

CHEF'S **COMBI**

# CONDENSATION **HOODS**

## MAINTENANCE MANUAL





# Table of contents

<b>1. ESSENTIAL TOOLS</b>	<b>4</b>
<b>2. PREVENTIVE MAINTENANCE</b>	<b>4</b>
2.1 LIST OF ACTIONS	4
<b>3. TROUBLESHOOTING</b>	<b>5</b>
3.1 TROUBLESHOOTING METHODOLOGY	5
3.2 SYMPTOMS	5
<b>4. ELECTRICAL DIAGRAMS</b>	<b>7</b>
4.1 DIAGRAMS	7
4.2 PARTS LIST	9
<b>5. ACCESS TO COMPONENTS</b>	<b>10</b>
5.1 LOCATION OF TECHNICAL COMPONENTS	10
5.2 ACCESS TO COMPONENTS	10
<b>6. COMPONENTS</b>	<b>12</b>
<b>7. RECOMMENDED AND ESSENTIAL SPARE PARTS</b>	<b>12</b>

## 1. ESSENTIAL TOOLS

Chapter	Tools	Features	Application
<b>Common</b>	Standard hand tool kit		
	Cutting tools	Retractable blade knife	
	Set of spanners (flat, pipe, ratchet with sockets, BTR)	From 5.5 to 22 mm	
	Set of screwdrivers (flat, Phillips)	Philips	
	Pliers (multi-socket, flat, cutting, stripping)		
	Spanner		
<b>Electric</b>	PPE	Standard	Personal protection for technicians
	Verification of absence of voltage (VAT)	Maxi 690V a.c.	Check that there is no voltage
	Multimeter-Voltmeter	Maxi 690V a.c.	Various checks on electrical components
	Draw knife	Type : "JOKARI" No 50 and No 28	Pull out the power cable

## 2. PREVENTIVE MAINTENANCE

To ensure that your equipment operates safely and reliably over the long term, we recommend that you have it checked and serviced by one of our company's qualified personnel.

### 2.1 LIST OF ACTIONS



**CAUTION:** The appliance must be disconnected from its power supply during cleaning or maintenance, and when replacing parts.

Subject	Recommendations (Every year or every 3,000 hours)
Checking and cleaning air vents	Check and clean the intake vents and grilles.
Checking and cleaning baffle filters	Check, clean or replace Baffle filters.
Checking the air intake fan	When running, check that there are no abnormal noises - When stopped and de-energised, clean the turbine.
Checking for leaks	Check for leaks and residual water - Check the condition of the condensate discharge pipe: suppleness, absence of cracks, deformation - Replace if necessary.
Checking power and control cables	Check the condition of the cables.
Checking the technical compartment	Check the condition of the connections, contactors, capacitors, etc., and the condition of the terminals: no signs of overheating, no moisture, no corrosion. - Re-seal if necessary.
Function control	Start cooking and check that the hood is working: open the door and check that the suction speed changes.
Cleaning the HEPA filter vents (if accessory)	Check and clean the exhaust vents.
HEPA filter cartridge maintenance (if accessory)	Check the condition of the HEPA filter cartridge and replace if necessary. Replace at least every 3 years after using the Chef'sCombi oven.
Maintenance of the carbon filter (if accessory)	Check the condition of the charcoal filter and replace if necessary. Replace at least every 4 months after using the Chef'sCombi oven.

## 3. TROUBLESHOOTING

### 3.1 TROUBLESHOOTING METHODOLOGY



Before intervening physically in the hood by replacing components without being certain of the problem, it is important to use the methodology below.

1. **Interviewing the customer:**
  - Gather as much information as possible from the user about the problems encountered (frequency, anomaly, etc.).
2. **Identifying the problem :**
  - Make sure that the hood is correctly supplied with electricity when it is emptied.
  - Visually inspect the outside and inside of the hood for signs of damage or obstructions.
  - Make a note of the details of the problem encountered to help you understand it better.
3. **Search for faults :**
  - Refer to the manual to access the available diagnostics (► [Symptoms](#)).
  - Refer to the electrical diagrams (► [Electrical diagrams](#)).
4. **Contact technical support if necessary:**
  - If the problem persists or if you are unable to solve the problem using the above steps, contact the manufacturer's technical support.
  - Provide all the relevant information you have gathered during the diagnosis to ensure effective assistance.

### 3.2 SYMPTOMS

All electrical measurements must be carried out in compliance with local legislation (personnel authorisation, use of PPE, etc.). OFF-VOLTAGE tests must absolutely be carried out in this configuration. Make sure you carry out these tests safely (consignment, etc.).

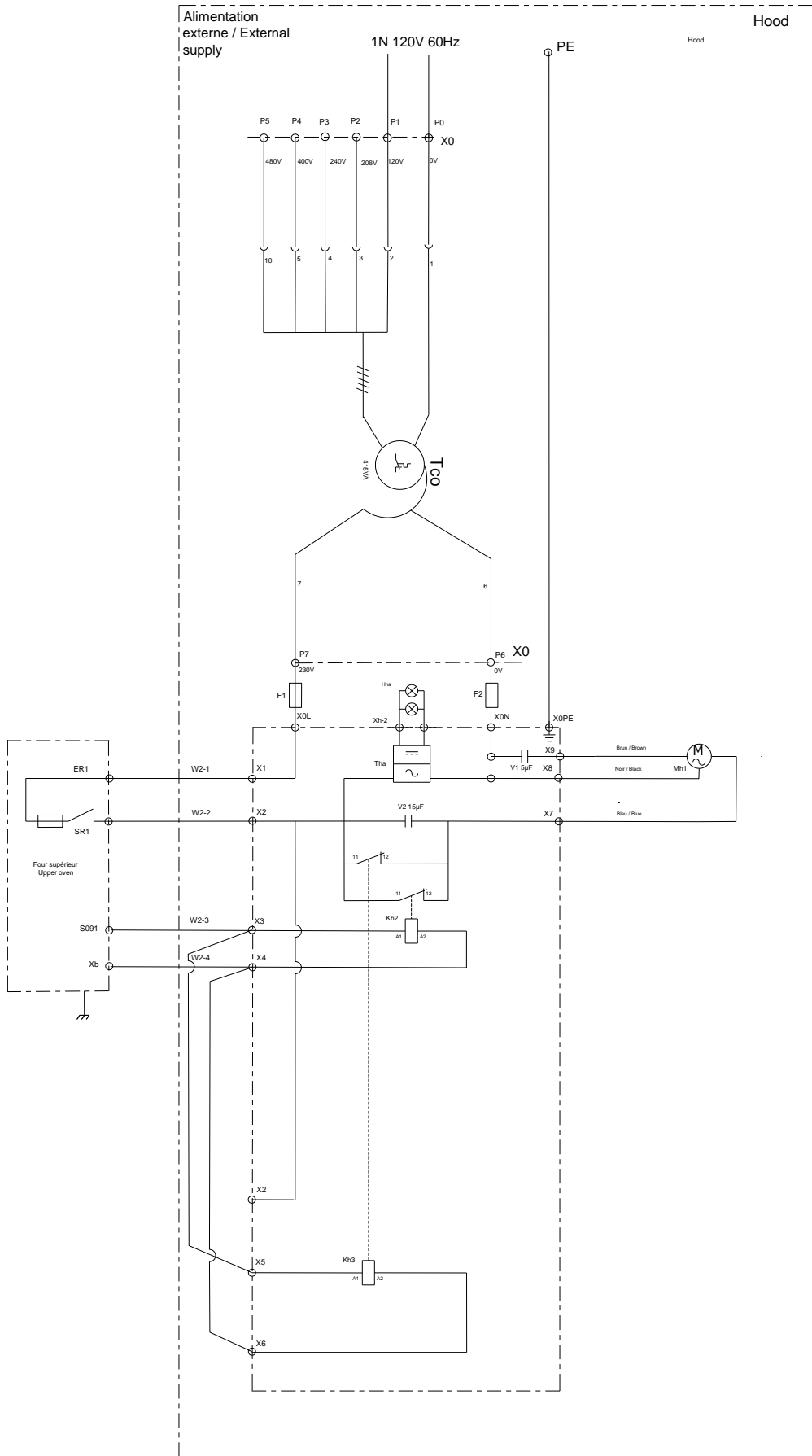
SYMPTOM	CAUSE	WHAT TO DO
The hood does not work when the oven is in operation		
	- The hood is not powered	Check that there is voltage between Xa and Xb (230Vdc). If not, look for the cause of the problem using the Expert maintenance manual for Chef'sCombi.
	- Fuse F1 is blown	Check the state of the fuse. After solving the cause of its blowing, replace it (► <a href="#">Electrical diagrams</a> - Parts list).
	- The hood is powered but does not receive a run command	Check the status of outputs Ar-Sr1 and Ar-S09 on the Main board in the oven. Check the connections and the link cable between the oven and the hood.
The hood stays on high speed		
	The sequence does not occur correctly	Check the status of contactors Q2.1 and Q2.2: for low speed to be selected, both must be engaged. If the problem persists, check the Ar-S09 output on the Main board by activating the KP button from the "Output status" screen in the oven maintenance screen - Replace the faulty component(s).
	- Capacitor V2 is defective	Check its value and, if necessary, replace it (► <a href="#">Electrical diagrams</a> - Parts list).
The hood remains on low speed when the oven door is opened.		
	The sequence does not occur correctly	Check the status of contactors Q2.1 and Q2.2: for high speed to be selected, one or other must be tripped. Check the connection cable between the oven and the hood and if the problem persists, check the Ar-S09 output on the Main board by activating the KP button from the "Output status" screen in the oven maintenance screen. - Replace the faulty component(s).
Hood lighting does not work		
	- The hood is not powered or fuse F1 is out of order.	Check the power supply to the hood and the condition of fuse F1.
	- The switching power supply is out of order	On the switched-mode power supply, check that the green LED (presence of voltage) at the output is lit. If not, disconnect the output and check the input supply voltage 230Va.c. If voltage is present, replace the switching power supply.
	- The LED strips are out of order	If the green LED on the switching power supply is lit or if it lights up again after disconnecting the output from the power supply, replace the LED strips.
Water or condensation dripping from the hood		
	- Condensate drain pipe blocked	Check the condensate drainage system inside and outside the hood and unblock or replace the pipe if necessary.
	- The oven is not level	Check that the oven is level and adjust if necessary.
	- The oven is incorrectly connected to the hood	Check the condensate drainage system inside and outside the hood and unblock or replace the pipe if necessary.
Steam coming out of the hood in excess		
	- The oven is incorrectly connected to the hood	Check the connection between the oven chimney and the hood.
	- Intensive steam production	

		In the case of cooking with intensive steam production, not all the steam is condensed. Please inform the customer.
Steam is not extracted by the hood when the oven door is opened		
	- Filters not in place or blocked	Check the position and condition of the filters and clean or replace them if necessary.
	- The grille in front of the turbine/fan is blocked	Clean the suction grille with warm water, a soft cloth and a non-abrasive degreaser. Follow the instructions. Rinse thoroughly and wipe dry.
The customer has noticed a loss of efficiency in the extractor hood or a loss of efficiency in the oven.		
	- The filters are blocked or incorrectly positioned	Check the position and condition of filters, clean or replace if necessary
	- The fan is not running at the right speed	Check its power supply and replace it if necessary.
	- The air outlet or inlets are blocked	Check the air vents and clean if necessary.
	- The grille in front of the turbine/fan is blocked	Clean the suction grille with warm water, a soft cloth and a non-abrasive degreaser. Follow the instructions. Rinse thoroughly and wipe dry.

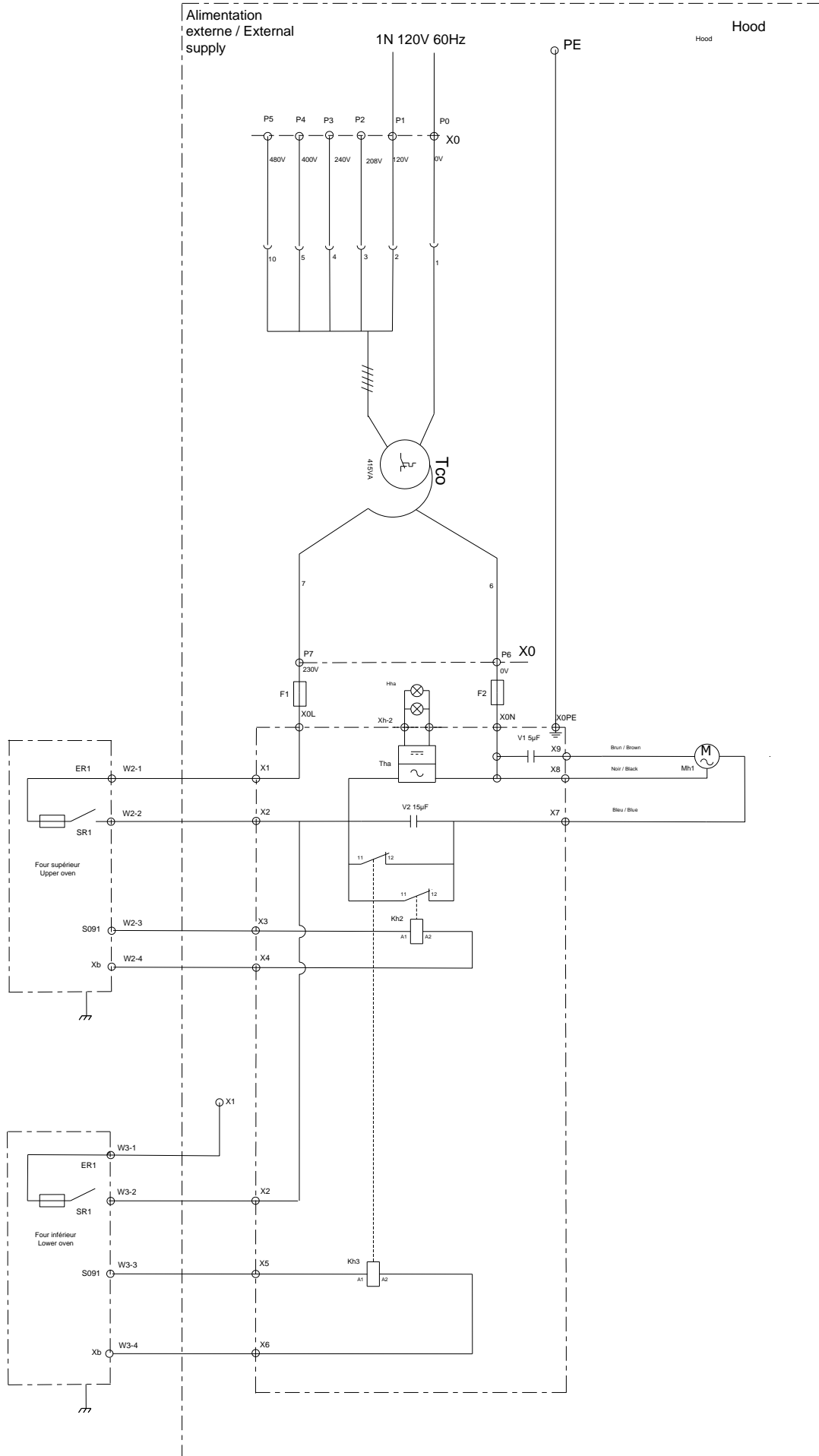
**4. ELECTRICAL DIAGRAMS**

**4.1 DIAGRAMS**

DIAGRAM - 6 or 10 deck oven



PRINCIPLE DIAGRAM - Superimposed ovens

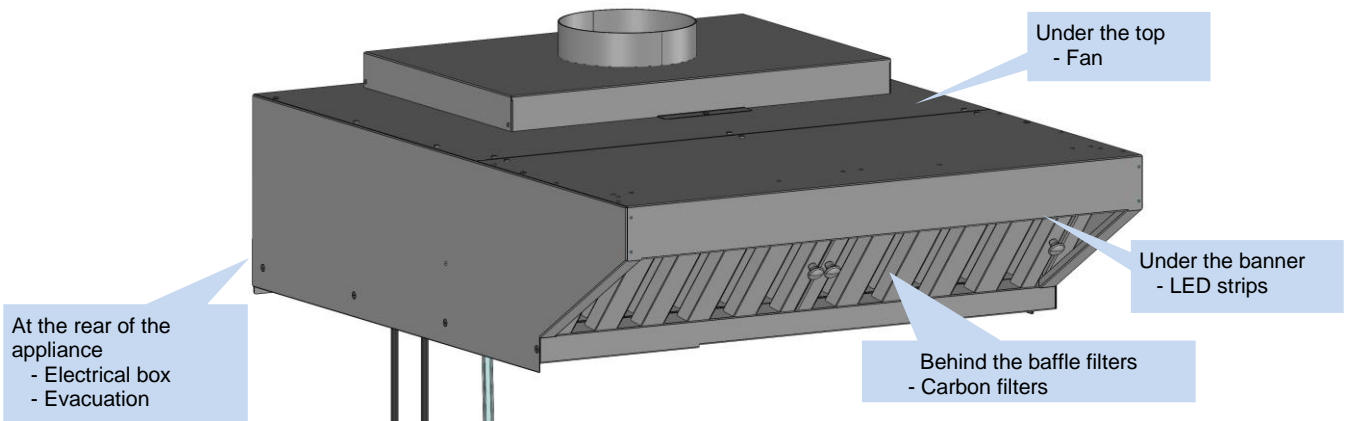


**4.2 PARTS LIST**

Reference	Designation	Features	Quantity	Reference
<b>Ch15µF</b>	Capacitor	15µF	1	387637
<b>Ch5µF</b>	Capacitor	5µF	1	304269
<b>F1, F2</b>	Time-delay fuse	F1, F2	2	387638
<b>Hha</b>	LED strip	24Vd.c. 5W	2	309719
<b>Kh2-Kh3</b>	Contactors	4-pole 2 "O" 2 "F" - 25A - AC1	2	387639
<b>Mh1</b>	Fan	2750 rpm - 250 W	1	387640
<b>N</b>	Terminal block	2.5mm <sup>2</sup> blue terminal	1	-
<b>PE</b>	Terminal block	2.5mm <sup>2</sup> green/yellow terminal	1	-
<b>Pf1, Pf2</b>	Terminal block Fuse holder	Terminal 6.3 x 32 10A	2	-
<b>T1</b>	Transformer	120Va.c./ 230Va.c.	1	408407
<b>Tha</b>	Power supply	15V d.c. 15W	1	387641
<b>Xh1-Xh2</b>	Terminal blocks	1.5mm <sup>2</sup> grey terminals	8	-

## 5. ACCESS TO COMPONENTS

### 5.1 LOCATION OF TECHNICAL COMPONENTS

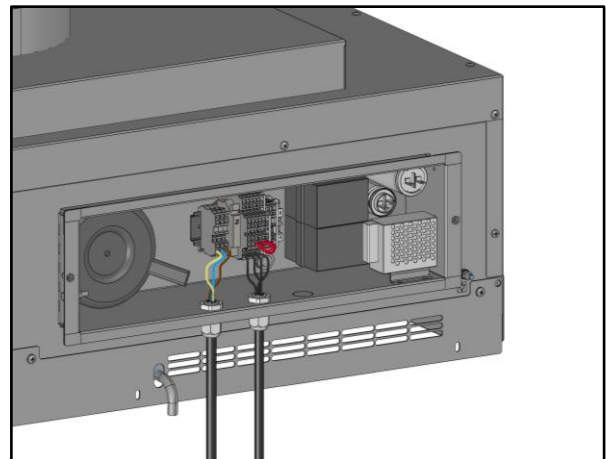
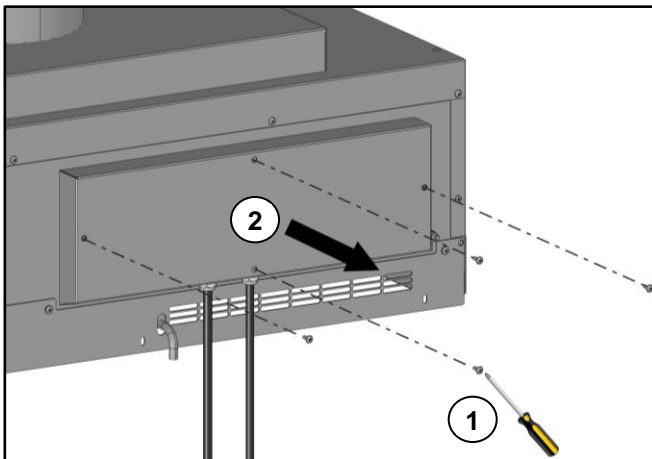


### 5.2 ACCESS TO COMPONENTS



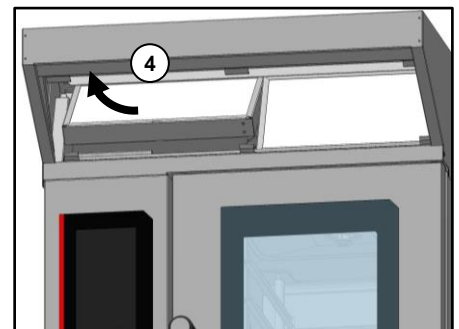
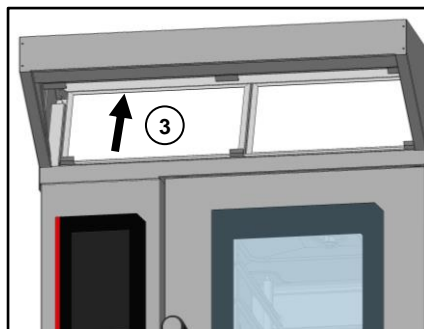
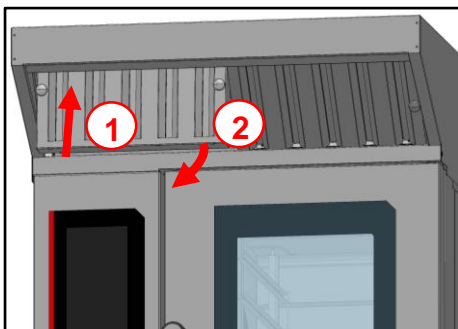
**CAUTION:** The appliance must be disconnected from its power supply during cleaning or maintenance, and when replacing parts.

#### 5.2.1 ELECTRICAL BOX



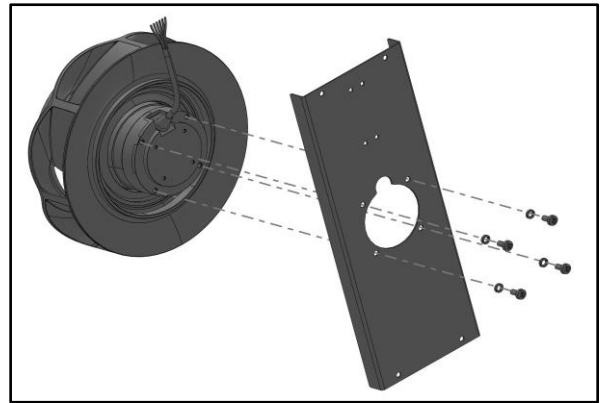
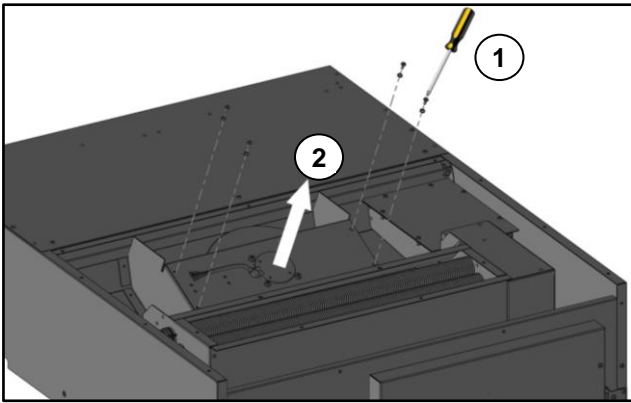
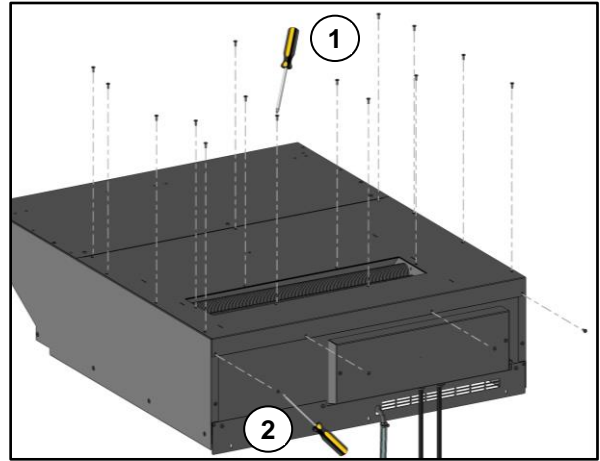
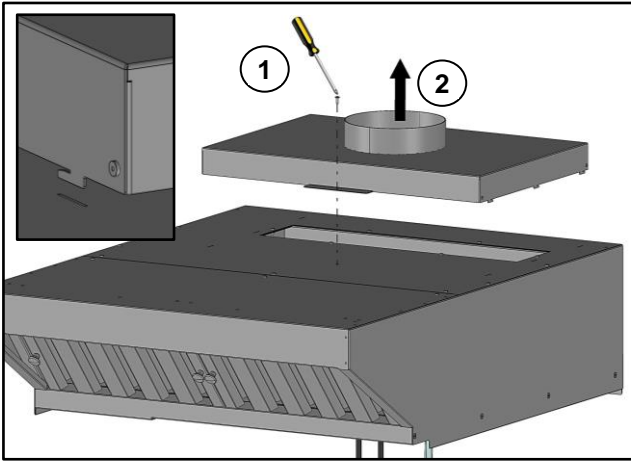
- » Prepare your speech:
  - ✓ Tools: Phillips screwdriver
- » Unscrew and remove the 4 M5 screws securing the housing .①
- » Remove the case .②

#### 5.2.2 BAFFLE FILTERS AND CHARCOAL FILTERS (IF ACCESSORY)



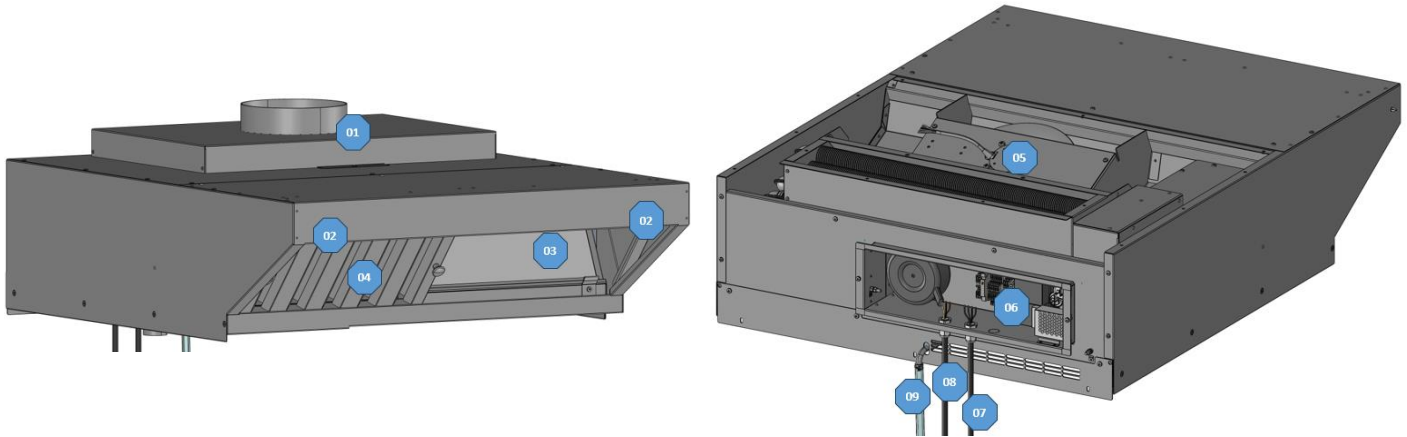
- » Remove the left-hand Baffle filter :
  - Lift the filter upwards ①.
  - Tip the bottom towards the front of the hood, then pull ② towards yourself.
- » Remove the right-hand Baffle filter: follow the same procedure as for the left-hand filter.
- » Remove the left carbon filter :
  - Lift the filter upwards ③.
  - Tip the bottom towards the front of the hood, then pull ④ of it towards yourself to extract it.
- » Remove the right-hand carbon filter: follow the same procedure as for the left-hand filter.

## 5.2.3 FAN



- » Prepare your speech:
- ✓ Tools: Phillips screwdriver, spanners
- » Unscrew the M4 screw securing the exhaust bonnet.
- » Remove the exhaust bonnet, pulling it slightly towards the front of the hood to release the 6 lugs from the notches cut in the top panel.
- » Unscrew the panel fixing screws (15 M4 screws on the top + 4 M4 screws on the back).
- » Remove the panel.
- » Disconnect the fan electrically.
- » Remove the 4 M5 screws + washers securing the fan support plate.
- » Remove the board with its fan.
- » Remove the 4 M6 screws + washers securing the fan to the circuit board.
- » Change the fan.

## 6. COMPONENTS



Reference	Ref.	Designation	Functions
1		Evacuation bonnet	Allows the hood to be connected to the exhaust pipe
2	Hha	LED Headband	Lighting of the front of the oven
3		Charcoal filter	Accessory: Neutralises food odours
4		Baffle filter	Filters grease from vapours
5	Mh1	Motor fan	Sucks up fumes and vapours
6		Electrical box containing :	Controls the hood
	F1/Pf1	Fuses and fuseholders	
	Ch15µF	Motor capacitor	
	Ch5µF	Motor capacitor	
	Kh2/Kh3	Motor contactors	
	T1	Transformer	
	Tha	Switching power supply	
7	W2	Oven connection cable	Controls hood operation according to oven status
8	W1	Hood power cable	Hood power supply
9		Condensate drain pipe	Condensate discharge

\*References on electrical diagrams.

## 7. RECOMMENDED AND ESSENTIAL SPARE PARTS

Code	Vulcan Code	Designation	Categories
304269		5 µF capacitor for pump	Recommended part
309719	00-978379	Led Strip 4000K 24V	Recommended part
311356	00-978387	LED strip label	Wear part
387637		ICS24 - 15µF capacitor	Recommended part
387638		ICS24 - Time-delay fuse 4A	Recommended part
387639		ICS24 - Contactors 25A - AC1	Recommended part
387640		ICS24 - Extractor fan 250W	Recommended part
387641		ICS24 - Switched-mode power supply 15V hood	Recommended part
408407	00-978511	Transformer 120Va.c./230Va.c.	Recommended part