# **BOMANN**<sup>®</sup>

HOUSEHOLD-DISHWASHER GSP 850



**Instruction Manual** 

# Contents

Introduction	Page 3
General Notes	Page 3
Special safety Information for this Unit	Page 4
Unpacking the Appliance	Page 5
Appliance Equipment	Page 5
Installation	Page 5
Prior Using for the first Time	Page 7
Loading the Dishwasher Baskets	Page 10
Starting a Rinse Program	Page 12
Cleaning and Maintenance	Page 15
Troubleshooting	Page 17
Technical Data	Page 19
Disposal	Page 20

#### Introduction

Thank you for choosing our product. We hope you will enjoy using the appliance.

#### Symbols in these Instructions for Use

Important information for your safety is specially marked. It is essential to comply with these instructions in order to avoid accidents and prevent damage to the machine:

#### **WARNING:**

This warns you of dangers to your health and indicates possible injury risks.

#### △ CAUTION:

This refers to possible hazards to the machine or other objects.

**I NOTE:** This highlights tips and information.

#### **General Notes**

Read the operating instructions carefully before putting the appliance into operation and keep the instructions including the warranty and the receipt. If you give this device to other people, please also pass on the operating instructions.

**I NOTE:** The illustrations in this instruction manual can deviate from the original appliance.

- The appliance is designed exclusively for private use and for the envisaged purpose. This appliance is not
  fit for commercial use.
- The appliance is only to be used as described in the user manual. Do not use the appliance for any other purpose. Any other use is not intended and can result in damages or personal injuries.
- Do not use it outdoors. Keep it away from sources of heat, direct sunlight and humidity.
- Do not operate the appliance without supervision.
- When not in use, for cleaning, user maintenance works or with disruption, switch off the appliance and disconnect the plug (pull the plug itself, not the lead) or turn off the fuse.
- The appliance and if possible the mains lead have to be checked regularly for signs of damage. If damage
  is found the appliance must not be used.
- For safety reasons, alterations or modifications of the appliance are prohibited.
- In order to ensure your children's safety, please keep all packaging (plastic bags, boxes, polystyrene etc.) out of their reach.

#### **WARNING:**

Do not allow small children to play with the foil. There is a danger of suffocation!

# Special safety Information for this Unit

- The maximum number of place settings to be washed is 14.
- This unit is intended to be used in household and similar applications such as
  - staff kitchen areas in shops, offices and other working environments;
  - by clients in hotels, motels and other residential type environments;
  - in farm houses.
- The appliance is to be connected to the water mains using new hose sets and that old hose-sets should not be reused.
- The maximum permissible inlet water pressure is 1 Mpa.
- The minimum permissible inlet water pressure is 0.04 Mpa.
- In the appliance bottom are located ventilation openings (depending on model).
   These may not be clogged e.g. by carpet.
- Open the door carefully during operation, there is a risk of water squirting out.
- Pay attention to a proper loading of the appliance. Follow the instructions in the chapter "Loading the Dishwasher Baskets".
- Knives and other utensils with sharp points must be loaded with their points down
  in the cutlery basket (depending on model) or placed in a horizontal position in the
  dishwasher basket.
- The door should not be left open, since this could increase the risk of tripping.
- This appliance can be used by children aged from 8 years and above and persons
  with reduced physical, sensory or mental capabilities or lack of experience and
  knowledge if they have been given supervision or instruction concerning use of
  the appliance in a safe way and understand the hazards involved.
- Children who are younger than 8 years must be kept away from the device.
- Children shall not play with the appliance.
- Cleaning and **user maintenance** shall not be made by **children**, unless they are older than 8 years and are supervised.
- Do not try to repair the appliance on your own. Always contact an authorized technician. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

# **Unpacking the Appliance**

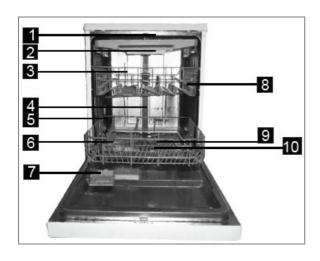
- Remove the appliance from its packaging.
- · Remove all packaging material, such as foils, filler and cardboard packaging.
- To prevent hazards, check the appliance for any transport damage.
- In case of damage, do not put the appliance into operation. Contact your distributor.

# I NOTE:

Production residue or dust may have collected on the appliance. We recommend cleaning the appliance according to chapter "Cleaning and Maintenance".

# **Appliance Equipment**

#### Appliance overview



1	Upper spray arm
2	Cutlery rack
3	Upper basket
4	Inner water pipe
5	Lower basket
6	Salt container (water softener)
7	Detergent / Rinse aid dispenser
8	Cup shelf
9	Lower spray arm
10	Filter system

#### **Delivery scope**

cub shelf (2 pcs), funnel tube, inlet hose safety system

#### Installation

# **WARNING:**

The unit must not be connected to the mains during installing. Otherwise there is **danger to life** or **electric shock hazard!** 

## △ CAUTION:

For a correct operation the appliance must be connected properly. The specifications for water supply and drain as well as the electrical connection must fulfill the required criteria.

#### Installation location

 The site should be located near the water inlet and outlet, as well as near a properly grounded power socket.

- Take care of a solid and horizontal position of the appliance. If the appliance is not horizontally leveled, adjust the feet accordingly.
- Power cable and water hoses may not kinked or squashed.
- Avoid the installation:
  - near heaters, next to a stove, direct sunlight or any other heat sources;
  - at locations with high humidity (e.g. outdoors), as metal parts would be susceptible to corrosion under such circumstances;
  - in rooms where the temperature could drop below freezing. Do not expose the appliance any weather.
  - near volatile or flammable materials (e.g. gas, fuel, alcohol, paint, etc.).

#### Water connection

## △ CAUTION:

- The Installation of the water supply must conform to the local laws and regulations.
- Use the new supplied hose set to connect the appliance to the water supply. Do not reuse old or used connection sets.
- If the water pipe is new or long time not used, ensure before connecting to the water system, that the water is clear and free from contamination.

## Notes on inlet hose safety system (included in delivery)

The safety system consists of a double-walled inlet hose. This system guarantees to cut off the water supply when leakage of the inner hose. Switching off the water supply leads over an electronic contact.

#### Connect the water inlet hose (cold water connection)

#### NOTE:

The water pressure must be between 0.04 and 1 MPa. With higher pressure: use a pressure regulator.



- Connect the water inlet hose to a water thread with ¾". Screw the hose firmly in the direction of the screw thread; pay attention for a tight fit.
- Connect the other end of the inlet hose to the inlet valve on the appliance back; pay attention for a tight fit too.

#### Hot water supply

The dishwasher can be supplied with a water temperature of not more than 60°C. Supplying the appliance with hot water, the rinse running time is shortened but the cleaning effect can be slightly reduced. The connection to the hot water valve must be done in the same manner as described for the cold water connection.

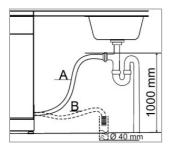
#### Connect the water drain hose

#### I NOTE:

The drain hose has a length of approx. 1.5 m and can extend with a suitable hose and connecting piece to a length of max. 4 m.

# △ CAUTION:

In order to prevent backflow of contaminated water, the free end of the hose must not come under the water level of the drain.



- Connect the drain hose to a drain pipe with a minimum diameter of Ø 40 mm;
   alternatively the drain hose can be fixed directly to the sink.
- Always make sure that the hose is not bent or squeezed.
- It is allowed to install the hose maximal up to a height of 1000 mm above the rinsing floor.
- Secure the drain hose securely to avoid a change in position and with it a water leakage.

#### **Electrical connection**

## **WARNING:**

- The installation to the mains supply must conform to the local standards and regulations.
- Improper connection may cause to an electric shock!
- Do not use multiple sockets or extension cords.
- It is not allowed to modify the plug provided with the appliance. If the plug does not fit properly to the outlet, let install a proper outlet by an authorized specialist.
- The accessibility of the power plug must always be ensured in order to disconnect the device from the power supply in case of an emergency.
- Ensure that your mains power corresponds with the specifications of the appliance. The specifications are printed on the rating label.
- Connect the mains cable to a properly installed and earthed wall outlet.
- If the plug after installation is not accessible, a corresponding disconnect device must be available to meet the relevant safety regulations.

## Prior Using for the first Time

#### Before using your dishwasher for the first time:

- A. Filling salt into the salt container (water softener)
- B. Fill the rinse aid dispenser
- C. Fill in detergent

# △ CAUTION:

- Use only salt, rinse aid and detergent for dishwashers. Other products may damage the appliance.
- Always consider the dosage and storage recommendations on the sales packaging.

# **⚠ WARNING:**

Keep salt, rinse aid and detergent out of reach for children.

## A. Filling salt into the salt container (water softener)

#### Water softener

The water hardness varies regionally. If hard water is used in the dishwasher, deposits form on the dishes and kitchen utensils. The appliance is equipped with a water softener, that removes lime and minerals from the water by using water softening in the salt container. Your local water authority can advise you on the hardness of the water in your area.

#### Adjusting the salt consumption

The salt consumption can be adjusted according to your water hardness and therefore optimally regulated.

- Open the appliance door and switch on the appliance using the Power button.
- Press the program selection button within the first 60 seconds for about 5 seconds. The warning lamps [rinse aid] and [salt] lights up when the appliance is in setting mode.
- By repeatedly pressing the program selection button, the water hardness can be changed accordingly. The display shows the setting: H1> H2> H3> H4> H5> H6.
- A few seconds after the completion of your choice the indication goes off and the water hardness is automatically saved. Finish the setup via the Power button.

The following settings are recommended:

	Water	Water hardness		Display indication	Salt consumption		
°dH	°fH	°Clark	mmol/l	Display indication	(gramm/cycle)		
0 - 5	0 - 9	0 - 6	0 - 0.94	H1	0		
6 - 11	10 - 20	7 - 14	1.0 - 2.0	H2	9		
12 - 17	21 - 30	15 - 21	2.1 – 3.0	H3 (factory setting)	12		
18 - 22	31 - 40	22 - 28	3.1 – 4.0	H4	20		
23 - 34	41 - 60	29 - 42	4.1 – 6.0	H5	30		
35 - 55	61 - 98	43 - 69	6.1 – 9.8	H6	60		

# I NOTE:

°dH: German degree 1.25 mmol/l °fH: Frechn degree 0.178 mmol/l °Clark: British degree 1.78 mmol/l

## Fill in the salt

#### $\triangle$ CAUTION:

- The salt container must only be refilled when the salt warning lamp in the control panel lights up.
- During filling the salt container, salt and water can escape. Start a program immediately after you have filled the container to prevent corrosion.





- Remove the lower basket and unscrew the lid of the salt container.
- Add about 1.5 kg of salt by using the supplied funnel tube.
- Full fill the salt container with water (just before the first use).
- Screw the lid firmly on again after filling the container.
- Depending on salt dissolution, the salt warning lamp usually goes off immediately after filling the container.

#### B. Fill the rinse aid dispenser

#### Function of rinse aid

The rinse aid is automatically added during the final rinse, ensuring thorough rinsing and a spot and streak free drying.

#### When to refill the rinse aid dispenser



As long as the rinse aid warning lamp does not light up on the control panel, you can estimate the amount of remaining rinse aid to the optical level indicator "C" next to the dispenser.

When the rinse aid dispenser is full, the indicator is completely dark. If the rinse aid diminishes, the size of the black dot changes as shown below. In order to avoid spotting, the rinse aid level must not drop below 1/4.









empty

#### Fill in the rinse aid







- To open the dispenser screw the lid counterclockwise to the open position (left arrow) and remove the lid.
- Add the rinse aid into the dispenser, being careful not to overfill.

The dispenser contains approx. 110 ml.

• Before closing the appliance door, put on the lid in the open position back and turn it clockwise to the closed position (right arrow).

# NOTE:

Remove spilled rinse aid with an absorbent cloth to avoid excessive foaming during the next rinse.

# Adjusting the rinse aid dosage

When forming spots and the dishes dries poorly, increase the added amount of rinse aid. You can set the amount of addition between level 1 (min.) and level 6 (max.).



Take off the lid of the rinse aid dispenser and adjust the dial to the desired level. The factory setting is "4".

#### I NOTE:

Increase the dosage if there are drops of water or lime spots on the dishes after rinsing. Reduce the dosage if there are sticky whitish stains on dishes or a bluish film on glassware or knife blades.

#### C. Fill in detergent

#### **Function of detergent**

Detergents with its chemical ingredients are necessary to remove dirt, crush dirt and transport it out of the dishwasher. The most commercially, high-quality cleaning agents are suitable for this purpose.

#### **Detergent**

Normally new pulverized detergent is without phosphate. Thus the water softener function of phosphate is not given. In this case we recommend to fill salt in the salt container even when the hardness of water is only

6°dH. If detergents without phosphate are used in the case of hard water often white spots appear on dishes and glasses. In this case add more detergent to reach better results. Detergents without chlorine do only bleach a little. Strong and colored spot will not be removed completely. In this case choose a program with a higher temperature.

#### **Detergent tablets (Tabs)**

Dishwasher tablets from different manufacturers dissolve at different rates. It is possible that they will not fully dissolve in programs with short running time and low water temperature and thus does not reach their full productive efficiency. To ensure the complete removal of detergent residues, we recommend to choose rinse programs with long running times and high water temperature. Always follow the manufacturer's instructions!

#### Fill in the detergent

# I NOTE:

- Always add the detergent just before starting the rinse cycle, otherwise it could get damp and will not dissolve properly.
- You'll find information about the amount of detergent for the respective programs in the "Rinse cycle table".
   Note that depending on the degree of soiling and water hardness differences are possible.
- At the end of the rinse cycle the detergent dispenser must be empty.



The dispenser must be refilled before the start of each rinse cycle according to the instructions in the "Rinse cycle table".

Press the release button to open the dispenser.



- 1 Chamber of detergent in powder form for the main rinse
- 2 Chamber of detergent for the pre-rinse / Chamber for detergent in tablet form

Add with heavily soiled dishes an additional dose of detergent in the chamber for the pre-rinse.

Close the dispenser. Make sure that the lid locks into place.

#### Loading the Dishwasher Baskets

## A CAUTION:

Only rinse such dishes and cutlery in the dishwasher, which is expressly marked as "dishwasher resistant".

# I NOTE:

- Remove gross scraps of food and soak burnt leftovers. Pre-rinse under running water is not necessary.
- Do not overload! This is important for adequate cleaning results and reasonable energy consumption.
- Very small items should not be rinsed in the appliance, as they could easily fall out of the baskets.

#### For rinsing in the dishwasher the following cutlery and dishes..

# ..are not suitable:

- Cutlery with hand pieces of wood, porcelain mother of pearl
- Plastic items that are not heat resistant

#### ..are limited suitable:

 some types of glasses can become dull after a large number of washes

#### ..are not suitable:

- Older cutlery with glued parts that are not temperature resistant
- Bonded cutlery items or dishes
- Pewter or cooper items
- Crystal glass
- Steel items subject to rusting
- Wooden platters
- Items made from synthetic fibres

#### ..are limited suitable:

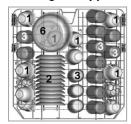
- silver and aluminum parts have a tendency to discolor during washing
- Glazed patterns may fade if machine washed frequently

## Recommendations for loading

- Arrange sensitive, light tableware items such as glasses, coffee and tea cups in the upper basket.
- · Place large items that are most difficult to clean in the lower basket.
- Make sure that the tableware is placed securely and cannot tip over.
- Place all items so, that the spray arms can rotate freely during rinsing.
- · Arrange all items with openings facing down.
- · Curved items, or ones with recesses, should be loaded aslant so that water can drain off.
- Make sure that glasses do not touch each other.
- Set the dishes and cutlery not into each other or covering each other.
- Arrange cutlery in the cutlery rack.
- Store long as well as sharp cutlery in the cutlery rack or horizontally in the dishwasher basket.

#### Methods for loading normal dishware

#### Loading the upper basket



On the upper basket only small and medium items should be loaded. Load e.g. glasses, cups, saucers and small bowls.

# Loading the lower basket



The basket is suitable because of the particularly intense cleaning action of the lower spray arm for heavily soiled dishes. Load e.g. pots and plates.

1	Cups	3	Glasses	5	Bowl	7	Dessert dishes	9	Soup plates
2	Saucers	4	Bowl	6	Bowl	8	Dinner plates	10	Platter

#### Foldable cup shelves





If necessary, fold the cup shelves downwards or remove them.

#### Foldable plate holders



In order to create a better arrangement for bulky dishes, the racks can be folded.

Lift the racks slightly and fold them down.

## Adjusting the upper basket

The height of the upper basket can be adjusted by placing the wheels on rails of different heights. This will create more space for large items in the upper as well as in the lower basket.

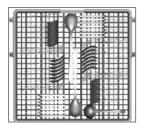
· Pull out the basket guides.





- Remove the basket out of the guides.
- Depending on the desired setting, insert the upper or lower pair of wheels into the guide; the left and right side should always be located at the same height.

## **Cutlery rack**



The cutlery is sorted into the separate cutlery rack in its appropriate positions.

You may sort the cutlery evenly distributed, vertically with the narrow side, so that the water can drains off. Extra long, large parts must be arranged in the middle of the rack.

# Starting a Rinse Program

## Rinse cycle table

Select a suitable program depending on dishes and degree of soiling.

Program	Program selection information	Program sequence	Detergent pre/main (g)	Running time (Min.)	Energy (kWh)	Water (L)	Rinse aid
Intensive	heavily soiled dishes and dried leftovers	Pre-rinse (50°C) Main rinse (60°C) Rinse 1 Rinse 2 Rinse 3 (65°C) Drying	5/30 (or Tab)	160	1.5	18.5	*
Normal	normal soiled dishes, daily use	Pre-rinse (45°C) Main rinse (55°C) Rinse 1 Rinse 2 (65°C) Drying	5/30 (or Tab)	180	1.25	15	*
ECO (*EN 50242)	Standard program for normal soiled dishes	Pre-rinse  Main rinse (45°C)  Rinse (65°C)  Drying	5/30 (or Tab)	185	0.93	11	*

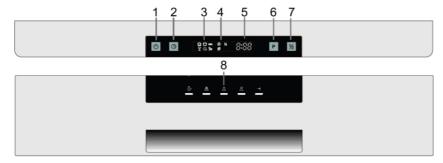
Program	Program selection information	Program sequence	Detergent pre/main (g)	Running time (Min.)	Energy (kWh)	Water (L)	Rinse aid
Y Glass	low adhesive, fresh leftovers, such as glasses	Pre-rinse Main rinse (40°C) Rinse 1 Rinse 2 (65°C) Drying	5/30 (or Tab)	120	0.85	14.5	*
<b>90</b> , 90 Min	for lightly soiled dishes	Main rinse (65°C) Rinse 1 Rinse 2 (65°C) Drying	35 (or Tab)	90	1.35	12.5	*
<b>∏</b> Rapid	rapid rinse cycle for lightly soiled dishes without drying	Main rinse (45°C) Rinse 1 Rinse 2 (55°C)	20	40	0.75	11.5	

# I NOTE:

- The extra addition of rinse aid can improve the drying result.
- \*EN 50242: this program is the test program and of combined energy and water consumption most efficient. The information for comparability:

Capacity: 14 settings; Position of the upper basket: upper wheels on rails; Rinse aid setting: 6

#### Control panel



- 1 Power button to switch on/off the power supply.
- 2 By repeatedly pressing the preset button, you can select a start delay of 1 24 hours. The display shows the selection. Choose the wanted program and close the appliance door. The operation will start automatically after the selected lead time has elapsed.
- 3 The corresponding program control lamp indicates the selection of the rinse program.
- **4** Warning lamp for the rinse aid and salt shortage. The lamp lights up when the corresponding container needs to be refilled.
  - Control lamp for  $\frac{1}{2}$  loading indicates the activation of the function.
- 5 About the LED display the salt consumption and the preset time will be selected.
  The start delay (if activated), the remaining time and possibly error codes are displayed.
- **6** Program selection button to select one of six rinse programs. By repeatedly pressing this button, you can select the rinse program.

7 Button to activate the ½ load function. At a loading of about or less than half load place settings; energy and water consumption will be reduced.

**I NOTE**: The function is not available for the rinse program [Rapid].

8 The process lamps shows the status of the rinse program: Pre-rinse->Main rinse->Rinse->Drying->End

#### Starting a rinse program

- The water supply must be opened up to the maximum pressure.
- Load the dishwasher baskets.
- Fill in the detergent.
- Press the power button to switch on the appliance.
- Select the desired rinse cycle.
- · Set the available options, if required.
- Close the appliance door and the dishwasher starts.

#### Program change

## △ CAUTION:

A program change should be done only a short time after starting the program. Otherwise, maybe detergent has been released and already drained rinse water.

- To do a program change, open the appliance door carefully so that you can operate the control panel. Press the program selection button for several seconds.
- Select the wanted program and close the appliance door to start the new operation.

## Forgot to add a dish?

## **WARNING:**

Open the door very carefully during operation, there is a risk of water squirting out.

Dishware can be added any time before the detergent dispenser opens.

- Open the door carefully a little.
- Once the spray arms stopped working, you can open the door completely.
- · Add forgotten dishware.

- Close the door.
- After approx. 10 seconds the operation will be continued.

## At the end of program

#### △ CAUTION:

Allow the appliance to cool down a bit after the program has ended, before you open it. This avoids that steam escapes that causing long-term damages to your furniture.

At the end of the rinse cycle will sound a series of signals; then the unit goes into standby mode.

#### Switch off

Open the appliance door and switch off the appliance by pressing the power button.

- Close the water supply!
- · Remove the dishes after cooling (see "Unloading the dishwasher baskets").
- If the appliance is not in use for an extended period:
  - Disconnect the mains plug or switch off or turn out the fuse and
  - leave the appliance door slightly open until the next rinse cycle to avoid odors.

#### Unloading the dishwasher baskets

#### △ CAUTION:

Let the dishware cool down for about 15 minutes before unloading. Hot dishes are sensitive to knocks.

## I NOTE:

At the end of program there could be still water drops inside the appliance.

- Open the door and pull out the basket.
- To avoid water dripping from the upper basket onto the dishes in the lower basket, it is advisable to unload the appliance from the bottom up.

## Cleaning and Maintenance

#### **WARNING:**

- Always switch off the appliance and disconnect the plug or turn off / unscrew the fuse before cleaning and user maintenance.
- · Allow the appliance to cool down sufficient before cleaning.
- Do not use steam cleaners for cleaning the appliance; moisture could enter electrical components. Risk of
  electric shock! Hot steam could damage the plastic parts. The appliance must be dry before restarting operation.

# △ CAUTION:

- Do not use a wire brush or other sharp, abrasive items.
- · Do not use any acidic or abrasive detergents.

#### I NOTE:

Dirty filters and clogged spray arms degrade the rinsing. Regularly check the filter and spray arms and clean them if necessary.

#### Filter system

The three-part filter system prevents larger amounts of food or other objects from getting inside the pump.



- 1: Main filter: food and soil particles trapped in this filter are pulverized by a special jet on the lower spray arm and washed down to drain.
- <u>2</u>: <u>Coarse filter</u>: filters out larger items such as pieces of bone or glass shards that could block the drainage.
- 3: Micro filter: filters dirt and food residues in the sump area and prevents it from being redeposited on the dishware during rinse cycle.

## Cleaning the filter system

#### $\triangle$ CAUTION:

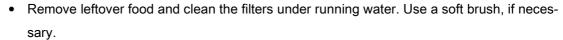
- The dishwasher must never be used without the filter.
- Improper replacement of the filter can reduce performance and damage the appliance.
- Do not knock out the filter for cleaning to avoid possible deformations of the filters.

#### NOTE:

Check after each rinsing the filter for residues.



- Turn the coarse filter counterclockwise and remove the whole filter system upwards.
- Remove the coarse as well as the micro filter from the main filter.





• Put the filter system properly in reverse order together and reinstall in its provided position. Fix the entire system, by tightening the filter unit clockwise.

#### Cleaning the spray arms

Lime and impurities from the rinsing water can block nozzles and bearings of the spray arms. Check the outlet nozzles of the spray arms regularly for blockages.

• Unscrew the securing nut of the upper spray and pull off the arm downwards.



- Pull off the lower spray arm upwards.
- Clean the arms under running water; if necessary use a soft brush for the nozzles.
- Insert the spray arms again until they clicks into place and tighten the nut of the upper spray arm.

#### Maintenance of the dishwasher

## △ CAUTION:

Never use spray cleaners to clean the door panel, this may damage the door lock and electrical components.

- Clean the appliance outer surfaces and the door sealing thoroughly with a soft, damp cloth. Use only mild cleaning agent.
- Use to remove stains inside the appliance a dampened cloth with a little white vinegar or a special detergent for dishwashers. If necessary, fill detergent in and start the appliance without dishware in the program with the highest rinse temperature.
- Dry the outer surfaces thoroughly before taking in operation again.

#### Antifreeze protection

If the unit is out of operation and exposed to temperatures below zero, observe the following precautions:

- Disconnect the mains plug.
- Close the water supply and remove the inlet hose from the water valve.
- Drain the water from the inlet hose and the water valve.
- Reconnect the inlet hose to the water valve.

• Turn off the lid of the salt container and take off the filter system. Remove the remaining water in the sump with an absorbent sponge.

# **Energy saving tips**

- Always try to operate the dishwasher when it is fully loaded.
- Do not rinse the dishes in advance under running water.
- Use for each type of load the most appropriate rinse program.
- Do not perform a pre-rinse (depending on model), if not absolutely necessary.
- If available, the appliance should be connected to a hot water supply up to 60°C.

# **Troubleshooting**

# Before you contact an authorized specialist

Problem	Possible causes	What do to
The appliance is not	Fuse blown or the circuit	Replace fuse or reset circuit breaker. Remove any other
working	breaker acted	units sharing the same circuit with the dishwasher.
	Power supply is not turned	Insert the power plug properly. Make sure the appliance is
	on	switched on and the door is closed securely.
	Water pressure is low	Check if the water supply is connected properly and the wa-
		ter is turned on.
Water is not drained off	Kink in drain hose	Check the drain hose.
	Filter clogged	Check the filter system.
	Kitchen sink clogged	Check kitchen sink to make sure it is draining well. If the
		kitchen sink is clogged, you may need a specialist.
Noise	Some audible sounds are	E.g. sound form detergent dispenser opening.
	normal	
	Dishware is not secured	Take care that the dishware is secured in the dishwasher.
	The spray arm knocks	Place the parts so that the spray arm can rotate freely dur-
	against a piece of tableware	ing rinsing.
Suds in the tub	Improper detergent	Use only special dishwasher detergent to avoid suds. If this
		occurs, open the door and let suds evaporate. Add approx
		4 liter cold water to the tub. Close the door and start a short
		rinse cycle to drain out the water.
	Spilled rinse agent	Always wipe up rinse agent spills immediately.
Stained tub interior	Detergent with colorant was	Only use detergent without colorant.
	used	
Dishes and flatware	Improper program	Select a stronger program.
not clean	Improper basket loading	Make sure that the action of the detergent dispenser and
		spray arm are not blocked by large dishes.

Problem	Possible causes	What do to
Spots and filming on	Extremely hard water	To remove spots of glassware:
glasses and flatware	Low inlet temperature	- Take out all metal utensils of the appliance.
	Overloading the baskets	- Do not add detergent.
	Improper loading	- Select a longer rinse cycle.
	Old or damp detergent	- Start the dishwasher and allow it to run for about
		15 minutes up to the main rinse.
	Empty rinse dispenser	- Pour 2 cups of white vinegar into the appliance bottom.
	Incorrect dosage of deter-	- Let complete the rinse cycle. If the vinegar does not work:
	gent	repeat as above, except use ¼ cup (60 ml) of citric acid
		crystals instead of vinegar.
Cloudiness on glass-	Combination of soft water	Use less detergent if you have soft water and select a short-
ware	and too much detergent	est cycle to rinse glassware and to get clean.
Yellow or brown film on	Tea or coffee stains	Using a solution of $\frac{1}{2}$ cup of bleach and 3 cups of warm wa-
inside surface		ter to remove the stains by hand.
	Iron deposits in water can cause an overall film	Call a water softener company for a special filter.
White film on inside	Hard water minerals	To clean the interior, use a damp sponge with dishwasher
surface		detergent. Wear rubber gloves.
Detergent dispenser	Clogged detergent residue	Clean the detergent from the catch.
close not properly	is blocking the catch	
Detergent left in dis-	Dishes blocks the dispenser	Reload the dishes.
penser		
Steam	Normal	There is some steam coming through the vent by the door
		latch during drying and water draining.
Black or grey marks on	Aluminum utensils have	Use a mild abrasive cleaner to eliminate those marks.
dishware	rubbed against dishware	
Water standing on the	Normal	A small amount of clean water around the outlet on the tub
bottom of the tub		bottom keeps the water seal lubricated.
Dishwasher leaks	Overfill dispenser or rinse	Do not overfill the dispenser. Spilled rinse aid could cause
	aid spills	oversudsing and lead to overflowing.

# **Error codes**

With some malfunctions the appliance displays the following error codes to warn you:

Display-indication	Meaning	Possible causes
E1	Water supply	Water inlet malfunction.
E4	Overflow / water leackage	Possible overflow / leakage occurs.

# △ CAUTION:

- If overflow occurs, turn off the main water supply before calling an authorized technician.
- If there is water in the lower housing part due to an overfilling or a small leak, remove this water before restarting the appliance.

# I NOTE:

If a problem still persists after following the steps above, please contact your distributor or an authorized technician.

#### **Technical Data**

Measures / Weights		
Height x Width x Depth	m	84.5 x 59.8 x 60.0
Net weight	kg	44.5
Electrical / Water connection		
Connection power	W	1930
Connection voltage V~/	Hz	220-240 / 50
Fuse protection	Α	10
Water protection Mpa (b	ar)	0.04 – 1.0 (0.4-10)

The right to make technical and design modifications in the course of continuous product development remains reserved.

## Product data sheet for household dishwasher according to regulation (EU) No. 1059/2010

Brand		Bomann
Model		GSP 850
Standard place settings		14
Energy efficiency class <sup>1)</sup>		A++
Annual energy consumption <sup>2)</sup>	kWh	266
Energy consumption of the standard cleaning cycle	kWh	0.93
Power consumption of the off mode	W	0.45
Power consumption of the left-on mode	W	0.49
Weighted annual water consumption <sup>3)</sup>	1	3080
Drying efficiency class <sup>4)</sup>		Α
Standard program to which the information relates to the		ECO 45°C
label and the data sheet <sup>5)</sup>		ECO 45 C
Program duration of the standard cleaning cycle	Min.	185
Duration of the left-on mode	Min.	30
Noise emission	dB(A) re1pW	48
Built-in appliance		-

- 1) A+++ (highest efficiency) to D (lowest efficiency).
- 2) Based on 280 standard cleaning cycles using cold water fill and the consumption of the low power models. Actual energy consumption will depend on how the appliance is used.
- 3) Based on 280 standard cleaning cycles. Actual water consumption will depend on how the appliance is used.
- 4) A (highest efficiency) to G (lowest efficiency).
- 5) This program is suitable for cleaning normally soiled tableware and that it is the most efficient program in terms of its combined energy and water consumption for that type of tableware.

Note: The above values have been measured in accordance with standards under specified operating conditions. Results may vary greatly according to quantity and pollution of the dishes, water hardness, amount of detergent, etc.

This appliance has been tested according to all relevant current CE guidelines, such as electromagnetic compatibility and low voltage directives, and has been constructed in accordance with the latest safety regulations



**Disposal** 

## Meaning of the "Dustbin" Symbol

Protect our environment; do not dispose of electrical equipment in the domestic waste.

Please return any electrical equipment that you will no longer use to the collection points provided for their disposal.

This helps avoid the potential effects of incorrect disposal on the environment and human health.

This will contribute to the recycling and other forms of reutilization of electrical and electronic equipment.

Information concerning where the equipment can be disposed of can be obtained from your local authority.

## **WARNING:**

Remove or disable any existing snap and bolt locks, if you take the appliance out of operation or dispose it.

