

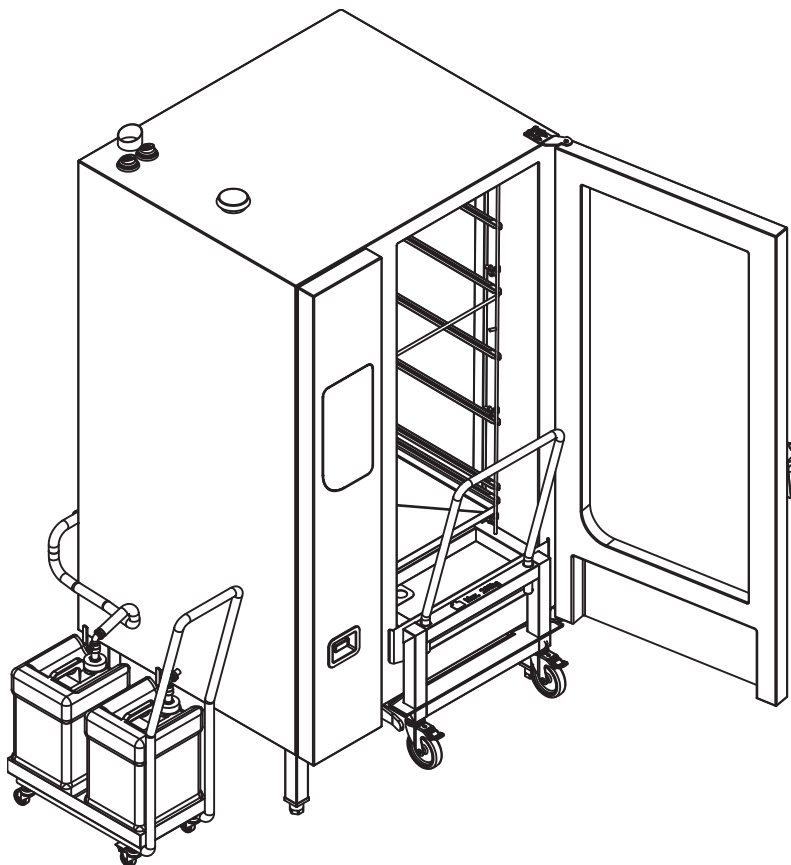


HENNY PENNY®
Engineered to Last



Read the Operating instructions before starting maintenance

FlexFusion® GAS PLATINUM COMBI incl. grease collection



FM08-901A • 2/3/2023

FM08-901A

en-US

Maintenance instructions

Model

FPG-221

Manufacturer

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1 Introduction

1.1 About this manual

The maintenance instructions contain information:

- About the safe maintenance of the unit.

Observe the following notes and adhere to them:

- Read the maintenance instructions completely before starting maintenance.
- Read the Operating instructions before operating the unit.

Target group The target group for the maintenance instructions is trained specialist personnel who are entrusted with the service, maintenance and operation of the unit.

Figures All figures in this manual are intended as examples. Discrepancies can arise between this and the actual unit.

Part replacement The customer is informed about the need to replace parts and his consent is obtained. Only original spare parts are used.

1.2 Personnel qualification

Explanation of qualification

Skilled personnel	• A skilled person is someone who, on the basis of their technical training, knowledge and experience as well as familiarity with the applicable standards, can assess the assigned work and recognize possible dangers.
Expert	• An expert is a person, who has sufficient professional knowledge on the basis of his training and experience, and who is sufficiently familiar with the relevant regulations, guidelines and rules covering the particular technology, that he can assess the safe operating condition of the system. • The person must be named in writing by the specialist company concerned, and the remit of his authorized tasks must also be stated.

Type of activity	Qualification
Electrical connection	• Electrician • Specialized training • Employee of the responsible technical company
Gas connection	• Gas expert • Specialized training • Employee, who is named in writing, of the specialist company concerned

2 Maintenance intervals

2.1 Required maintenance

The manufacturer does not prescribe any mandatory maintenance of the unit.

2.2 Recommended maintenance

The manufacturer recommends maintenance of the unit in accordance with the following table.

After 12 months, after 6 months under heavy workload (more than 12 hours per day)

- | |
|---|
| <ul style="list-style-type: none">• Overall state of the unit• Operating unit• Power supply• Electrical components• Water connection• Waste water connection |
|---|

3 Notes on safety

The maintenance personnel must be familiar with regional regulations and observe them.

The maintenance personnel must observe the safety information in these maintenance instructions.

The maintenance personnel must also observe the "Safety information" chapter in the installation instructions and operating instructions of the unit.

Organizational measures Risk of property damage and personal injury from lack of organizational measures

- Inform the operators present prior to starting the maintenance work.
- Discuss how to respond to an emergency prior to starting the maintenance work.
- Use equipment and protective gear suitable for the activity.

Electrical connection Danger of electric shock from live components.

- Prior to working on the electrical system, switch off the unit, disconnect the electrical system from the mains and prevent power from being switched on again. Check to ensure the system is dead.
- Use only insulated tools.
- Do not put a unit with damaged operating elements into service.

Gas connection Risk of explosion and fire from improper connection

- Observe applicable regional regulations of the gas utility.
- Ensure that only a tradesman licensed by the gas supplier connects the unit to the gas supply.
- Prior to working on the gas system, switch off the unit, close the gas supply from the gas system and secure it against being reopened. When bleeding air or degassing, ensure that the air and gas are discharged to the outside in a technically correct manner and without creating a risk.
- Observe the information on the nameplate and *Gas type* additional shield.
- Check for leaks.
- When working on the gas system and units in buildings, ensure that a hazardous gas-air mixture cannot form in the rooms.

Risk of poisoning from exhaust gases

- Ensure that exhaust gases are discharged properly and that the necessary amount of combustion air is supplied.

- Ensure that a maximum CO content of < 0.1 vol. % or < 1000 ppm is achieved in undiluted exhaust gas.

Risk of fire from combustion gases and hot surfaces

- Install the unit such that there is no contact with combustible surfaces.
- Maintain an adequate distance from grease filters on ventilation systems.

Improper maintenance Risk of physical damage and personal injury from improper maintenance

- Service the unit only as specified in these maintenance instructions.
- Use only original spare parts.

Concluding activities Risk of damage to property and personal injury from improper connections

- Reactivate all safety devices and check that they function properly.

4 Description of unit

4.1 Flexi Fusion device overview

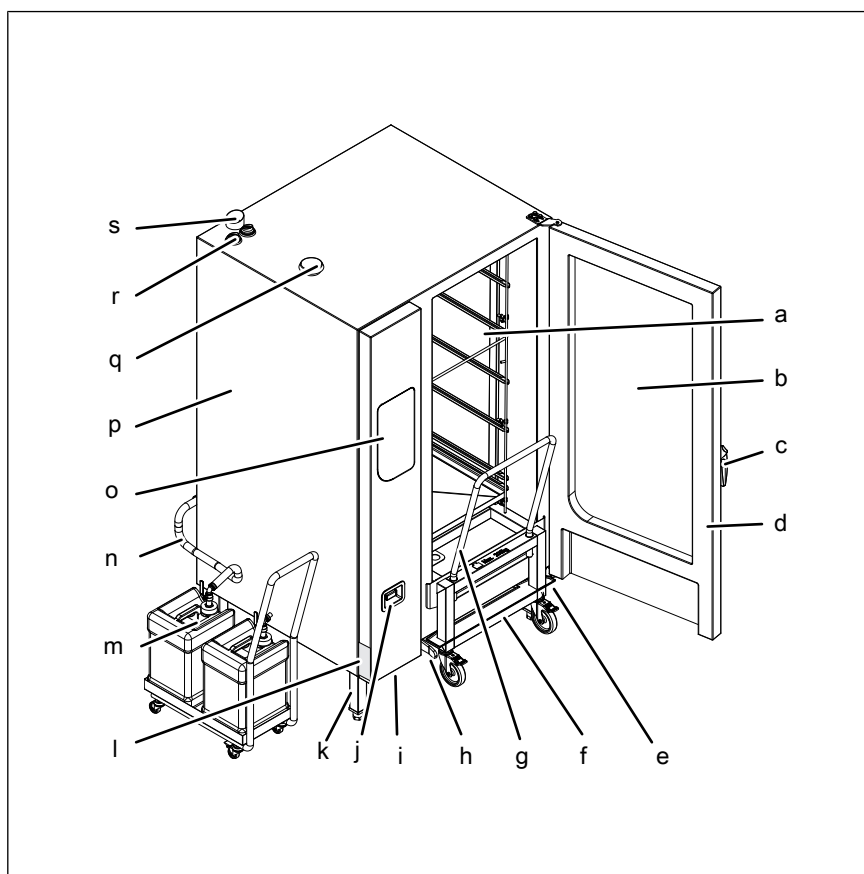


Image: Device with horde car and Grease Collection

- | | | | |
|---|----------------------|---|----------------------|
| a | Tray rack | k | Unit leg |
| b | Insulating disk | l | Nameplate |
| c | Door handle | m | Grease trap |
| d | Cooking chamber door | n | Grease drain hose |
| e | Guide rail (right) | o | Operating unit |
| f | Tray trolley | p | Housing |
| g | Handle bar | q | Air inlet nozzle |
| h | Guide rail (left) | r | Waste gas connection |
| i | USB port (covered) | t | Steam outlet nozzle |
| j | hand shower | | |

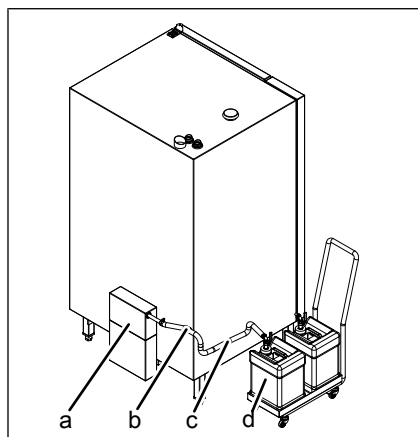


Image: Rear of device

- | | | | |
|---|-------------------|---|-------------------|
| a | Grease pump cover | c | Grease drain hose |
| b | Guide sleeve | d | Grease trap |

4.1.1 Tray trolley

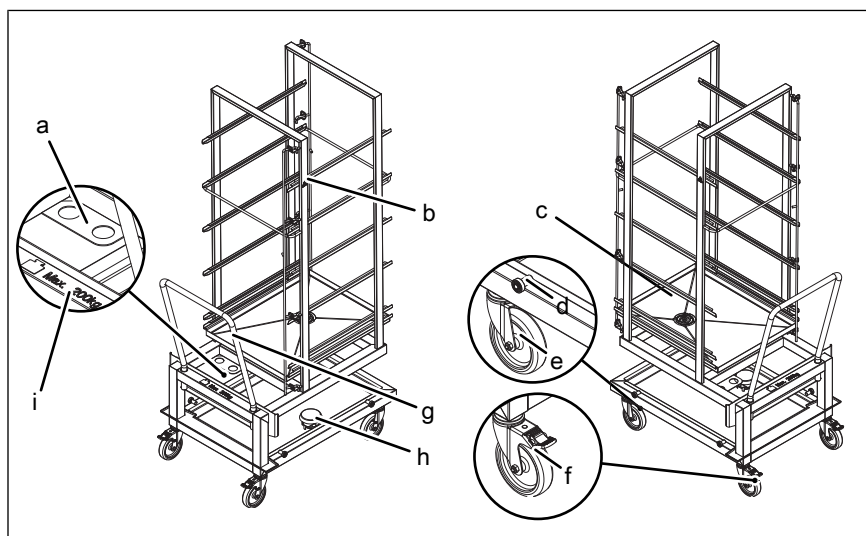


Image: Tray trolley with retraction system *EasyIn*

- | | | | |
|---|--|---|-------------------|
| a | Holder cleaning cartridge | f | Roller with brake |
| b | Slide-in frame (tray rack) | g | Handle bar |
| c | Grease guide plate | h | Tub with drain |
| d | Sliding roller (ball bearing) right/left | i | Warning |
| e | Roller | | |

4.1.2 Cooking chamber

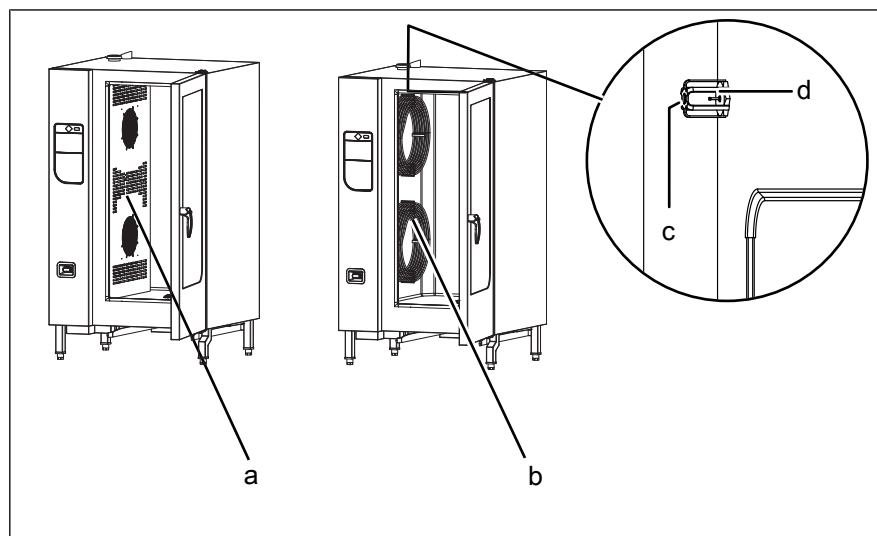


Image: Cooking chamber

- | | |
|-------------------|---------------------------|
| a Air diverter | c Cooking chamber sensors |
| b Heating element | d Protective basket |

The two cooking chamber sensors are located on the rear right inner side in the cooking chamber.

4.1.3 Air inlet

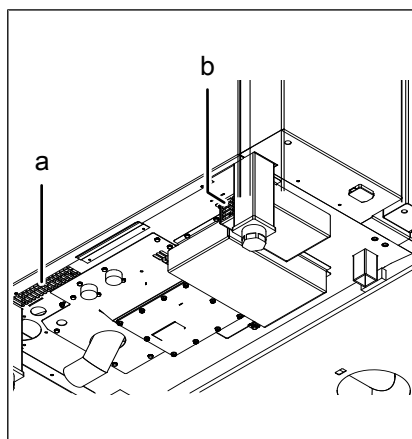


Image: Supply air openings

- | |
|----------------------|
| a Ventilation grille |
| b Ventilation shaft |

4.1.4 Gas screens

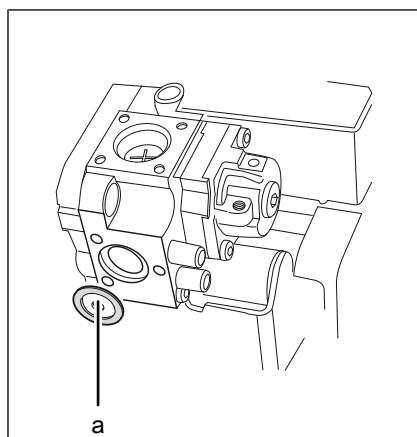


Image: Gas fitting with gas orifice

a Gas orifice with seal

4.2 Unit and connection data

Unit size	215	221
Emissions		
Noise level (db(A))	< 70	
Steam output (g/h (oz/h))	8400 (296,3)	16140 (569,31)
Steam output (m³/h (cuft/h))	14,2 (501,1)	27,4 (966,9)
Latent heat loss (W)	5706	10962
Sensible heat loss (W)	4755	9135
Operating environment		
Temperature (°C (°F))	5 (41) — 40 (104)	
Relative humidity (%) non-condensing	95	
Cooking chamber light		
Illuminant	Halogen oven lamp 20 W 12 V G4	
Energy efficiency class	C	
Electrical connection		
Protective system	IPX5	
Type of connection	1NPE / AC 50/60 Hz	
Voltage (V)	120	
Connected load (kW)	1.0	
Recommended fuse (A)	16	
Type of connection	1NPE / AC 50/60 Hz, 2PE / AC 50/60 Hz	
Softened drinking water connection		
Water type	Softened drinking water, cold	
Residual hardness CaCO ₃ (mmol/l (ppm))	< 1 (100 ppm)	

Unit size	215	221
Chloride Cl (mg/l)	< 100	
Iron Fe (mg/l)	< 0.2	
Connection pressure (kPa (psi))	200 (29) — 600 (87)	
Connection size (")	R 3/4	
Drinking water connection		
Water type	Drinking water, cold	
Carbonate hardness CaCO ₃ (mmol/l (ppm))	< 4 (400 ppm)	
Connection pressure (kPa (psi))	200 (29) — 600 (87)	
Connection size (")	R 3/4	
Water consumption, steaming		
Softened drinking water (l/h (gal/h))	36 (9,51)	48 (12,68)
Water consumption, combisteaming		
Softened drinking water (l/h (gal/h))	8 (2,11)	10,6 (2,8)
Water consumption, WaveClean cleaning program		
Softened drinking water (l (gal))	3 l (0,79)	
Drinking water (l (gal))	32 l (8,45)	
Waste water connection		
Waste water type	Dirty water, maximum 80 °C (176 °F)	
Dimension (mm (in))	50 (1,97)	
Maximum length (m (ft))	1 (3,3) with downward slope of at least 5% or 3°	
Temperature resistance (°C (°F))	95 (203)	
Maximum flow rate (l/min (gal/min))	10 (2,64)	
Exhaust air connection		
Dimension (mm (in))	73 (2,87)	73 (2,87)
Maximum length (m (ft))	2,5 (8,2)	
Temperature resistance (°C (°F))	180 (356)	
Gas connection		
Rated heat input (kW)	36	52
Gas type	The gas type, for which the unit is set, is indicated on the gas type supplemental label.	
Connection dimension in accordance with EN10226-1 (")	R 3/4	
Dimension (only US version) (")	3/4 NPT	
Connection pressure (hPa (lbf/sqft)) Natural gas 2H, 2E, 2L, 2LL *	20 (41,8)	

Description of unit

Unit size	215	221
Connection pressure (hPa (lbf/sqft)) Liquid gas 3B/P, 3P *	50 (104,4)	
Natural gas E/H, G20 (m³/h (cuft/h)) **	3,74 (132)	5,4 (190,6)
Liquefied gas P G31 (kg/h (lb/h))	2,8 (6,17)	4,04 (8,91)
Combustion air (m³/h (cuft/h)) **	45 (1587,9)	65 (2293,7)
Supply air and exhaust gas routing		
required conveying pressure B _{13BS} (Pa)	0 — 5	
Exhaust gas temperature B _{13BS} (°C (°F))	205 (401)	250 (482)
Exhaust gas mass flow B _{13BS} (kg/h (lb/h))	99 (218,3)	142 (313,11)
Dimension (mm (in))	155 (6,1) x 1 (0,04)	155 (6,1) x 1 (0,04)
* Information is country-specific and applies in Germany; for further information, see "Checking the connection pressure"		
** Data valid at 15 °C (59 °F) and 1013,25 hPa (2115,34 lbf/sqft)		

Transformer voltage

Type of connection	1NPE / AC 50/60 Hz			
Voltage range (V)	100 — 120			
Transformer	T1		T2 / T3	
Wire identification or color	blue	red	blue	red
Voltage measured (V)	Voltage at transformer (V)			
90 — 100	0	110	-20	120
101 — 110	0	110	0	120
111 — 120	0	120	0	120

Gas connection pressure

Gas type	Dynamic pressure (inch WC (mbar))	Dynamic pressure range (inch WC (mbar))
Natural gas A	8 (20)	6.8 - 10 (17 - 25)
LP Gas B/P gas E	12 (30)	17 - 23 (42.5 - 57.5)

Gas blower speed

Unit size	Gas blower speed (rpm)	
	High output (High)	Low output (Low)
221	6700	2800

Exhaust gas values

Gas type	CO ₂ at high power (high)	CO ₂ at low power (low)	CO (ppm) range	CO (ppm) optimal
Natural gas	8.6 — 9.6 %	0.5 - 1.2% lower than at high setting	0 — 1000	< 100
Liquefied petroleum gas (LP)	10.0 — 11.0 %			

Gas orifice size, natural gas

	E/H	LL/L	L	K	13A	Gas A	NGN, NG174
Test gas	G20	G25	G25	G25.3	G21	G20	G20,
Wobbe index (kWh/m ³)*	15.0	12.4	12.4	12.5	16.1	15.0	15.0
Range Wobbe index (kWh/m ³)*	12.0 — 16.1	10.1 — 13.1	11.5 — 13.1	12.7 — 13.3	14.5 — 16.3	12.0 — 16.1	12.0 — 16.1
Connection pressure (hPa (lbf/sqft))	20 (41,8)	20 (41,8)	25 (52,2)	25 (52,2)	20 (41,8)	20 (41,8)	20 (41,8)
Primary air gap (mm (in))	30 (1,18) — 50 (1,97)						
CO content (ppm) ***	< 1000 (optimum < 100)						
Unit size	Aperture size (1/100 (mm (in)))						
215	565 (22,24)	650 (25,59)	650 (25,59)	650 (25,59)	N/A**	590 (23,23)	565 (22,24)
221	565 (22,24)	640 (25,2)	640 (25,2)	640 (25,2)	N/A**	580 (22,83)	565 (22,24)
* upper Wobbe index, data apply at 0 °C (32 °F) and 1013,25 hPa (2115,34 lbf/sqft)							
** For information on manually setting the rated heat input, (see "Adjusting the basic gas setting").							
*** in undiluted exhaust gas							

Gas orifice size, liquefied gas

	B/P	B/P	P	LP gas B/P	LP gas B/P gas E	LP gas B/P FL50, BP29, PX275
Test gas	G30/G31	G30/G31	G31	G30/G31	G30/G31	G30/G31,
Wobbe index (kWh/m ³)*	25.7 / 22.5	25.7 / 22.5	22.5	23.5	25.7 / 22.5	25.7 / 22.5
Range Wobbe index (kWh/m ³)*	21.4 — 25.7	21.4 — 25.7	21.4 — 22.5	21.4 — 25.7	21.4 — 25.7	21.4 — 25.7
Connection pressure (hPa (lbf/sqft))	50 (104,4)	30 (62,6)	37 (77,2)	28 (58,5)	30 (62,6)	50 (104,4)
Primary air gap (mm (in))	30 (1,18) — 50 (1,97)					
CO content (ppm)**	< 1000 (optimum < 100)					
Unit size	Aperture size (1/100 (mm (in)))					
215	420 (16,54)	420 (16,54)	420 (16,54)	420 (16,54)	420 (16,54)	420 (16,54)
221	400 (15,75)	400 (15,75)	400 (15,75)	400 (15,75)	400 (15,75)	400 (15,75)

Description of unit

	B/P	B/P	P	LP gas B/P	LP gas B/P gas E	LP gas B/P FL50, BP29, PX275
* upper Wobbe index, data apply at 0 °C (32 °F) and 1013,25 hPa (2115,34 lbf/sqft)						
** in undiluted exhaust gas						

5 Special tools, testing and measuring equipment

The following tools and measuring instruments are needed for maintenance:

- Pressure gauge, measuring accuracy at least 0.1 mbar
- Exhaust gas measuring device
- Exchange mirror
- Voltmeter
- Clamp-on ammeter
- Hex key, size 5
- Spirit level
- Personal protective equipment
- Measuring cup with scale, capacity approx. 1 litre

6 Entering the order data and nameplate information

Order data	
Date:	
Name and location of customer:	
Company performing the work:	
Order number:	

The nameplate contains all important data and information about the present unit.

It is attached to the outside of the unit's housing. A second nameplate is located inside the unit behind the operating panel.

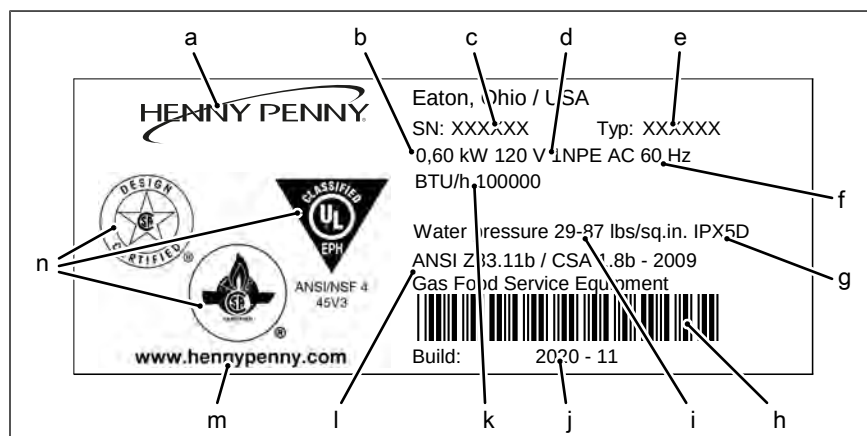


Image: Nameplate data

- | | |
|-----------------------------|---------------------------------|
| a Manufacturer | h Barcode |
| b Electrical connected load | i Connection pressure for water |
| c Serial number | j Year of manufacture |
| d Type of connection | k Gas connection value |
| e Type number | l Test criteria |
| f Frequency | m Manufacturer's web address |
| g Protective system | n Certificate |

Checking the nameplate				
Test criteria		Remarks / values	Yes	No
- Present. - Legible.			☐	☐
In case of no. Check if the nameplate is present inside the device. Nameplate not legible or not present: Do not carry out any further work and contact customer service.				

Entering the order data and nameplate information

General information	Yes	No
Enter serial number (c) SN: _____		

General information	Yes	No
Enter the data of the type plate SN: _____ Type: _____ Heat load (calorific value): _____ Electrical connection: _____ Item no.: _____ (if available)		

7 Opening and closing the housing

DANGER

Risk of personal injury and property damage from electric shock

- Before working on the unit, ensure that the unit is dead.
- Do not operate the unit with the housing open.

CAUTION

Risk of injury from sharp edges

- Wear protective gloves.

NOTICE

Risk of property damage from damage to the lines

- Remove and attach housing components carefully.

7.1 Removing and attaching the side wall

7.1.1 Removing the side wall

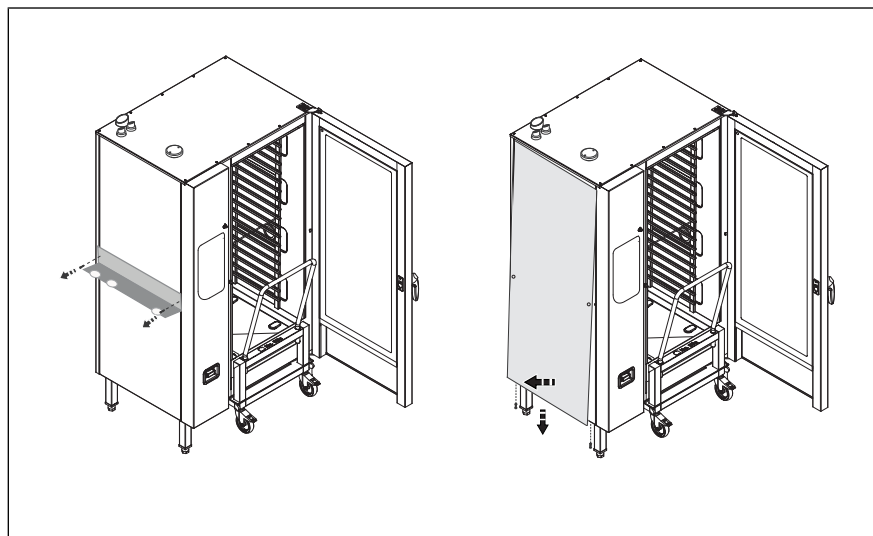


Image: Removing the side wall

1. Unscrew the screws on the holder.
2. Remove holder.
3. Unscrew the screws at the bottom of the side panel.
4. Pull the bottom edge of the side wall forwards.
5. Remove the side wall.

7.1.2 Attaching the side wall

NOTICE

Risk of property damage from leaky housing

- Check seals when attaching the housing parts.

- Replace damaged seals.

1. Insert top edge of side wall.
2. Carefully push the bottom of the side wall inward.
3. Secure the bottom of the side panel with screws.
4. Check that the side wall is in contact with the unit on all sides.

7.2 Opening and closing the control panel

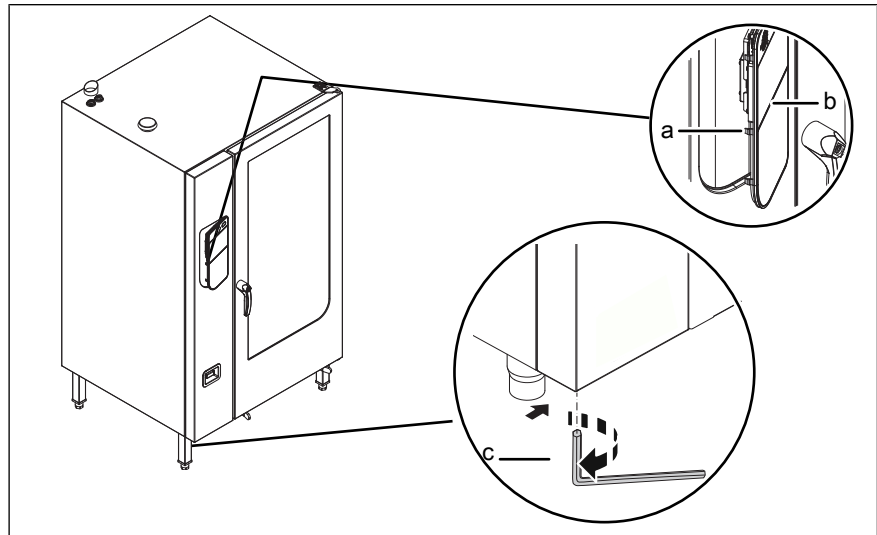


Image: Opening the control panel

- a Lock (cam)
c Hex key

- b Operating panel

7.2.1 Opening the control panel

1. Insert hex key into screw and turn clockwise.
 - ↳ The operating panel is now unlocked.
 - ↳ The operating panel pops up automatically.
2. Withdraw the hex key.

7.2.2 Closing the control panel

1. Press and hold operating panel on the left.
 - ↳ Repeat as many times as necessary.
 - ↳ The operating panel snaps in audibly.
- ↳ The operating panel is secured against unauthorized opening.

8 Performing maintenance

DANGER

Risk of personal injury and property damage from electric shock

- Inspection and adjustment work that can be carried out only with the housing open and the unit under power must be performed only by electrically trained qualified personnel.

Overview and order of tasks
Prerequisite: Unit cooled down, drained and voltage-free
1. Check availability of the instructions.
2. Inquire about complaints from the operator.
3. Check underframe.
4. Check the overall state of the unit.
5. Check tray trolley.
6. Align tray trolley.
7. Check housing.
8. Check the cooking chamber.
9. Check cooking chamber door.
10. Check water connection.
11. Check the piping.
12. Check the flexible conduit.
13. Check water filter.
14. Check wastewater connection.
15. Check components.
16. Check optional features.
17. Check software.
18. Check operating panel.
19. Check the condition of the electrical components in the unit.
20. Check power supply.
21. Check the controller.
22. Perform safety inspection to DGUV V3.
23. Restore the unit to operability.
24. Document the result of the maintenance.

8.1 Complaints from the operator

Has the operator noticed unacceptable situations during operation?			
Were they traced on the unit?			
Complaint	Remarks / values	Yes	No
		☐	☐
		☐	☐
		☐	☐

8.2 Checking the overall state of the unit

8.2.1 Operating panel

Check operating panel		Yes	No
Test criteria	Remarks / values	Yes	No
Operating panel is closed and fully engaged.		☐	☐
If No Check whether the operating panel closes properly.			
At No with ServiceKit repair.			

8.2.2 Supply air supply cooking chamber

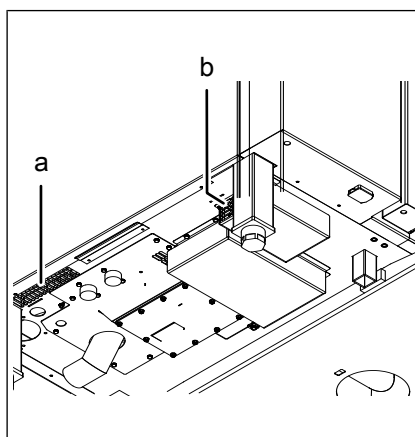


Image: Supply air openings

- a Ventilation grille
- b Ventilation shaft

Performing maintenance

Check the air supply to the cooking chamber			
Test criteria	Remarks / values	Yes	No
Supply air opening is free (air flow is not restricted or obstructed).		☐	☐

Action
Clean the supply air opening.

8.2.3 Supply air electronics

Check the supply air to the electronics			
Test criteria	Remarks / values	Yes	No
Supply air opening is free (air flow is not restricted or obstructed).		☐	☐

Action
Clean the supply air opening.

8.3 Check all existing tray trolleys

Check external damage to the tray trolley with drive-in system			
Test criteria	Remarks / values	Yes	No
- Tray trolley appears OK externally. - Handle bar is present and the function is given. - Safety information is legible and without contamination. - Ball bearings are externally in order. - Ball bearings are easy to move. - Rollers are externally in order. - Rollers are firmly screwed on. - Rollers are easy to move.		☐	☐

If No Clean the tray trolley and make the safety information legible.
If no Change ball bearing.
If No Change the roller.

Check alignment of the tray trolley with retraction system			
Test criteria	Remarks / values	Yes	No
- The tray trolley stands horizontally and securely on its rollers. - Tray trolley is aligned. - Floor unevenness of up to 10 mm is compensated. - Safe entry and exit of the tray trolley is guaranteed.		☐	☐

Align with No horde car.

8.3.1 Align combi steamer

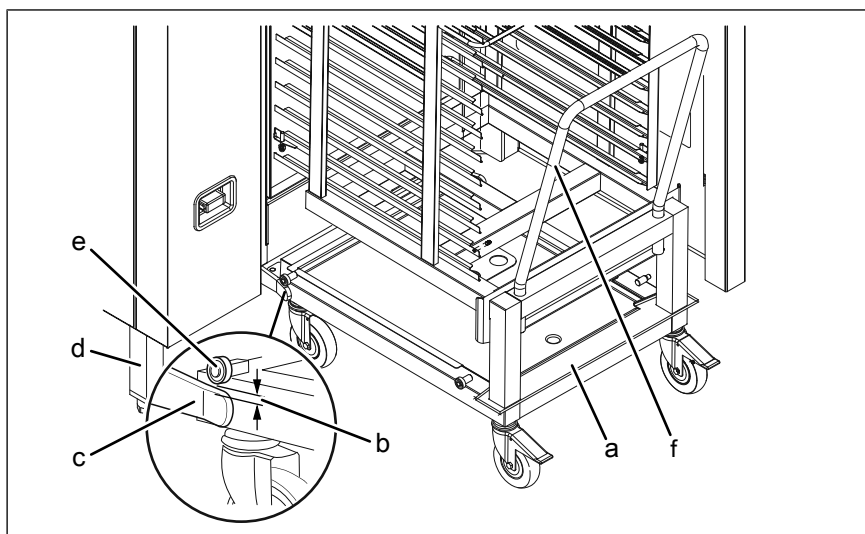


Image: Aligning tray trolley with insertion system

- | | |
|----------------|------------------|
| a Tray trolley | d Unit leg |
| b Distance | e Support roller |
| c Guide rail | f Handle bar |

1. Level the unit by screwing the equipment legs in or out.
2. Open the cooking chamber door.
3. Place the tray trolley against the guide rails.
4. Screw the unit legs in or out until the support rollers 1 mm (0,04 in) - 5 mm (0,2 in) are above the support rails.
5. Retract the tray trolley.
6. Level the guide rails.
7. Move tray trolley into the unit until it stops and check the alignment.
 - ↳ The support rollers of the inserted tray trolley no longer have floor contact.
8. Remove the push handle.
9. Close the cooking zone door.

8.4 Check housing

Check hand shower			
Test criteria	Remarks / values	Yes	No
- Hand shower is tight. - Hand shower works perfectly. - undamaged.		☐	☐
If No Check hose reel.			
If No Change hand shower.			

Performing maintenance

Check hose reel and hose			
Test criteria	Remarks / values	Yes	No
- Hose rolls in without problems and is easy to unroll. - Hose is free of cracks. - Hose reel works perfectly.		☐	☐
If No Inform operator that customer service must repair the unit.			

Check USB port cover			
Test criteria	Remarks / values	Yes	No
- Cover is without damage. - Function of closing the cover is given.		☐	☐
If No Replace cover.			

Check steam outlet nozzle			
Test criteria	Remarks / values	Yes	No
Steam outlet nozzle is free of deposits.		☐	☐

Action
Clean the steam outlet nozzle.

8.4.1 Cleaning the steam outlet

NOTICE

Risk of property damage from deposits

- Inspect the steam outlet nozzle and connected piping for deposits.

INFORMATION

Use a liquid cleaner containing at most 20% sodium or potassium hydroxide.

Rinsing with water is not necessary.

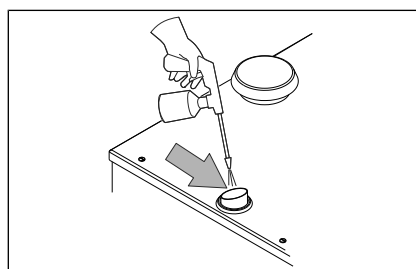


Image: Cleaning the steam outlet

- Examine steam outlet nozzles (exhaust pipe) for deposits with a flashlight.
- Also check connected pipelines for deposits.

3. Clean unit with spray bottle and liquid cleaner. Spray the liquid cleaner completely into the steam outlet nozzle using a spray bottle and allow it to take effect.
↳ Rinsing with water is not necessary.
4. Wipe the steam outlet nozzle dry.

8.5 Check cooking chamber

8.5.1 Cooking chamber

Check the cooking chamber for contamination			
Test criteria	Remarks / values	Yes	No
• Cooking chamber is clean.		☐	☐
If No Inform the operator, because the proper function of the unit cannot be reliably checked and guaranteed due to the contamination.			

Check the cooking chamber for limescale residues			
Test criteria	Remarks / values	Yes	No
• Cooking chamber is free of limescale residues.		☐	☐
If No Decalcify unit and check on-site softening system. Check water quality.			

Check drain screen			
Test criteria	Remarks / values	Yes	No
• Drain screen is present and screwed to the drain?		☐	☐
If no, mount drain screen.			

NOTICE

Material damage due to missing drain screen

- Operating the device without drain screen may cause damage to the device.
- Only operate the device with the drain screen screwed on.

8.5.2 Lighting

Check the lighting of the cooking chamber			
Test criteria	Remarks / values	Yes	No
• Lighting cooking chamber works. • Glass cover of the lamp is clean.		☐	☐
If No Replace bulb.			
If No Clean glass.			

8.5.3 Internal core temperature sensor

Check internal core temperature sensor for damage			
Test criteria	Remarks / values	Yes	No
• Core temperature sensor is not bent or damaged.		☐	☐
If No Change core temperature sensor.			

8.5.4 Cooking chamber sensor and protective basket

CAUTION

Fire hazard due to overheating of the unit

Deposits can falsify the measurement result of the temperature sensor and cooking results can deviate from the ideal.

- Only operate unit with a clean temperature sensor.
- Clean the temperature sensor and the protective basket.

⇒ If cleaning does not produce the desired result or is not feasible, the temperature sensor must be replaced.

Check the cooking chamber sensor and protective basket for contamination			
Test criteria	Remarks / values	Yes	No
• Protective basket is not dirty or calcified. • Cooking chamber sensor is not dirty or calcified.		☐	☐
If No Clean the cooking chamber sensor and protective basket.			

Check cooking chamber sensor and protective basket for damage			
Test criteria	Remarks / values	Yes	No
• Protective basket is not bent or damaged. • Cooking chamber sensor is not damaged. • The cooking chamber sensor is bent slightly upwards.		☐	☐
If No Replace protective basket. Replace cooking chamber sensor.			

8.5.5 Fan wheel, heating element and water inlet

Check heating element and fan wheel for limescale residues			
Test criteria	Remarks / values	Yes	No
• Heating element is free of limescale residues. • Fan wheel is free of limescale residues.		☐	☐
If No Decalcify the unit.			

Check water inlet for limescale residues			
Test criteria	Remarks / values	Yes	No
Water inlet is free of limescale residues.		☐	☐
If No Decalcify or replace water inlet pipe.			

8.6 Check oven door

Check external damage to cooking chamber door			
Test criteria	Remarks / values	Yes	No
- Window is fine (no cracks). - Window is properly glued.		☐	☐
If no Inform the operator.			
If No Manufacturer's recommendation: Change oven door.			

Check the seal on the cooking chamber			
Test criteria	Remarks / values	Yes	No
Seal is OK (no cracks or other severe deformations).		☐	☐
If no Replace seal.			

Check the profile seal on the tray trolley			
Test criteria	Remarks / values	Yes	No
Seal is OK (no cracks or other severe deformations).		☐	☐
If no Replace seal.			

8.6.1 Check Preheat strip

Action
- Push the tray trolley into the cooking chamber. - Close the cooking zone door.

Preaheat strip check			
Test criteria	Remarks / values	Yes	No
Preheat strip is operated by the tray trolley.		☐	☐

Action
Open the cooking chamber door.

Performing maintenance

Preaheat strip check			
Test criteria	Remarks / values	Yes	No
Preheat strip does not jam and springs back to the starting position.		☐	☐
If no Clean area of preheat strip. Remains the fault - Preaheat strip change.			

8.6.2 Door latch

Check the door latch on the inside of the cooking chamber door			
Test criteria	Remarks / values	Yes	No
Cover cap is not damaged.		☐	☐
If No Replace cover cap.			

Check the door latch on the inside of the cooking chamber door			
Test criteria	Remarks / values	Yes	No
Door latch is firmly screwed to the door.		☐	☐
If No Tighten screws and secure with suitable adhesive e.g. Loctide®. Add missing screws and secure them as well.			

Check the function of the interlock			
Test criteria	Remarks / values	Yes	No
Lock must be actuated (locking and unlocking).		☐	☐
If No Change door latch.			

8.7 Check water connection

What type of water softening is present?			
Test criteria	Remarks / values	Yes	No
- Water filter available. - Replacement date of the water filter?		☐	☐
On-site water softening system available.		☐	☐

Checking the flexible conduit on the unit			
Test criteria	Remarks / values	Yes	No
Flexible conduit is tight (no deposits or corrosion).		☐	☐

Checking the flexible conduit on the unit				
Test criteria		Remarks / values	Yes	No
If No Change flexible conduit.				

8.8 Check gas connection

Check gas connection line				
Test criteria		Remarks / values	Yes	No
- No damage, no creases. - Firm fit. - no unacceptable heating.			☐	☐
In case of no. Inform the operator: The device must not be operated in a defective condition. Do not carry out any further work. Commission or plan repair work.				

Check gas type				
Test criteria		Remarks / values	Yes	No
Existing gas type matches the device setting.			☐	☐
In case of no. Existing gas type does not match the gas type to which the device is set. Inform operator: Do not carry out any further work. The unit must be switched to the correct gas type.				

Checking the supply air and exhaust gas routing				
Test criteria		Remarks / values	Yes	No
Supply air and exhaust gas ducting available.			☐	☐

8.9 Check flexible conduits

Check the flexible conduit in the unit				
Test criteria		Remarks / values	Yes	No
Clamps are screwed on tightly.			☐	☐
If No Tighten bolts or replace clamp.				

Check tightness				
Test criteria		Remarks / values	Yes	No
- Hoses or flexible conduits are dry. - No traces of moisture or corrosion visible.			☐	☐
If No Change hose. If replacement is not possible immediately, take the unit out of service.				

8.10 Check waste water connection

Check the waste water connection on the unit			
Test criteria	Remarks / values	Yes	No
On-site waste water connection to the unit is tight (no deposits or corrosion).		☐	☐
If No Repair wastewater connection.			

8.11 Checking the condition of the electrical components



Risk of personal injury and property damage from electric shock

- Before working on the unit, ensure that the unit has been disconnected from the power supply.

Action
- Disconnect unit from power. - Open side panel (see "Opening and closing the housing").

Check the unit for water residues			
Test criteria	Remarks / values	Yes	No
Unit is free of moisture and water residues.		☐	☐
If No Determine cause of moisture or water residue. Stop cause. If cause cannot be stopped immediately, take unit out of operation.			

Check control board cable			
Test criteria	Remarks / values	Yes	No
- Wire insulation is undamaged (not brittle, swollen or scorched). - Connection wires appear OK externally (not damaged or scorched).		☐	☐

Check contactor of the control board			
Test criteria	Remarks / values	Yes	No
- Contactor is externally OK (not brittle, damaged or charred). - Screw connections are tight.		☐	☐

Inspecting the permanent connection for visible damage			
Test criteria	Remarks / values	Yes	No
- Electrical connection line is installed correctly. - Wire insulation is undamaged (not brittle or scorched).		☐	☐

Check USB connector for visible damage			
Test criteria	Remarks / values	Yes	No
Conductor insulation is undamaged (not brittle).		☐	☐

Action			
Close the control panel (see "Opening and closing the control panel").			

8.12 Check components

Checking fan			
Test criteria	Remarks / values	Yes	No
Both fans work perfectly when the cooking process is active.		☐	☐
If No Troubleshooting according to service manual.			

Check lift magnet air inlet flap			
Test criteria	Remarks / values	Yes	No
Lift magnet works perfectly.		☐	☐
If No Troubleshooting according to service manual. Inform operator.			

Check the steaming unit (see service level)			
Test criteria	Remarks / values	Yes	No
Humidification unit works perfectly.		☐	☐
- Water volume measured in the DynaSteam test indicated. - Unit in "ml" or "fl oz".		☐	☐
If No Troubleshooting according to service manual.			

Check solenoid valve vapour release (service level / relay test)			
Test criteria	Remarks / values	Yes	No
Solenoid valve works perfectly.		☐	☐

Performing maintenance

Check solenoid valve vapour release (service level / relay test)			
Test criteria	Remarks / values	Yes	No
If No Troubleshooting according to service manual. Inform operator.			

Check siphon pump (service level / relay test)			
Test criteria	Remarks / values	Yes	No
• Siphon pump works perfectly.		☐	☐
If No Troubleshooting according to service manual. Inform operator.			

Check pump circulation (service level / relay test)			
Test criteria	Remarks / values	Yes	No
• Pump circulation works properly.		☐	☐
If No Troubleshooting according to service manual. Inform operator.			

Check motor cooking chamber for noise			
Test criteria	Remarks / values	Yes	No
• Motor cooking chamber runs virtually noiselessly.		☐	☐
If no • Check fan wheel for imbalance. • Recommendation of the manufacturer: Change motor and fan wheel.			

Check electrical contacts - Carry out inspection of wiring harness (cable and contacts)			
Test criteria	Remarks / values	Yes	No
• Contacts are free of scorch marks.		☐	☐
If No Change electronic components.			

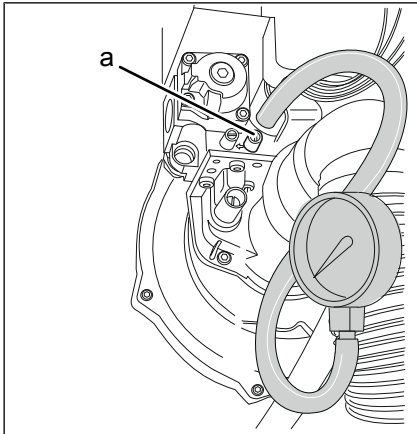
8.13 Check components gas

Action
• Switch on the ventilation system.
• Open the gas inlet.
• Switch on the device. • In case of two devices next to each other - switch on both devices.

Checking for leaktightness outside the unit				
Test criteria		Remarks / values	Yes	No
• Gas-carrying parts tight (see "Checking tightness outside the device").			☐	☐

Gas connection			Yes	No
• Does the information on the gas type supplemental label match the gas type available?			☐	☐
• Information from the gas type supplemental label entered?			☐	☐
☐ natural gas E/H, G20, 8 inch WC (20 mbar)	☐ liquid gas P, G31, 12 inch WC (30 mbar)			
• Is the unit connected with cable protection device for gas line?			☐	☐
• Dimension of Gas Supply Line Connection "I.D." at the unit: _____ inch				
• Dimension of Gas Supply Line at the wall: _____ inch				
• Is the gas connection line leak-free?			☐	☐
• Are gas-conducting parts inside the unit leak-free?			☐	☐

Gas type	Dynamic pressure (inch WC (mbar))	Dynamic pressure range (inch WC (mbar))
Natural gas A	8 (20)	6.8 - 10 (17 - 25)
LP Gas B/P gas E	12 (30)	17 - 23 (42.5 - 57.5)

Gas connection		Yes	No
 Connection pressure OK (right side port on gas valve "a")? • Is the connection pressure (dynamic pressure) OK at "High" power? (See chapter "Checking the connection pressure" in the installation instructions) Connection pressure (dynamic pressure): _____		☐	☐

• Exhaust gas values at full load "High" okay? (See chapter "Checking exhaust gas values at partial load" in the installation instructions)		☐	☐
Measured CO ₂ : _____ Vol %	Set CO ₂ : _____ Vol %		
Measured CO: _____ ppm	Set CO: _____ ppm		

Performing maintenance

• Exhaust gas values at partial load "Low" okay? (See chapter "Checking exhaust gas values at partial load" in the installation instructions)		☐	☐
Measured CO ₂ : _____ Vol %	Set CO ₂ : _____ Vol %		
Measured CO: _____ ppm	Set CO: _____ ppm		

8.14 Check software

New software version may fix bugs and include feature enhancements.

INFORMATION

Software	Yes	No
Software version on the device : _____		
Is the manufacturer's current software version installed on the device?	☐	☐
If no Update software on the device Software version after update: _____		

8.15 Checking the power supply

DANGER

Risk of personal injury and property damage from electric shock

- Inspection and adjustment work that can be carried out only with the housing open and the unit under power must be performed only by electrically trained qualified personnel.

NOTICE

Risk of property damage from using wrong wires

When servicing, only use wires with silicone insulation.

Check supply voltage	
Type of connection	1NPE / AC 50/60 Hz, 2PE / AC 50/60 Hz, 120V
Test criteria	Actual value (V)

Action	
• Close the unit (see "Opening and closing the unit").	

8.16 Checking the controller

8.16.1 Check date and time

Prerequisite The unit is ready for use

1. Switch on the voltage.

2. Switch on the unit.
 3. Set the date and time.
 4. Switch the unit off and then back on.
 5. Check date and time.
- ↳ If necessary: Replace buffer battery.

Check date and time			
Test criteria	Remarks / values	Yes	No
• Date and time are current.		☐	☐

8.16.2 Are there any current error messages?

Prerequisite The unit is ready for use
Voltage switched on

1. Switch on the device.
2. No error message appears in the display:
↳ Device is fine. Regulation works perfectly.
3. An error message appears in the display:
↳ Perform troubleshooting according to service instructions.
↳ Fix error.
4. Switch off the unit.

Current error messages			
Test criteria	Remarks / values	Yes	No
• Are current error messages displayed?		☐	☐
For Yes • Error was fixed.		☐	☐
If No (error was not corrected) • Why has the error not been fixed?			

Maintenance only possible to a limited extent.

INFORMATION

8.17 Clean and check Grease Collection

8.17.1 Clean grease collection system

Prerequisite Cooking program has ended

- Detach the grease drain hose from the grease collector.
→ Connect grease drain hose to existing water hose.

- Flush the system for approx. one minute.
- ↳ Cleaning is complete.
- Disconnect the water hose from the grease drain hose.

Clean grease collection system			
Test criteria	Remarks / values	Yes	No
• Grease collection system has been cleaned.		☐	☐

8.17.2 Function test grease separator

- Detach the grease drain hose from the grease collector.
- Mount the backflush fitting on the grease drain hose.
- Open the cooking chamber door.
- Remove tray trolley
- Spray water into the cooking chamber with the hand shower for at least 30 seconds.
- Open the relay test in the service menu.
- Activate relay K13. The grease pump switches on.
- ↳ Water/grease is pumped into the collection container = pump system in order.
- ↳ Water/grease is not pumped into the collection container = carry out troubleshooting.

Tap "K 13" to exit.

Check grease trap			
Test criteria	Remarks / values	Yes	No
• Water / grease is pumped into the collection container.		☐	☐

8.17.3 Function test Automatic flushing

- Prerequisite**
- Detach the grease drain hose from the grease collector.
 - Mount the backflush fitting on the grease drain hose.
 - Open the cooking chamber door.
 - Remove tray trolley
 - Open the relay test in the service menu.
 - Activate relay K14.
 - ↳ Solenoid valve K41 for flushing is switched on.
 - After approx. 30 seconds, additionally activate relay K13.
 - ↳ Water is pumped into the collection tank = solenoid valve OK.
 - ↳ Water and occasional lumps of grease are pumped into the collection container = clean the grease drainage system. Then repeat the test.
 - ↳ Water is not pumped into the collection tank = carry out troubleshooting.

→ Tap "K 13" and "K14" to exit.

Check automatic flushing			
Test criteria	Remarks / values	Yes	No
• Display solenoid valve K41 shows green when activated.		☐	☐
• Water / grease is pumped into the collection container.		☐	☐

8.18 Restoring the unit to operability

Action
• Restore the unit to its operational state.

Final cleaning	Yes	No
Unit heated and rinsed?	☐	☐

Handing over the unit			
Test criteria	Remarks / values	Yes	No
• Hand over the operational unit to the operator.		☐	☐

Notes and remarks

9 Completing the maintenance

The following work was carried out as part of the maintenance	
Component	Reason for the exchange

The following components were replaced during maintenance	
Component	Reason for the exchange

Completing the maintenance

The following components should be replaced promptly for proper operation.	
Component	Reason for the exchange

10 Acceptance of maintenance

The maintenance was performed by:			
Company	Installation fitter	Place, date	Signature / Stamp

Confirmation of customer:			
Customer	Function	Place, date	Signature / Stamp



Henny Penny Corp., Eaton, Ohio 45320, Revised 2/3/2023

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