

Operating instructions

for Winterhalter Gastronom dishwasher GS 501

Contents

1	Intended use-----	1
2	Safety instructions-----	1
3	Before using the machine -----	3
4	Operating and control elements -----	5
5	Functioning of the dishwasher -----	5
6	Preparation for washing -----	6
7	Washing -----	8
8	After washing-----	10
9	Maintenance and care -----	11
10	Faults-----	13
11	Emission values -----	13

1 Intended use

The **Winterhalter Gastronom dishwasher GS 501** may only be used for washing items from the catering industry and related trades. Any change in design or use of the dishwasher carried out without the written permission of Winterhalter Gastronom GmbH, leads to the guarantee and product liability becoming null and void. If damage is caused to the dishwasher due to failure to observe the instructions given in this manual, no claims under guarantee can be made to Winterhalter Gastronom GmbH or any associated companies.

2 Safety instructions

Make sure that you have read and understood the operating instructions before you start to use the washer. The Winterhalter customer service department can tell you how to operate the washer and how it works. These operating instructions must always be kept within easy reach of the dishwasher.

The following symbols are used in this manual:



Warning: Failure to observe these instructions can lead to danger to life, e.g. from electrical equipment.



Attention: Failure to observe these instructions can lead to damage to equipment.



No drinking water! The water in the machine is not for drinking.



This sign indicates recommendations and special features.



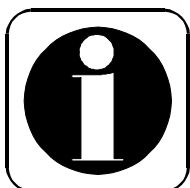
- The dishwasher may only be used once the operating instructions have been read and understood. Receive instruction in the operation and functioning personally from the Winterhalter customer service.
- Only operate the dishwasher in the manner described in this manual.
- In the event of danger or faults, switch the dishwasher off immediately.
- Do not open any machine casings or machine parts if tools are necessary to do so.
- Work on the electrical equipment is only to be carried out by specialist personnel. First disconnect the dishwasher from the mains.



- The water in the dishwasher is not drinking water.
- In the event of faults which are not due to the customer's water or electricity supply, contact the Winterhalter customer service.
- In the event of faults with unknown causes, do not switch the dishwasher on again until the cause is known. If necessary, contact the Winterhalter customer service.
- Only use detergent and rinse additive which are suitable for industrial dishwashers. We recommend the products developed by Winterhalter Gastronom. These are specially suited to Winterhalter Gastronom dishwashers. All quantities given refer to Winterhalter Gastronom products. Observe danger instructions printed on packaging.
- During daily cleaning, make sure that no rusting foreign bodies remain inside the dishwasher. This can cause the interior to rust. The rust particles may come from non-stainless items to be washed, cleaning aids, damaged wire trays or baskets or from supply lines which have not been rust proofed.
- Leave the hood open until the next time you put the machine into operation, so that the inside of the machine can dry out. This is important for long-lasting protection against corrosion, even with high grade stainless steel.
- Protect the dishwasher against frost. Systems carrying water can be damaged if they freeze.
- Do not use normal washing-up liquid. This leads to large amounts of foam building up in the dishwasher.



- **The dishwasher is splash-proof. Do not spray the outside with a high pressure or steam jet cleaner.**



- Check the FI-residual current operated device for functioning regularly according to the regulations by pressing the test button.
- In addition to daily cleaning, we recommend that you have the dishwasher serviced at least twice a year by Winterhalter customer service.

3 Before using the machine

Before you use the machine in your work, it must be connected on your premises by trained specialists in conformance with locally effective regulations and then set in operation by the Winterhalter customer service.



Do not expose the machine to freezing temperatures. Freezing can damage running water systems damaged.

3.1 Setup and hookup



Setting up and hooking up the machine to the customer's supply lines and outlets must be performed in conformance with specific local and national circumstances by approved fitters.

Completeness check:

After unpacking the machine, first check the delivery against the packing slip to see that it is complete and has suffered no damage during transportation. Inform the haulage company, the insurance company and the manufacturer immediately of any damages.

Setting up and aligning the machine

Install supply and drainage tables for pass-through machines and adjust with slight incline to machine or available sink. Before starting installation, use a spirit level to check that the machine is totally horizontal. Adjust the machine's feet to compensate for any unevenness of the floor.

Sanitary installations:



Please observe carefully the information in the attached connection diagram!
Make sure that the water pressure and flow capacity demanded by the connection diagram are present so that the machine will function properly.

- Install an easily accessible **main shutoff valve** in the water supply line near the machine. It may not be located behind the machine.
- The machine is DVGW and WRC approved, or designed and built according to DVGW and WRC guidelines. It can be connected to the fresh water supply line without any safety device in between.
- Use the hose and the fine filter in the machine to connect it. The fine filter keeps particles from the water supply line from getting into the machine and causing extraneous rust to form on the cutlery or the machine itself.
- If water hardness is greater than 6°d, the installation of a water softener is recommended. Now, the water inlet temperature is max. 50°C.
- The machine is optionally equipped with a drain pump. The maximum draining capacity is found on the connection diagram.

Electrical installation:



DANGER! Danger of death due to live components!

Have the electric installation of the washer and the auxiliary devices belonging to it carried out only by a specialist firm of electricians approved by the responsible electricity board in accordance with the norms.

Observe the technical connection regulations.

Before commissioning the washer, check that all electrical protection systems are working correctly.

Caution! The machine is only to be considered free from voltage when the mains disconnecting switch (mains switch) provided by the customer is switched off.

The electrician must take note of the following:

- The total connected load of the machine is stated on the rating plate.
- Safeguard the electrical connection of the machine with delayed-action fuses or automatic fuses in conformance with the total connected load (see rating plate). Do not use the machine to safeguard any other electric power consumers.
- As required by regulations, install a main or on-off switch, as well as an FI safety switch in the electrical supply line. All poles of this switch must respond when it is switched off and it must be at least 3 mm between contacts. It must be installed near the machine and be easily accessible.
- Connect the machine to your potential equalization system. The screw for this connection is located in the machine's base.
If you set up the machine on a supporting stand, the potential equalization system must be put between the machine and the stand.

Connecting cable

The connecting cable may only be changed or replaced by the manufacturer, its customer service representative or a similarly qualified person. Use an H07 RN-F type cable or equivalent.

Phase sequence of main power cable

Mains	1/N/~	2/-/~	3/N/~	3/-/~
No. of leads	3	3	5	4
PE	green-yellow	green-yellow	green-yellow	green-yellow
N	blue	-	blue	-
L1	brown	brown	grey	brown
L2	-	blue	brown	grey
L3	-	-	black	black

Final work:

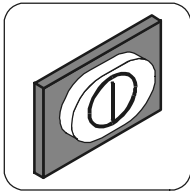
The machine must be entirely connected to the electrical power mains and the fresh water supply and waste water drain system. The electrical safety system must be tested and fully functional.

A Winterhalter customer service technical performs the initial start-up. In the process, the operator of the machine is instructed in how the machine works.

3.2 Initial start-up

After the machine has been connected to your supply lines according to regulations, contact the Winterhalter agent responsible for your locality in order to perform the initial start-up and be instructed in how to run the machine.

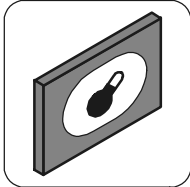
4 Operating and control elements



On/Off switch

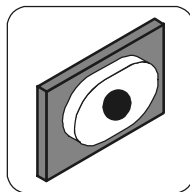
*Press On/Off switch: dishwasher is switched on.
Indicator lamp in On/Off switch lights up.*

*Press On/Off switch: dishwasher is switched off.
Indicator lamp in On/Off switch does not light up.*



Indicator lamp (can only light up with full tank)

*Indicator lamp illuminated: heating phase of tank.
Indicator lamp extinguished: heating phase completed.*

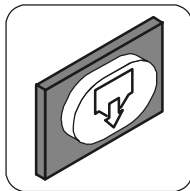


Programme switch

*Press programme switch: short programme.
Release programme switch: long programme.*

The indicator lamp in the programme switch lights up while the programme is in progress.

OPTIONAL FEATURE:



Pushbutton switch for drain pump

*Press switch: drain pump pumps out tank water (switch lights up)
Release switch: drain pump not in operation (switch does not light up.)*

5 Functioning of the dishwasher

After it is switched on, the dishwasher heats up the boiler. During this heating up phase, the tank is filled in batches with water and simultaneously heated up. The temperature indicator lamp lights up after filling of the tank is completed until the pre-set target temperature is reached. Then the indicator lamp goes out. It lights up repeatedly during the heating phases of the tank.

Once the tank has been filled completely, a wash cycle is started automatically to signal readiness for operation.

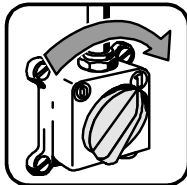
The dishwasher is fitted with an automatic hood start. When closing the hood, slight pressure has to be applied to overcome the hood catch position. The pre-set programme starts as soon as the lid has been closed.

The container for rinse additive is installed separately from the dishwasher. Dosage for the rinse additive is controlled automatically by the dishwasher.

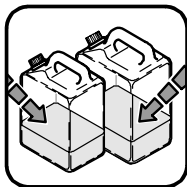
6 Preparation for washing



Open stop valve of water supply.



Switch on the mains disconnecting device (mains switch) provided by the customer.

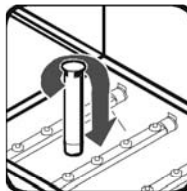


Check level in rinse additive container and detergent container (only with automatic detergent dosage).

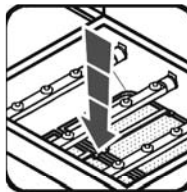
Replace or fill up empty containers.



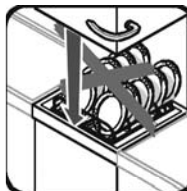
Observe safety instructions on packaging.



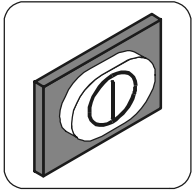
Screw standpipe into wash tank with slight turning movement.



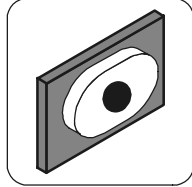
Check whether drainage filter, pump suction filter and surface strainers are installed.



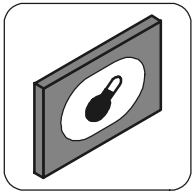
*Do not load dishes.
Close hood.*



Switch on dishwasher:
Press On/Off switch: dishwasher is switched on.
Indicator lamp in On/Off switch is illuminated.
Tank is filled by the boiler and heated up.



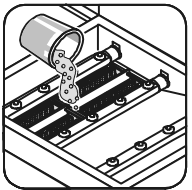
Once the tank is filled completely, a wash cycle is started automatically to signal readiness for operation.
The programme switch lights up.



Indicator lamp illuminated: heating phase.
Indicator lamp extinguished: heating phase completed.

● Detergent dosage

If the dishwasher is fitted with an external detergent dosage pump, there is no need for manual dosage. In this case, detergent dosage is carried out automatically by the dishwasher.
With an external detergent dosage pump, please observe the operating instructions belonging to it.



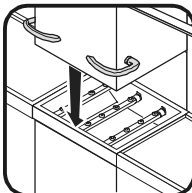
Manual detergent pre-dosage:
Pour detergent powder into surface strainer with cup.
Dosage: Approx. 120g



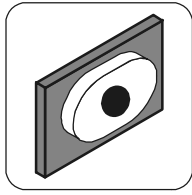
We recommend Winterhalter Gastronom detergent powder. Observe the Winterhalter Gastronom recommended dosage.



Observe safety instructions on the detergent packaging.



Close hood. Wash programme is started.



Programme switch illuminated: wash programme in progress.
Programme switch extinguished: wash programme completed.

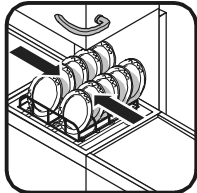


Manual addition of detergent:

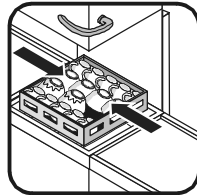
Manual addition of detergent powder must be repeated after approx. every 5 wash cycles. Pour 60g of detergent powder onto the surface strainer. Then start the wash programme.

7 Washing

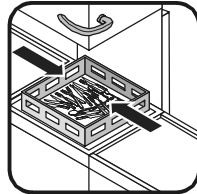
Pre-clean dishes (if necessary pre-wash with spraying nozzle), *place* in wash rack:



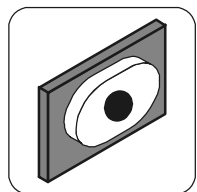
Upper surface of plate facing forward.



Cups and bowls, opening facing down.

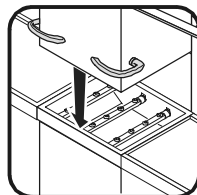


Insert cutlery in one layer only.

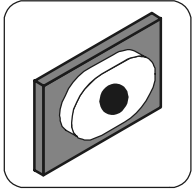


To select programme length:
Press programme switch: short programme
Release programme switch: long programme

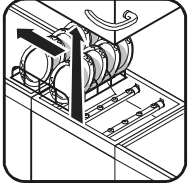
Note: The indicator lamp in the programme switch does not light up yet



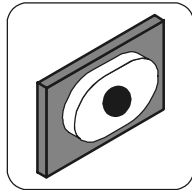
Close hood. The wash programme starts automatically.



Programme switch illuminated: wash programme in progress.
Programme switch extinguished: wash programme completed.



Open hood.
Remove rack



When the hood is opened, the programme switch lights up again briefly and the wash programme switches to standby.

As soon as the programme switch is extinguished again (after approx. 5 seconds), a new programme can be started.

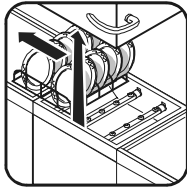


- The programme starts automatically when the lid is closed.
- Check surface strainers occasionally for contamination and clean if necessary.
- Check tank water for soiling. If necessary, drain and re-fill machine.

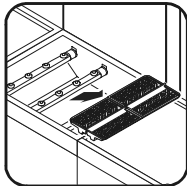
● Wash pause

Do not close hood completely but leave in the lower rest position, since on complete closure a wash programme is immediately triggered.

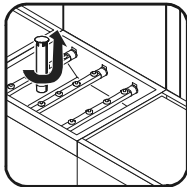
8 After washing



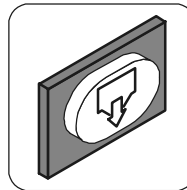
Open hood and remove wash rack.




Remove and clean surface strainers.



Remove standpipe, tank is drained.

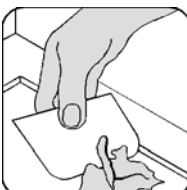


Note: If the dishwasher is fitted as an optional extra with a drain pump for pumping off the tank water, the switch  must be pressed after removing the standpipe.

The switch then lights up.
Pumping is ended by pressing the switch again.

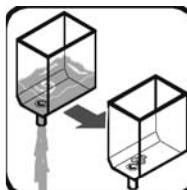


Spray inside of dishwasher and clean.




Check whether the interior has been cleaned completely.
Remove any remains with a soft scraper or a soft brush.

If necessary, spray the inside of the dishwasher again.



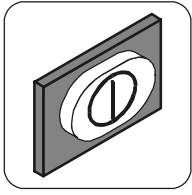
For machines with a drain pump, check whether tank has been completely drained.

If necessary, press the switch  again.

After draining, release the switch again.



Re-insert parts removed (standpipe, surface strainers, pump suction filter).



Switch off dishwasher.
Press On/Off switch: dishwasher is switched off.
Indicator lamp in On/Off switch is extinguished.



Close stop valve of water supply.

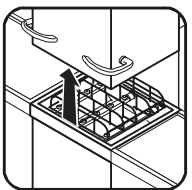


Switch off the mains disconnecting device (mains switch) provided by the customer.
Only now is the machine isolated.

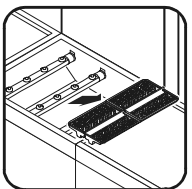


- Leave hood open. In this way the interior can dry out.
- Clean the outer walls of the dishwasher with cleaning products for high grade stainless steel. We recommend Winterhalter Gastronom high-grade stainless steel cleaner and Winterhalter Gastronom high-grade stainless steel protection.

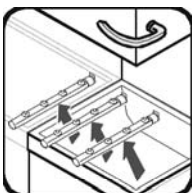
9 Maintenance and care



Open hood.



Remove and clean surface strainers.
Remove and clean pump suction filter.



Remove wash arms and check nozzles for blockages.



Re-insert parts removed.



Clean the outer walls of the dishwasher with cleaning products for high-grade stainless steel. We recommend Winterhalter Gastronom high-grade stainless steel cleaner and Winterhalter Gastronom high-grade steel protector.

Descaling

Drain machine.

Interrupt detergent supply: Remove suction pipe from the detergent canister.

Re-fill machine.

Addition of the descaling solution according to manufacturer's instructions.



Observe the printed safety instructions.

Start wash programme 3-5 times (max. 10 minutes circulation). This loosens the coating of scale.

Drain machine.



Never leave the descaling solution in the machine for a period of several hours.



Put detergent supply into operation again.

Re-fill machine.

Operate machine 3-5 times more.

Drain machine or use for the current wash programme.

10 Faults

Fault	Cause/Effect	Remedy
Appliance does not start up	Customer's main switch is not switched on	Switch on customer's main switch
Dishwasher does not fill up	Stop valve closed	Open stop valve
	 For machines with drain pump, switch is pressed and illuminated	Press switch. Indicator lamp must go out.
Wash programme does not start	Hood is not completely closed	Close hood completely. Press hood over hood catch
	Programme not on standby	 Open hood again briefly until indicator lamp in programme switch is extinguished
Items are not clean	Too low dosage of detergent or detergent container empty	Top up detergent container or add detergent powder
	Surface strainer blocked	Clean surface strainer
	Wash nozzles in the wash arms blocked	Clean wash nozzles
	Functional fault in the water treatment	Call Winterhalter customer service

11 Emission values

Noise emission values

Workplace related emission value measured according to DIN EN ISO 11202: $L_{pAeq} < 70\text{dB}$