

# Operating and Installation Instructions

# Dishwasher G 7856

To prevent accidents and machine damage read these instructions

before

installation or use.

en - US

M.-Nr. 09 321 310

## **Contents**

IMPORTANT SAFETY INSTRUCTIONS
Guide to the machine
Intended purpose
Opening and closing the door
Water softener
Setting the water softener
Filling the salt reservoir
Salt indicator
<b>Rinse aid</b>
Adding rinse aid
Setting the dosage
Loading the machine
Adjusting the upper basket
Items not suitable for dishwashers
Adding cleaning agent
<b>Use</b>
Turning on
Starting a program
Selecting an additional function
Program sequence display
At the end of a program
Changing a program
Canceling a program
Program guide
Programming special functions
Cleaning and care
Frequently Asked Questions
After Sales Service
INSTALLATION INSTRUCTIONS 45
Caring for the environment
Installation
Electrical connection
Plumbing
Technical data

## WARNING -When using your dishwasher follow basic precautions, including the following:

This dishwasher is intended for household and professional applications.

Only use the machine for its intended purpose. Any other use, conversion or modification is dangerous.

This dishwasher complies with current safety requirements. Improper use of the machine can lead to personal injury and material damage.

Read all instructions before installing or using this machine.

Keep these operating instructions in a safe place and pass them on to any future user.

#### Installation and service

- Installation and repair work should be performed by a qualified and trained service technician in accordance with local and national safety regulations. Work by unqualified persons could be dangerous and may void the warranty.
- Do not use the machine until properly installed.
- Do not install the machine in an area where a danger of explosion or of freezing temperatures may be present.
- The installation of this unit in non-stationary locations (e.g. ships) must be performed by a qualified installer or service agency, in strict accordance with national and local safety regulations and standards.
- ▶ Before installation, make sure that the voltage and frequency listed on the data plate correspond with the household electrical supply. This data must correspond to prevent injury and machine damage. Consult a qualified electrician if in doubt.
- ▶ Be certain this machine is properly installed and grounded by an authorized technician. To guarantee the electrical safety of this machine, continuity must exist between the machine and an effective grounding system. It is imperative that this basic safety requirement be met. If there is any doubt, have the electrical system checked by a qualified technician.

- Do not install or use a damaged dishwasher. A damaged machine is dangerous. Unplug the machine and call your Miele dealer or the Miele Technical Service Department.
- If the power cord is damaged it must only be replaced by a qualified Service technician with a genuine Miele power cord.
- Do not use an extension cord to connect this machine to electricity. Extension cords do not guarantee the required safety of the machine (e.g. danger of overheating).
- Defective components should be replaced by Miele original parts only.
- ▶ Before installation or service, disconnect the power supply to the work area by unplugging the unit, "tripping" the circuit breaker or removing the fuse.
- When work has been performed on the supply plumbing, the supply line to the commercial dishwasher must be bled.

Otherwise, the water softening system may be damaged.

#### Use

- Please follow the advice on installation in this manual and in the separate Installation Instructions.
- Personnel operating the machine should be trained regularly.
- Persons who lack physical, sensory or mental abilities, or experience with the machine should not use it without supervision or instruction by a responsible person.
- Do not allow children to play in or around the dishwasher, or to operate it.
- Do not tamper with the controls.
- BURN AND SCALD HAZARD
  This dishwasher reaches very high
  temperatures. Take care when
  unloading the unit. Let baskets and
  inserts cool before touching them. Any
  water which may remain in containers
  will be very hot and should be emptied
  into the wash cabinet.
- ► BURN HAZARD
  The heating elements become extremely hot during use. Do not touch the heating elements during or directly after the end of a program.
- ► Take care when handling liquids such as detergent, rinsing, wetting, or neutralizing agents. These may contain irritant or caustic ingredients. **Do not use any organic solvents.** Danger of explosion!

Follow the instructions and relevant safety procedures carefully. Wear protective gloves and goggles. The manufacturer's safety conditions must be observed with all chemical agents.

- Dunder certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, turn on all hot water faucets and let water flow from each for several minutes before using the dishwasher. This will release any accumulated hydrogen gas. Do not smoke or use an open flame during this time.
- Avoid inhaling detergent. If swallowed, it can cause burning in the mouth and throat or inhibit breathing.
- ▶ Be careful when sorting and loading items to be washed: locate sharp items so that they are not likely to damage the door seal; and load sharp knives with the handles up to reduce the risk of injuries.
- The water in the machine must not be used as drinking water.
- Do not sit or lean on the open door. This could cause the machine to tip or be damaged.
- Never clean the machine or near its vicinity with a water or high pressure hose.
- Only use cleaning agents formulated for special processes and approved by Miele for use with this machine. Keep all cleaning agents out of the reach of children. Use of unsuitable cleaning agents could adversely affect the components of the machine.

- ▶ Use only rinse agents for commercial dishwashers. When other rinse agents are used, there is the danger that the rinse load and the dishwasher might be damaged.
- Pre-treatments with detergents can create suds, as can certain rinsing agents. For pre-treatment and / or cleaning only, use low-sudsing detergents which have been approved by Miele. Suds can have an adverse effect on the cleaning process.
- When a chemical additive is recommended on technical application grounds (e.g. with a detergent). Please be aware that changes in formulation, storage conditions, etc., which may not be publicized by the chemical producer, can have a negative effect on the cleaning result.
- Always follow the instructions of the chemical manufacturer when using detergents and special application chemicals. Only use such chemicals for the purpose and in the situation specified to avoid such dangers as chemical reactions and material damage.
- The dishwasher is designed only for operation with water and additive cleaning agents. Organic solvents must not be used in the machine. An explosion or machine corrosion could occur with the use of organic solvents.

- In critical applications where very stringent requirements must be met, it is highly recommended that all relevant factors for the process, such as cleaning agent, quality of water, etc., be discussed with a Miele Application Specialist.
- The special inserts should only be used for their specific application.
- Do not wash plastic items unless they are marked "dishwasher safe" or the equivalent. If in doubt follow the manufacturers recommendations.
- Empty any containers or utensils before arranging them in the machine.
- Do not allow any remains of acids or solvents, particularly hydrochloric acid or chloride solutions, to get into the wash cabinet. The presence of any solvents should be minimized (especially those in hazard class A1).
- To avoid corrosion damage ensure that solutions or steam containing hydrochloric acid do not come into contact with the steel outer casing of the machine.

#### **Accessories**

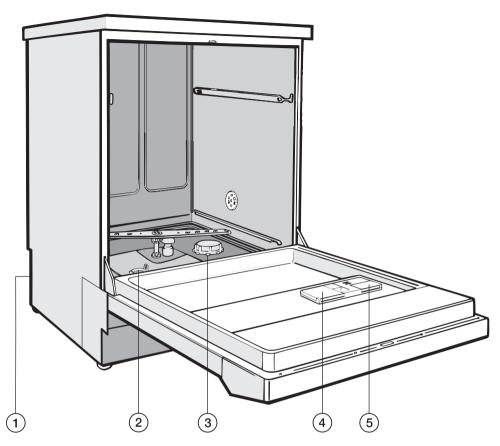
Only specific additional equipment, made by Miele or approved by Miele, should be used with this machine. Consult Miele on the type and application of such equipment.

## Disposal of the old machine

- When disposing of your old dishwasher first make it unusable. Disconnect it from the mains power supply, cut off the cable and plug from the cable.
- For environmental and safety reasons ensure the machine is completely drained of any residual water and detergent. (Observe safety regulations and wear safety goggles and gloves).
- Remove the door to the washing compartment, so that children cannot accidentally shut themselves in. Make appropriate arrangements for the safe and environmentally responsible disposal of the machine.
- For tank system machines ensure that all water is emptied out the tank.

# SAVE THESE INSTRUCTIONS

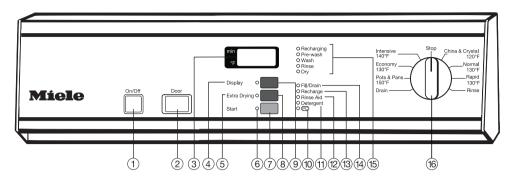
## Guide to the machine



- Connection for dosage pump for liquid detergents - optional (located on the rear side of the machine)
- 2 Filter combination
- ③ Salt reservoir (water softener)

- 4 Compartment for powder detergent
- Rinse aid reservoir (with dosage selector)

## Guide to the machine



- ① On/Off button (I-0)
- (2) Door button
- 3 Display
- Delay Start indicator (see "Programming special functions")
- ⑤ Extra drying indicator
- 6 Start indicator
- (7) Start button
- 8 Extra drying button
- Display button to toggle between "Actual time" and "Elapsed wash time"

- Serial interface (for use by Service Technicians)
- ① Add liquid cleaning agent indicator (only applies to machines equipped with an optional external DOS module)
- 12 Add rinse aid indicator
- (3) Add salt indicator
- (14) Check water inlet/drain indicator
- 15 Program sequence indicator
- 16 Program selector

## **Intended purpose**

This Miele machine is a dishwasher with fresh water wash system and short batch times for household and professional applications. It is especially suitable for use where quick turn-around flexible wash programs, and commercial durability are of the utmost importance.

The dishwasher is equipped with a water softener as a standard.

## Opening and closing the door

#### To open the door

Press the door button, hold the door grip and pull open the door at the same time.

The door should only be opened during operation for emergencies, e.g. if items are knocking together or if a program fault is indicated in the display. See "Canceling a program".

Do not touch the heating elements during or directly after the end of a program, you could burn yourself. They remain hot for some time after the end of the program.

When using the "Rapid" program the door must be kept closed between loads. The condensed water which builds up in the machine could cause corrosion or damage to surrounding countertops or furniture. See advice on installation locations in the "Installation" section of this manual.

#### To close the door

■ Lift the door upwards and push until it clicks shut. Do not press the door button while shutting the door.

#### Water softener

To avoid the build-up of calcium deposits on items being cleaned and in the machine the water needs to be softened.

To ensure a steady supply of soft water the water softener unit must always be:

- 1. correctly set (programmed) and
- 2. the salt reservoir must be filled. (If the water hardness level is below 4 gr/gal (4 °d) the water does not need to be softened.)

The machine is set at the factory for a water hardness level of 20 gr/gal (19 °d).

If the water supply is harder or softer than this (including below 4 gr/gal (4 °d) the factory setting will need to be changed following the instructions in the section "Setting the water softener". For settings see chart on the next page.

Your local water authority will advise you on the water hardness in your area.

For fluctuating levels (e.g. 8 - 18 gr/gal or 8 - 17 °d) set the water softener to the highest setting (in this example to 18 gr/gal or 17 °d).

## Important

The built-in water softener has settings from 1 - 62 gr/gal (1 - 60 °d).

For future servicing it is useful to make a note of your water hardness level.

■ Enter details of your water hardness level here: gr/gal

#### **Table of settings**

°d (German scale)	gr/gal	Setting
46	48	46
47	49	47
48	50	48
49	51	49
50	52	50
51	53	51
52	54	52
53	55	53
54	56	54
55	57	55
56	58	56
57	59	57
58	60	58
59	61	59
60	62	60

#### \*) factory setting

Machines without a water softener are set to "0" at the factory. This setting of "0" must not be changed on these machines.

#### Water softener

## Setting the water softener

- Switch the machine off.
- Turn the program selector to "Stop".
- Press "Display" and "Start" at the same time, hold them in and while doing so switch on the machine with the "On/Off" button.

  The actual program status "P..." appears in the display.

  The "Fill/Drain" indicator light illuminates.
- Press "Extra Drying" once, "E01" (program level 1) will appear in the display.
- Turn the program selector six switch positions to the right (6 o'clock position).
  The number "19" appears in the display (the factory water hardness setting in °d), (equivalent to 20 gr/gal).
- Press "Display" as many times as is necessary, or hold it in until the required value (degree of hardness in °d) appears in the display.

  The counter returns to "0" after reaching "60".
- Press "Start". "SP" appears.
- Press "Start" once more. The setting will now be stored. The display clears.
- The machine is now ready for operation.

#### Filling the salt reservoir

Please only use special coarse grained **reactivation salt** with granules of approx. 1-4 mm. Do not use other types of salt, e.g. table salt, agricultural or gritting salt. These could contain components which are insoluble in water which could result in damage to the water softener. If in doubt consult your Miele Professional Department.

The salt reservoir holds approx. 5.5 lbs (2.5 kg) of salt.

Inadvertently filling the salt reservoir with cleaning agent will damage the water softener.

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

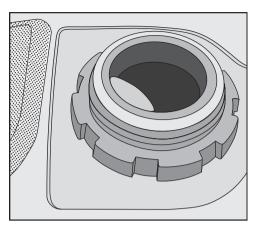
- Remove the bottom basket from the machine.
- Unscrew the salt reservoir cap.

Before filling the salt reservoir with reactivation salt for the first time fill it with approx. 2 quarts (2.5 liters) of water.



- Place the funnel provided in place.
- Fill carefully with salt, (as it is filled water will run out).

#### Water softener

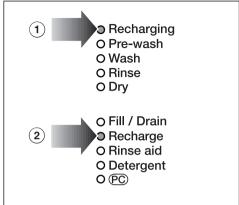


- Wipe any residual salt off the screw threads on the socket.
- Screw the cap on firmly.
- Immediately after this: Run the "Rinse" program to remove any traces of salt from the cabinet.

#### Important:

If after starting the "Rinse" program, the machine will not start for a few minutes. This is not a fault. The water softener is being reactivated.

#### Salt indicator



When the salt reservoir is empty the "Recharging" indicator light ② comes on to remind you to fill the reservoir.

Reactivation takes place automatically during a program. The program sequence indicator light ①, "Recharge" lights up while this is happening.

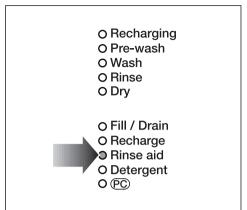
Rinse aid is needed to prevent spotting on dishes and glassware.

The rinse aid is filled in the reservoir and the set amount will be automatically dispensed during the final rinse. The reservoir holds about 4 oz. (125 ml).

Inadvertently filling the rinse aid reservoir with **detergent** (liquid or powder detergent) will damage the reservoir!

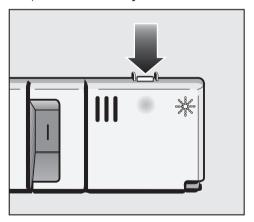
Only use rinse aid approved for this dishwasher.

## Adding rinse aid



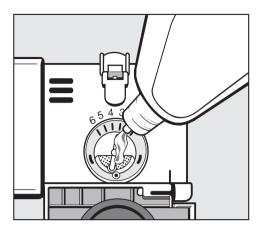
If the "Rinse aid" indicator lights, the rinse aid reservoir must be refilled.

■ Open the door fully.



■ Press the button in the direction of the arrow until the flap springs open.

## Rinse aid

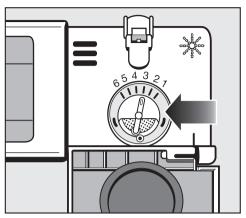


- Add rinse aid until it is visible on the surface of the filter in the opening.
- Close the flap until it clicks into place. Make sure it is firmly shut, otherwise water could get into the rinse aid reservoir during the program.
- Clean up any spilled rinse aid to prevent over-foaming during the next program.

The flap should always remain closed. Only open it to add more rinse aid.

 Only add rinse aid when the rinse aid indicator comes on.

## Setting the dosage



The dosage selector (see arrow) is preset to 3. This dispenses approximately 3 ml of rinse aid per program. It can be adjusted from 1 to 6.

- Use a higher setting if spots appear on dry glassware.
- Use a lower setting if streaking appears on dishes or glasses.

#### Loading the machine

#### **Preparation**

■ Empty all containers before loading into the machine.

Ensure that no acid or solvent residues, especially hydrochloric acid or chlorides get into the wash cabinet.

#### **Notes**

- Load items so that water will come into contact with all surfaces. This ensures that they will be properly cleaned.
- Do not place items to be cleaned inside other pieces where they may be concealed.
- Hollow vessels such as cups, glasses, pots, etc. should be inverted and placed in the correct inserts.
- Deep based items should be placed at an angle to ensure that water runs freely off them.
- Tall, narrow, hollow pieces should be placed in the center of the basket to ensure good coverage of water.
- Small pieces should be placed on the cup racks in the upper basket. Do not obscure them by larger items below. Cups should be on the lower rack and bowls on the top rack so that water reaches all pieces.

- The water duct for the spray arm in the middle of the upper basket must not be covered.
- The spray arms must not be blocked by items which are too tall or which hang down in their path. If necessary, manually rotate the arms to test.

#### Use the upper basket for:

small, lightweight, delicate items such as cups, saucers, glasses, dessert bowls etc. as well as for lightweight thermally stable plastic items.

#### Use the bottom basket for:

■ larger and heavier items such as plates, serving platters, saucepans, bowls etc. Glasses may only be cleaned in the bottom basket if it is fitted with a special glassware insert or if there is a special bottom basket.

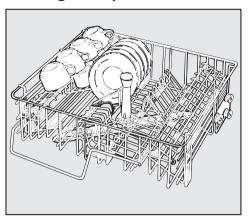
#### Cutlery

Unsorted cutlery should be placed in the cutlery holders with the handles facing downwards.

Select baskets and inserts which are appropriate for the application (available from Miele).

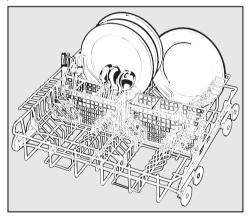
#### See examples on the following pages

## Loading examples:



#### O 881 Upper basket

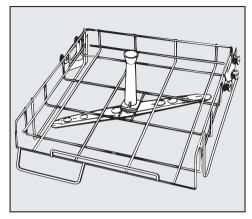
for 20 cups, 24 saucers or 12 dessert plates.



#### U 880 Bottom basket

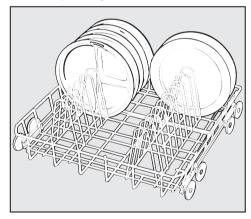
with 2 x E 216 half inserts each for 15 plates  $\emptyset$  240 mm and 2 x E 165 cutlery baskets for mixed cutlery.

#### Individual upper and bottom baskets



#### O 889 Upper basket carrier

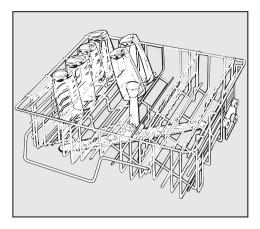
to take various inserts, e.g. containers for cutlery and glasses.



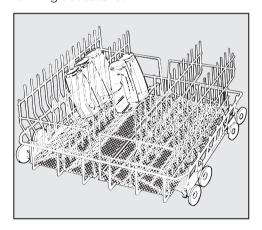
#### U 880 Bottom basket

with E 884 insert 1/1 for 20 large plates or 10 trays.

#### Glass-Set GG/F-GL



O 882 Upper basket for 27 glasses Ø 65 mm.



**U 880 Bottom basket** with 2 x E 205 half inserts each for 14 glasses Ø 65 mm.

## Adjusting the upper basket

The upper basket can be adjusted above and below the middle position by 1" (2.5 cm). It is set in the middle position on delivery.

Depending on the setting of the upper basket and the insert used, a variety of plate dimensions can be accommodated.

#### To adjust the upper basket:

- Pull the upper basket out until a resistance is felt, lift from the runners and remove.
- Unscrew the knurled nuts on both sides of the basket with an adjustable wrench and reposition as required.

# Items not suitable for dishwashers

- Cutlery with wooden or bone handles.
- Wooden or plastic cutting boards.
- Glued items, e.g. old knives with handles which have been glued on.
- Hand-made craft items.
- Copper or tin items.
- Plastic items which are not heat resistant.

#### Please note

- Silver and aluminum items may tarnish.
- Colors painted over a glaze may fade after a number of washes.
- Clouding or etching may occur on glasses after frequent washing.

#### Our recommendations

- Wash delicate glassware by hand.
- When purchasing new glasses, dishes and cutlery make sure they are dishwasher safe.

## Adding cleaning agent

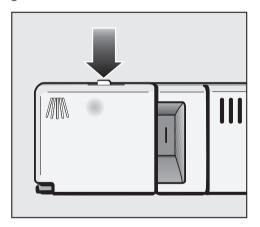
**Only** use cleaning agents formulated for dishwashers.

**Powder cleaning agent** is dispensed via the compartment for powder cleaning agents in the door.

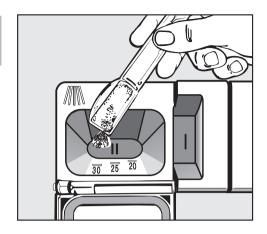
**Liquid cleaning agents** are dispensed via dosing pump (optional).

**Tab cleaning agents** cannot be used in this machine.

If liquid cleaning agent is not being used, powder detergent must be placed in the detergent container prior to every program (with the exception of "Rapid" and "Rinse"). See the "Program guide" for more information.



■ Press the opening catch in the direction of the arrow. The flap will spring open. The flap is always open at the end of a program.



Add powder cleaning agent to compartment II.

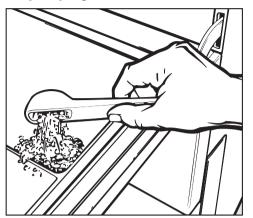
**Dosage:** approx. 1 ½ tablespoons (20 g) per program cycle.

Follow cleaning agent manufacturer's instructions if they differ.

■ Close the dispenser lid.

## Adding cleaning agent

#### "Rapid" program



If liquid cleaning agent is not being used, add powder detergent directly to the inside of the door for this program.

A different combination of cleaning agents and other additives may be necessary for special soiling. Contact Miele fore more information.

#### Note

This machine can be equipped with a dispenser pump for liquid cleaning agent as an optional accessory. This is connected externally.

To vent the dosage system and set the dosage concentration see,

"Programming special functions".

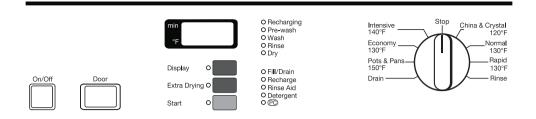
# Maintenance of the dispensing systems

The following maintenance should be carried out by a Miele Service Technician to ensure trouble-free operation.

Use caution when handling liquid agents and additives! They may contain irritant or caustic ingredients.

Please follow the manufacturer's safety instructions.

Wear protective gloves and goggles.



## **Turning on**

- Close the door.
- Open the water supply (if closed).
- Press the **On / Off** button.

If the program selector is turned to "Stop" a dot lights in the display.

#### Starting a program

Turn the program selector clockwise or counterclockwise to the required program. See the "Program guide" for information on the programs.

The display shows the first wash temperature of the selected program (except "Rinse" and "Drain"). The "Start" indicator flashes.

- If required select the additional feature "Extra Drying". See "Selecting an additional function".
- Press the "Start" button. The running time is displayed in ascending minutes.

The "Start" indicator lights.

Once the program has started all other programs are blocked. If the program selector is turned to another program during the running program, the values shown in the display will go out. The values appear again if the program selector is turned back to the running program.

Press the "Display" button to alternate between the elapsed time and actual temperature in the display during the program.

**Note:** During the heating stage in "Wash" and "Rinse" cycles, the required end temperature is shown in the "time run" display.

## Selecting an additional function

"Extra drying" can be selected as an additional function.

 Select the drying function directly after a program has been selected (not available for "Rapid", "Rinse" and "Drain" programs).

Drying is phased over 10 minutes. The total running time of the program lengthens accordingly.

## **Program sequence display**

The indicator for the **active** program sequence lights up during the program.

Recharging

Pre-wash

Wash

Rinse

Dry (optional function)

## At the end of a program

At the end of a program the "program sequence indicators" and the "Start" indicator go out. A "0" will appear in the display and a buzzer sounds for 30 seconds (factory setting). The buzzer can be changed (see "Programming special functions").

If desired use the "Display" button to see the total running time of a program or the actual temperature.

#### To turn the buzzer off

- Turn the program selector to "Stop". or
- Open the door.

## **Turning off**

■ Press the "On/Off" button.

#### Changing a program

If the "Start" button has not yet been pressed, the selected program can be changed.

- Turn the program selector to the desired program.
- If required select the additional function "Extra Drying" again. See "Selecting an additional function".
- Press the "Start" button.

## Canceling a program

Once a program is running it should only be canceled in extreme cases, e.g. when items in the machine are moving and need to be arranged securely.

- Turn the program selector to "Stop".

  The program is canceled after

  2 seconds.
- Open the door.

⚠ Caution! Water and items in the machine may be hot. Danger of burning or scalding!

- Rearrange the items securely. Observe appropriate health and safety regulations - wear protective gloves when necessary.
- Replenish powder detergent if necessary.
- Close the door.
- Select the "Drain" program. The waste water is drained.
- Select and start the program again.

## Program guide

Program	When to use	Program cycle				
		Pre- wash	Main wash 1)	Interim rinse	Final rinse	Drying (Option. funct.)
		1 2		1 2 3 <sup>3)</sup>		
China & Crystal 120°F	For temperature sensitive glassware and lightly soiled dishware. Run-time: ~ 12 minutes* (plus 10 minutes for optional drying)		X	X (X)	X	(X)
Rapid 130°F	Quick program for lightly soiled dishware.**) Powder detergent: Place detergent directly on the right hand side of the door interior, <b>NOT</b> in the detergent compartment. Run-time: ~ 10 minutes*		X	(X) <sup>2)</sup>	X **)	
Normal 130°F	For normally soiled items or to remove salt traces from the wash cabinet after refilling salt. Run-time: ~ 15 minutes* (plus 10 minutes for optional drying)	X		(X)	X	(X)

**Powder detergent dosage:** 1 ½ tablespoons (20 grams) in the detergent dispenser. Follow manufacturers instructions if they differ.

\*) Run times dependent on incoming water pressure and temperature

#### \*\*) Important information for the "Rapid" program

At the end of the program, the final rinse water is not drained away. It is used for the following "Rapid" program as wash water. If the operation is interrupted for a longer time or another program is desired:

■ Select the program "Drain". The final rinse water is drained away.

X = Sections included in the program (with temperature/temperature holding time)

Important: it is recommended to program a wash temperature of 140°F (60°C) to clean soiled dishware.

<sup>&</sup>lt;sup>1)</sup> Temperature or temperature holding time adjustment (see "Programming special functions").

<sup>&</sup>lt;sup>2)</sup> To select an economy interim rinse see "Programming special functions".

<sup>3)</sup> To select a second interim rinse see "Programming special functions".

## Program guide

Program	When to use	Program cycle					
		Pre- wash	Main wash 1)	Interim rinse	Final rinse	Drying (Option. funct.)	
		1 2		1 2 3 <sup>3)</sup>			
Economy 130°F	For normally soiled items with light greasy/oily residues. Run-time: ~ 24 minutes* (plus 10 minutes for optional drying)	X	X	X (X)	X	(X)	
Intensive 140°F	For heavily soiled items. Higher wash temperature to remove starchy foods. Run-time: ~ 25 minutes* (plus 10 minutes for optional drying)	X	X	X (X)	Χ	(X)	
Pots & Pans 150°F	For heavily soiled items. Most of the soiling is removed in an intensive cold water pre-rinse. Run-time: ~ 30 minutes* (plus 10 minutes for optional drying)	XX	X	X (X)	X	(X)	
Rinse	To rinse heavily soiled items (e.g. for removing soiling or to prevent soiling from drying onto dishes when a full program does not need to be run).			X			
Drain	To drain waste water, e.g. when a program has been interrupted (to interrupt a program, the program selector must be in the "Stop" position).						

**Powder detergent dosage:** 1 ½ tablespoons (20 grams) in the detergent dispenser. Follow manufacturers instructions if they differ.

\*) Run times dependent on incoming water pressure and temperatures

X = Sections included in the program (with temperature/temperature holding time)

Important: it is recommended to program a wash temperature of 140°F (60°C) to clean soiled dishware.

<sup>1)</sup> Temperature or temperature holding time adjustment (see "Programming special functions").

<sup>&</sup>lt;sup>2)</sup> To select an economy interim rinse see "Programming special functions".

<sup>3)</sup> To select a second interim rinse see "Programming special functions".

Every change of the factory setting should be documented in case of possible technical service.

Record any changes in the field "Adjusted value\_\_\_\_\_\_".

# 1. Setting the cold water inlet from: "Nominal water intake" to "Nominal water intake + 1 l".

The amount of water taken into the machine at each intake can be increased by 1 liter to a maximum of 9.5 liters (1 liter = approx. 1 quart).

- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, at the same time turn the machine on with the "On/Off button". The displays shows the current program status "P...".
  The "Fill/Drain" indicator lights.
- Press the "Extra Drying" button once. "E01" (programming level 1) is displayed.
- Turn the program selector to "China & Crystal".
   Either "10" or "11" is displayed.

"10" = Nominal water intake
"11" = Nominal water intake + 1 liter

- Press "Display" to change from "10" to "11" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

#### 2. Selecting a second interim rinse

A second interim rinse "Interim rinse II" can be programmed to improve interim rinsing in all programs (not available for "Rinse" and "Rapid" programs).

- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, **at the same time** turn the machine on with the "On/Off" button.

The display shows the current program status "P...".

The "Fill/Drain" indicator lights.

- Press the "Extra Drying" button once. "E01" (programming level 1) is displayed.
- Turn the program selector to "Rapid".

  "30" or "31" is displayed.

  "30" = without interim rinse II.

  "31" = with interim rinse II.
- Press "Display" to change from "30" to "31" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

## 3. Selecting an economy interim rinse (only for "Rapid" program)

- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, **at the same time** turn the machine on with the "On/Off" button.

The display shows the current program status "P...".
The "Fill/Drain" indicator lights.

- Press the "Extra Drying" button once.
   "E01" (programming level 1) is displayed.
- Turn the program selector to "Rinse".

  "40" or "41" is displayed.

  "40" = without economy interim rinse

  "41" = with economy interim rinse
- Press "Display" to change from "40" to "41" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

# 4. Venting and setting the dosage for liquid cleaning agents (optional extra)

- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, **at the same time** turn the machine on with the "On/Off" button.

The display shows the current program status "P...".
The "Fill/Drain" indicator lights.

■ Press "Extra Drying" twice. "E02" (programming level 2) is displayed.

#### Venting the dispensing system:

- Turn the program selector to "Rinse". "do1" is displayed.
- Press "Display" for 90 secs. The dosage system is vented.

#### If only **venting** is required:

■ Turn the machine off with **On/Off** (I-0) button.

**Immediately:** Start the "Rinse" program, so that after venting any agents in the wash cabinet are diluted before being drained away.

#### Setting the dosage

Set the dispensing amount according to the detergent manufacturer's recommendations and the applications.

The machine needs 1.85 gal (7 liters) of water in the program cycle "Main wash".

#### Example:

The detergent manufacturer recommends 4 ml of detergent per liter water.

7 | x 4 m|/| = 28 m|

2 ml per 1 sec dispensing time; i.e. programming to 14 secs.

- Turn the program selector to "Normal" the dispensing time in seconds is displayed, e.g "10".
- Press and hold "Display" until "14" is displayed (dispensing time 14 secs per 28 ml, see example above). The dosage time / dosage amount is set.

## Having changed a value or all values:

- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

If the dispensing system was also **vented**:

Start the "Rinse" program, so that after venting any agents in the wash cabinet are diluted before being drained away.

# 5. Altering the cleaning temperature and/or the temperature holding time in the "Main Wash" and "Final rinse"stage of the program cycle

Any changes to the wash temperature and/or the temperature holding time should be recorded in the **program chart**.

The main wash and final rinse temperatures can be changed from 86°F - 158°F (30 °C - 70 °C) and the temperature holding time from 1 - 10 mins.

## Important: To wash dishes with soiling, program to 140°F (60°C).

- Turn the program selector to "Stop". The programming level is displayed in this position only.
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, and **at the same time** turn the machine on with the "On/Off" button.

The displays shows the current program status "P...".

The "Fill/Drain" indicator lights.

# ■ Temperature "Main wash": Press "Extra Drying" three times. "E03" (programming level 3) is displayed.

- Turn the program selector to the program to be changed. The current value is displayed after \*F.
- Press and hold "Display" until the desired value is displayed.
- Temperature holding time "Main wash":

Turn the program selector to the "Stop" position (the programming level is displayed in this position only).

- Press "Extra Drying" again. "E04" (programming level 4) is displayed.
- Turn the program selector to the program to be changed. The current value is displayed after **min**.
- Press "Display" until the required value is displayed.

#### ■ Temperature "Final rinse":

Turn the program selector to the "STOP" position (the programming level is displayed in this position only).

- Press "Extra Drying" again. "E05" (programming level 5) is displayed field.
- Turn the program selector to the program to be changed. The actual value is displayed after °F.
- Press and hold "Display", until the desired value is displayed.

## ■ Temperature holding time "Final rinse":

Turn the program selector to the "Stop" position (the programming level is displayed in this position only).

- Press "Extra Drying" again. "E06" (programming level 6) is displayed field.
- Turn the program selector to the program to be changed. The actual value is displayed after **min**.
- Press "Display" until the required value is displayed.
- Having changed a value or all values:
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

## 6. Delay start and setting the delay start time

The start of a wash program can be delayed up to 9 hours and 30 minutes in 30 minute increments.

Delay start should only be selected with the "Economy" and "Pots & Pans" programs. The short programs cannot guarantee satisfying cleaning results when the residues are allowed to dry on because the start time is delayed.

#### a) To activate Delay Start

- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, **at the same time** turn the machine on with the "On/Off" button.

The display shows the current program status "P...".
The "Fill/Drain" indicator lights.

- Press the "Extra Drying" button once. "E01" (programming level 1) is displayed.
- Turn the program selector to "Drain" either "80" or "81" is displayed.
   "80" = No Delay Start
   "11" = Delay Start active
- Press "Display" to change from "80" to "81" or vice versa.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

#### b) Setting the delay start period

The delay start period (from 30 minutes to 9 hours 30 mins) must be set before a program is started.

After selecting a program (see "Turning on") press or hold the "Display" button it until the required value is displayed. The "Delay Start" indicator lights.

After the "Start" button is pressed the delay start period will count down in the display until the program automatically starts.

#### 7. Buzzer

A buzzer (30 secs) can be set for the following functions:

- End of program = Buzzer constantly
- Error = Buzzer sounds every other second
- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, **at the same time** turn the machine on with the "On/Off" button.

The display shows the current program status "P...".

The "Fill/Drain" indicator lights.

- Press the "Extra Drying" button once. "E01" (programming level 1) is displayed.
- Turn the program selector to "Pots & Pans".

The display shows a figure between "90" and "93".

"90" = Buzzer turned off

"91" = End of program

"92" = Fault

"93" = All functions / End of program /

Fault (default)

- Press "Display" until the desired function is displayed.
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. The change has been saved.

Value set:

### **Programming special functions**

# 8. Re-setting all changes back to the factory default

- Turn the program selector to "Stop".
- Turn the machine off.
- Press and hold the "Display" and "Start" buttons, **at the same time** turn the machine on with the "On/Off" button.
  - The display shows the current program status "P...".
    The "Fill/Drain" indicator lights.
- Press "Extra Drying" seven times.
   "E07" (programming level 7) is displayed.
- Turn the program selector to any position (except "Stop").

  The display shows either "00" or "PP".

  "00" = factory setting
  (electronic was not reset).

  "PP" = Electronic was reset.
- If "PP" is displayed press "Display" to change from "PP" to "00".
- Press the "Start" button. "SP" is displayed.
- Press the "Start" button again. Values which had been changed are now reset.

If the hardness level setting in the water softener had been changed this will reset to the factory setting of 19 gr/gal (19 °d). This will need to be adjusted back to the hardness level in your area.

# Cleaning the filters in the wash cabinet

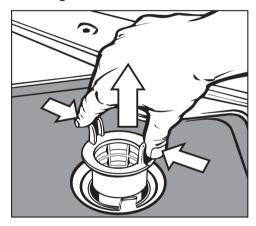
The machine must not be used without all the filters in place.

The filter combination in the base of the wash cabinet should be inspected regularly and cleaned if necessary.

### A Caution:

Watch out for glass splinters which could cause injury.

#### Cleaning the coarse filter

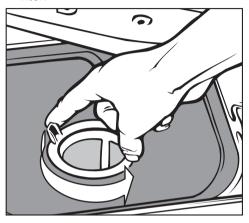


- Press the two clips together, remove and clean the filter.
- Put the clean filter back in position and press it until it clicks into place.

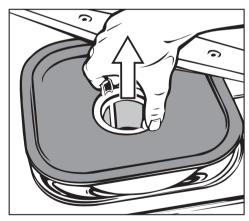
# Cleaning the flat and the micro-fine filters

Remove the coarse filter.

- To unscrew the micro-fine filter, take hold of the two clips and turn twice in a counter-clockwise direction.
- and remove, together with the flat filter.



Clean the filters.



■ The filter combination is then replaced in the reverse order in which it was removed.

### Cleaning the spray arms

Waste particles can lodge in the spray arm jets.

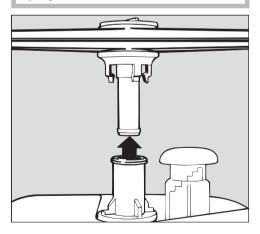
The spray arms should be inspected and cleaned regularly (approx. every 6 months).

■ Use a sharp pointed object to push particles into the spray arm jets and rinse well under running water.

Remove the spray arms as follows:

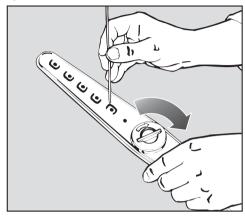
- Unscrew the **upper** spray arm.
- Remove the middle spray arm (on the top basket) by unscrewing the toothed wheel mechanism. Important:

The toothed wheel mechanism has a left hand thread, and to unscrew it, it must be turned to the right with the spray arm.



■ First remove the bottom basket and then take the **lower** spray arm out.

Particles in the **lower** spray arm are easier to rinse out if the cap is first opened.

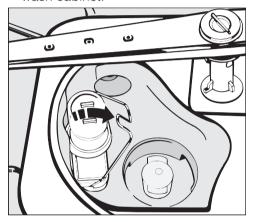


- Open the cap in the direction of the arrow. After cleaning close up the cap again.
- After replacing the spray arms check that they move freely.

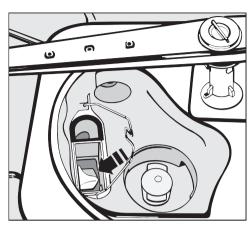
# Cleaning the drain pump and non-return valve

If water has not been pumped away at the end of a program the drain pump or the non-return valve might be blocked. They are however, easy to clean.

■ Take the filter combination out of the wash cabinet.



- Release the locking clamp.
- Lift up the non-return valve and rinse under running water.



The drain pump is situated under the non-return valve (see arrow).

- Before replacing the non-return valve check that the drain pump is free of obstructions.
- Carefully replace the non-return valve and secure with the locking clamp.

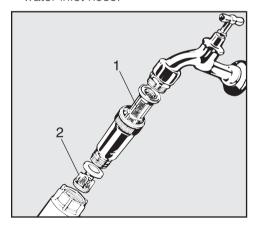
# Cleaning the filters in the water inlet

Filters are incorporated in the screw connection of the water inlet hose to protect the water inlet valve. If these filters get dirty they need to be cleaned, otherwise insufficient water flows into the wash cabinet.

The plastic housing of the water connection contains an electrical component. It must not be submerged in water.

#### To clean the filters

- Turn off the machine, and unplug it.
- Turn off the valve and unscrew the water inlet hose.



Clean the large area filter (1) and fine filter (2), and replace with new filters if necessary.

- Replace filters and the seal. Make sure they are sitting correctly.
- Reconnect the hose to the water inlet, making sure that it goes back on straight.
- Open the valve carefully. If there is a leak, screw the connections on more tightly.

### Cleaning the control panel

This should only be cleaned with a damp cloth or a suitable cleaner for use on plastic materials, or with a disinfectant tested and recognized as suitable for this use.

⚠ Do not use abrasive cleaners, glass cleaners or all-purpose cleaners!

Because of their chemical composition they could cause serious damage to plastic components.

# Cleaning the front of the machine

 Clean using a proprietary cleaning agent designed for the type of front the machine is fitted with.

⚠ Do not use cleaning agents containing ammonia or thinners.

### **Frequently Asked Questions**

Appairs should only be carried out by a qualified and trained person in accordance with local and national safety regulations. Unauthorized repairs could cause personal injury or machine damage.

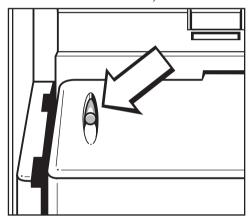
could cause personal injury of machine damage.				
The machine does not start.				
Possible fault	Solution			
<ul> <li>The door is not closed properly</li> <li>The machine is not plugged in properly.</li> <li>The circuit breaker has tripped.</li> </ul>	Close the door securely.			
	■ Insert the plug.			
	Reset the circuit breaker. See the data plate for minimum amperage.			
	■ If the circuit breaker trips again. Contact Miele.			
A few minutes after switching on, the "Fill/Drain" indicator light flashes (fault code FE appears in the display)				
Possible fault	Solution			
<ul> <li>The valves are closed.</li> <li>The filters in the water inlet hose are dirty.</li> <li>The water pressure is too low.</li> </ul>	■ Turn the program selector to the "Stop" position (the fault code goes out).			
	■ Turn the machine off using the "On/Off" button.			
	Open the valves or clean the filters (see "Cleaning and care").			
	Switch on the machine again and re-select the program.			
The wash cycle finishes too early and the "Fill/Drain" indicator light flashes (fault code F A appears in the display)				
Possible fault	Solution			
<ul><li>The drain hose is kinked.</li><li>The drain pump is blocked.</li></ul>	■ Turn the program selector to the "Stop" position (the fault code goes out).			
	Correct the fault.			
	■ Pump away the water and start the program again (see additional program "Drain" and "Turning on").			

### **Frequently Asked Questions**

# Water in the wash cabinet is not heated; the program sequence lasts too long

This machine has a resettable heater limiter which will turn off the heaters in the case of over-heating. This could be caused for example, if large articles obscure the heating elements or if the filters in the wash cabinet are blocked.

- Remove the cause of the fault.
- Remove the service panel (see "Electrical connection").



Press the reset button on the heater limiter (yellow) located on the lefthand side of the plastic cover.

# If this switch trips again contact Miele.

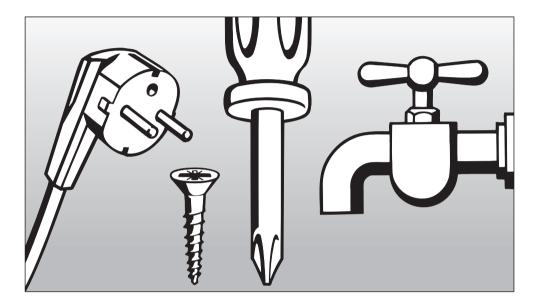
### **After Sales Service**

In the event of a fault which you cannot correct yourself or if the fault code "F..." shows in the display please contact the Miele Service Department at the phone number on the back of these instructions.

■ Please quote the model and serial number of your machine.

This information can be found on the data plate (see also "Electrical connection").





## Installation Instructions

Information is subject to change. Please refer to our website to obtain the most current product specification, technical & warranty information.

To prevent accidents and machine damage read these instructions

#### before

installation or use.

### Caring for the environment

# Disposal of the packing material

The protective packing materials are environmentally safe and can be recycled.

Ensure that any plastic wrappings, bags, etc. are disposed of safely and kept out of the reach of children. Danger of suffocation!

### Disposal of the appliance

Appliances contain materials which can be recycled. Please contact your local authorities about recycling in your area.

Ensure that the machine presents no danger to children while being stored for disposal. See "Important Safety Instructions".

### Installation

# Please refer to the installation diagram supplied with the machine.

Furniture and fittings installed near the machine must be able to withstand the effects of steam and condensed water.

#### Installation options

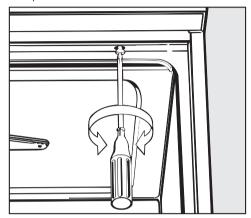
#### Undercounter

The machine must be positioned under a continuous worktop or sink drainer.

The opening must be at least 23 5/8" (60 cm) wide, 23 5/8" (60 cm) deep and 34 1/4" (82 cm) high.

If necessary, the machine lid can be removed as follows:

■ Open the door.



- Remove the fixing screws on both sides using a Phillips screwdriver.
- Pull the machine lid approx. ¼" (5 mm) forwards, lift and remove.

### Installation

### Leveling the machine

Any unevenness in the floor can be compensated for.

Adjust the four screw feet to raise or lower the height of the machine.

# Position and secure the machine

To ensure stability the machine must first be aligned and then screwed to the countertop.

- Open the door.
- Through each of the two holes in the front trim, left and right, screw the machine to the front edge of the continuous countertop.
- Do not use silicone sealant to seal the gaps between the machine and any neighboring units, this would hinder ventilation to the circulation pump.

#### Stainless steel toe kick

A stainless steel toe kick is included for easing undercounter installations. Please refer to installation directions included with the toe kick.

Depending on the requirements for installation, the following "**kits**" can be ordered from the Miele.

#### Cover plate (protects the countertop)

The underside of the countertop is protected from steam damage by a stainless steel plate.

### **Electrical connection**

All electrical work must be performed by a qualified service technician in accordance with local and national safety regulations.

Connection should be made via a suitable isolator which complies with local and national safety regulations and the on-off switch should be easily accessible for servicing.

#### WARNING THIS APPLIANCE MUST BE GROUNDED

For technical data see the data plate or wiring diagram supplied.

The machine must only be operated with the voltage, frequency and fusing shown on the **data plate**.

The **data plate** (with test certifications) is located on the rear of the machine and also behind the plinth panel below the protective plastic cover.

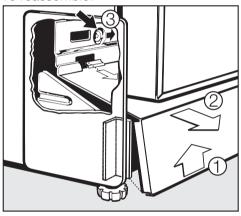
The **wiring diagram** is secured to the inner side below the protective plastic cover.

# Removing the plinth panel and the protective plastic cover:

⚠ Isolate the machine from the power supply.

- Holding the plinth panel at both sides, pull gently outwards from beneath ① and take it out ②.
- To remove the protective plastic cover unscrew the 2 screws (left and right) c.

#### To reassemble:



Refit the protective plastic cover and the plinth panel in the reverse order to which they were removed.

See also the installation diagram supplied.

### WARNING THIS APPLIANCE MUST BE GROUNDED

### Grounding the machine

A connection screw with the grounding symbol  $(\frac{1}{2})$  is provided on the back of the machine for grounding.

### **Plumbing**

#### Connection to the water inlet

Mater in the machine is not suitable for drinking.

- The machine must be connected to the water supply in accordance with local and national regulations.
- The washer is constructed so it may be connected to a water supply without an extra non-return valve, unless required by code.
- The water pressure (flow rate) must be a minimum of 7.25 psi (0.5 bar / 50 kPa).

If the water pressure (flow rate) is below 29 psi (2 bar) the fill time is automatically extended.

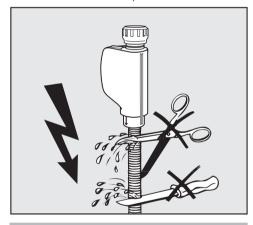
The max. permitted static pressure is 145 (10 bar).

If the water pressure is not in the range of 7.25 psi (0.5 bar) to 145 psi (10 bar) the "Fill/Drain" indicator light may come on and the fault code "F2 E" show in the display. Please contact the Miele Service Department.

 The machine is supplied as standard for connection to a cold (coded blue)
 and a hot (coded red) water supply up to a max. temperature of 158°F (70 °C).

The inlet hoses should be connected to the cold and hot water valve. If there is no hot water connection the hot water inlet hose marked **red** should also be connected to a cold water valve. In other words both inlet hoses are connected to the cold water supply.

- Valve with 3/4 BSP male thread are to be provided on site. They should be easily accessible so that the water supply can be turned off when the machine is not in use.
- The DN10 inlet hose is 5 ½ ft. (1.7 m) long, with a <sup>3</sup>/<sub>4</sub>" (2 cm) female hose thread. The water inlet filters in the threads must not be removed.
- Large surface area filters are enclosed in the kit supplied with the machine for installing between the valve and the inlet hose (see illustration in "Cleaning and Care - Water inlet").



⚠Do not cut the inlet hose or damage it in any way.

■ See also the installation diagram supplied.

### **Drainage**

- The drainage system is fitted with a non-return valve which prevents dirty water from flowing back into the machine via the drain hose.
   The drain hose should be permanently positioned, during installation, so that its highest point is located above the flood plane of the sink that it is attached to.
- The on-site drain connection point should be located between 1 ft.
  (0.3 m) and 3' 3". (1 m) above the lower edge of the machine.
  If it is lower than 1 ft. (0.3 m), bend the hose in a curve to a height of at least 1 ft. (0.3 m).
  The drainage system must be able to take a minimum drainage flow of 4.5 gal/min (16 l/min).
- The flexible drain hose is 4' 7" (1.4 m) long and has an internal diameter of <sup>7</sup>/<sub>8</sub> " (22 mm). Do not cut the drain hose.
   Hose clamps are supplied for securing it into position.
- A longer drain hose (up to 13 ft.
   [4 m] long) is available to from Miele.
- The drainage system must not exceed 13 ft. (4 meters).

# See also the installation diagram supplied.

### **Technical data**

	English	Metric
Height:	33 1/2" (321/4")	85 (82) cm
Width:	23 <sup>5/8</sup> "	60 cm
Depth:	23 <sup>5/8</sup> "	60 cm
Voltage: Rate load: Fuse rating:	see Data Plate see Data Plate see Data Plate	
Connection cable:	approx. 5' 10"	approx. 1.8 m
Water pressure (flow pressure):	7.25 - 145 PSI	50 - 1000 kPa
Cold or hot water connection:	up to max. 158°F	up to max. 70 °C
Drainage length:	max.13'	max. 4 m
Delivery head:	min. 12" max.39 <sup>3/8</sup> "	min. 0.3 m max. 1 m
Inlet hose:	approx. 5' 7"	approx. 1.7 m
Drain hose:	approx. 4' 7"	approx. 1.4 m
Test marks:	CSA	

Please have the model and serial number of your appliance available before contacting Technical Service.



### U.S.A. Miele, Inc.

#### **National Headquarters**

9 Independence Way Princeton, NJ 08540 Phone: 800-991-9380

609-419-9898

Fax: 609-419-4241 www.mieleusa.com

# **Technical Service & Support Nationwide**

Phone: 800-991-9380 Fax: 800-220-1348

proservice@mieleusa.com

#### Germany

Miele & Cie. KG Carl-Miele-Straße 29 33332 Gütersloh

All rights reserved /Publication date / 01/06/2012

M.-Nr. 09 321 310 / 01

### $\epsilon$

INFORMATION IS SUBJECT TO CHANGE. PLEASE REFER TO OUR WEBSITE TO OBTAIN THE MOST CURRENT PRODUCT SPECIFICATIONS, TECHNICAL & WARRANTY INFORMATION.