) to confirm that all test cycles have passed the test.

**Note: Be careful not to touch the wash clean indicator or protein test swab because the test may fail.**



Wash clean holder (8793228)



Wash clean indicators (8793193)



Protein test (3371)



Position of wash clean holder on bottom carrier.

## Service

Eschmann products are supported by a network of fully trained engineers, offering high quality Eschmann spare parts. For further information on the range of Service Contracts available, please contact your local Eschmann representative.

Eschmann can be contacted during normal office hours. Please quote the model and serial number exactly as printed on the product label. Please use the contact details below.

## Warranty

This product and purchased accessories are warranted for a minimum period of 12 months to be free from defects in materials and workmanship at the time of delivery.

Eschmann will be under no liability for any defect arising from fair wear and tear, negligence, wilful damage, misuse, abnormal working conditions, failure to follow the manufacturer's instructions, unauthorised alteration or repair of hardware, unauthorised or accidental alteration of software or configuration, lost profits, commercial loss, economic loss, or loss arising from personal injury. We may, at our discretion, raise a charge for any faults repaired that fall outside the warranty cover. Where charges are necessary, replacement parts will be charged at manufacturers' list prices and labour will be charged at the prevailing hourly rate. Repairs performed by Eschmann carry a 3-month parts and labour warranty.

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Ingenuity in  
infection control  
since 1830

