



Chimney hoods

KD 9450.0

KD 12450.0

Service Manual: H5-60-85-01

Responsible:	U. Laarmann	KÜPPERSBUSCH HAUSGERÄTE AG
E-mail:	uwe.laarmann@kueppersbusch.de	
Tel.:	(0209) 401-732	Kundendienst
Fax:	(0209) 401-743	Postfach 100 132
Date:	12.09.2003	45801 Gelsenkirchen

Contents

1. Safety	4
2. General Information	5
3. Functional characteristics	6
3.1 Control panel	6
3.2 Automatic switch-off for the period in which the high-power setting is in operation	6
3.3 Automatic switch-off device for the fan follow-up time	7
3.4 Recirculating air – exhaust air programming	8
4. Grease filters	9
4.1 Resetting the grease filter indicator	9
4.2 Removing the grease filters	9
5. Charcoal filters	10
5.1 Resetting the charcoal filter indicator	10
5.2 Removing the grease filter of the KD 12450 and KD 9450	10
6. Access to components	12
6.1 Replacing the aluminium front strip	12
6.2 Disassembling the aluminium front strip	13
6.3 Removing the switch block	14
6.4 Replacing the right-hand side aluminium trim	15
6.5 Replacing the left-hand side aluminium trim	15
6.6 Replacing the aluminium front trim	16
6.7 Replacing the control panel	17
6.8 Replacing the halogen lights	18
6.9 Replacing the control board	19
6.10 Replacing the flat multiwires of the control panel	20
6.11 Replacing the processor	21
7. Technical data	22
8. Circuit diagram	23
8.1 Illustration of dimensions	24
8.2 Data in decibels	24
9. Faults and their cause	25
10. Installing the hood	27

1. Safety



Danger!

Repairs may only be carried out by a qualified electrician! Repairs carried out improperly may put the user at risk.

To prevent electric shocks, please observe the following:

- In the event of faults, the housing and the frame may be live.
- Touching live components inside the appliance may cause dangerous currents to flow through your body.
- Disconnect the appliance from the mains prior to carrying out any repairs.
- When inspecting live parts, a residual current operated device must be used at all times.
- The ground wire resistance must not exceed that specified in the standard. It is of vital importance for ensuring the safety of people and the functioning of the appliance.
- On completion of repairs, an inspection must be carried out in accordance with VDE 0701 [Association of German Electrical Engineers] or the corresponding regulations for your country.



Caution!

Make sure you observe the following instructions:

- The appliances must be disconnected from the mains prior to carrying out any repairs. If inspections must be carried out on live appliances, make sure you use a residual current operated device.



Sharp edges: Use protective gloves.



Components may be electrostatic!
Observe handling precautions!

2. General Information

Altering the specifications or attempting to modify the product is dangerous. For your own safety, have spare parts installed by a professional electrician. The manufacturer is not liable for any damage resulting from improper installation or the non-observance of current regulations for this type of application. Please read through the installation instructions carefully prior to commencing with work.

In order to be able to achieve an optimal effect and the best possible ventilation, the cooker hood needs sufficient inlet air which has been properly supplied. In the event of an insufficient supply of inlet air, the number of revolutions of the ventilation motor will rise, the ventilation power will be reduced and the appliance will be noisier.

Should the filter mats become saturated, the ventilation power of the cooker hood will be reduced and vapours will be insufficiently removed.

The cooker hood has been designed to draw off steam resulting from cooking and is supplied with an exhaust air operating mode. Should it not be possible to draw off the air to the outside, respective optional accessories may be used to adapt the hood for the recirculation air mode with charcoal filters.

On installing the hood, the following points are to be observed in addition to currently-valid safety instructions and the respective instructions of your country:

1. The cooker hood must always be installed above the centre of the hob.
2. The clearance stipulated for instalment must be maintained.

The minimum distance between hobs and the lower edge of the hood must be 650 mm.

The minimum distance between gas hobs and the lower edge of the hood must be 700 mm.

3. Exhaust air may not be discharged into a smoke chimney, exhaust gas chimney or into a shaft for ventilating rooms where hearths or fireplaces have been installed. Should exhaust air be discharged into smoke chimneys or exhaust gas chimneys which are not in operation, prior approval must have been granted by the master chimney sweep responsible.
4. In the case of **exhaust air operation** of the extractor hood and the simultaneous operation of heating systems requiring a chimney (such as gas, oil or coal heaters, flow heaters or hot water boilers), a sufficient supply of inlet air, required by the fireplace for combustion purposes, must be ensured. The negative pressure in the location of the fireplace may not exceed 4 PA (0.04mbar). This is achieved if it is possible for more air to flow in. In order to assess this, the entire ventilation system of a house or apartment must always be taken into consideration.
In the case of **the recirculating air mode**, the cooker hood can be operated without any restrictions.
5. The cooker hood may only be installed above a fireplace for solid fuels where there may be a risk of fire (e.g. flying sparks) if the fireplace has a fully enclosed, permanent cover.

3. Functional characteristics

Both cooker hoods have the following features:

- Programmable exhaust air or recirculating air operation
- Automatic switch-off for the duration of the high-power setting
- Automatic switch-off for the follow-on time of the fan
- Grease filter saturation indicator
- Charcoal filter saturation indicator
- Remote control (optional accessory)

3.1 Control panel



Power settings with a high-power setting

There is a choice of four power settings. The required power level is set with the LEDs 1, 2, 3 and Max.

- 1 = low motor speed
- 2 = medium motor speed
- 3 = high motor speed
- Max. = high-power setting

When the fan is switched on by means of pressing the respective LED, namely 1, 2 or 3, the corresponding LED will light up orange. Press the active LED (lights up orange) once again in order to switch off the fan.

The high-power setting is generally only needed for a short time. For this reason the cooker hood will switch down to level 3 after 10 minutes.

When the high-power setting has been activated the "Max" LED will light up orange.

In order to switch the lamp on and off press the lamp led.

3.2 Automatic switch-off for the period in which the high-power setting is in operation

In order to achieve maximum extraction, it is recommended that a specific period of operation be programmed for the high-power setting prior to commencing with cooking. This period can be limited by means of a time function element. Program the automatic switch-off device for the period of operation of the high-power setting as follows:

1. Switch on the motor (LED 2), then select the required setting for cooking with the (+) and (-) LEDs.

2. The high-power setting is activated by means of pressing LED 5 (Max.) once. The fan is automatically switched back to the previously-set power level when the "5 minutes follow-up time" of the high-power setting has elapsed.
3. The high-power setting is switched off by means of activating LED 5 (Max.) once again.

Attention: *This function cannot be carried out if the "automatic switch-off for the follow-up time of the fan" has been activated.*

3.3 Automatic switch-off device for the fan follow-up time

This function enables any remaining cooking steam to be extracted by means of time-limited extraction (follow-up time) subsequent to the actual cooking process, after which the fan and the lamps are switched off automatically.

The lamp and the motor must be switched off at the controls in order to program this function. The cooker hood, however, must be connected to the mains. Pressing switch no. 5 (INT) once or several times will adjust the follow-up time as follows:

- 1 blink of the LEDs 1 and 5 indicates the "Off" function.
- 2 blinks of the LEDs 1 and 5 indicate "5 minutes follow-up time".
- 3 blinks of the LEDs 1 and 5 indicate "10 minutes follow-up time".
- 4 blinks of the LEDs 1 and 5 indicate "15 minutes follow-up time".

Please switch on the appliance once it has been programmed. Set the required fan power level. The follow-up time programmed will be indicated by the blinking of LEDs 2, 3 and 4 as follows:

In the case of the MAX. setting

- LEDs 2, 3 and 4 do not blink if the "automatic switch-off" function has not been activated.
- LEDs 2, 3 and 4 blink once if a follow-up time of "5 minutes" has been programmed.
- LEDs 2, 3 and 4 blink twice if a follow-up time of "10 minutes" has been programmed.
- LEDs 2, 3 and 4 blink three times if a follow-up time of "15 minutes" has been programmed.

In the case of the MED. setting

- LEDs 2, 3 and 4 do not blink if the "automatic switch-off" function has not been activated.
- LEDs 2 and 3 blink once if a follow-up time of "5 minutes" has been programmed.
- LEDs 2 and 3 blink twice if a follow-up time of "10 minutes" has been programmed.
- LEDs 2 and 3 blink three times if a follow-up time of "15 minutes" has been programmed.

In the case of the MIN. setting

- LEDs 2, 3 and 4 do not blink if the "automatic switch-off" function has not been activated.
- LED 2 blinks once if a follow-up time of "5 minutes" has been programmed.
- LED 2 blinks twice if a follow-up time of "10 minutes" has been programmed.
- LED 2 blinks three times if a follow-up time of "15 minutes" has been programmed.

3.4 Recirculating air – exhaust air programming

The cooker hood has been programmed for exhaust air operation in the factory. In order to adjust the cooker hood for recirculating air operation, please carry out the following steps:

Recirculating air operation

The motor and the lamp must be switched off. Press the 4 (+) switch for approximately 20 seconds.

Two blinks of all 5 LEDs indicates: recirculating air function = ON

Return to exhaust air operation

The motor and the lamp must be switched off. Press the 4 (+) switch for approximately 10 seconds.

A single blink of all 5 LEDs indicates: exhaust air function = ON

4. Grease filters

When the cooker hood has been in operation for 200 hours, LED 1 will blink to indicate that the grease filters are saturated.

4.1 Resetting the grease filter indicator

The motor and the lamp must be switched off. Press the 4 (+) switch for approximately 3 - 4 seconds. If all 5 LEDs light up briefly "reset" has been carried out successfully.

4.2 Removing the grease filters



Release the grease filter by pressing on the locking mechanism and opening it up downwards.

5. Charcoal filters

When the cooker has been in operation for 400 hours, LED 1 will blink twice briefly to indicate that the charcoal filter needs to be replaced.

5.1 Resetting the charcoal filter indicator

The motor and the lamp must be switched off. Press the 4 (+) switch for approximately 10 seconds.

All 5 LEDs blinking twice indicates function = ON

All 5 LEDs blinking once indicates function = OFF

5.2 Removing the grease filter of the KD 12450 and KD 9450

The charcoal filter (ZUB 613) does not fit into these cooker hoods. Instead the charcoal filter (ZUB 870) and a U-shaped supporting frame for the charcoal filter needs to be used for both cooker hoods. Additional reinforcement is required for cooker hoods produced prior to October 2002.

The following spare parts are required:

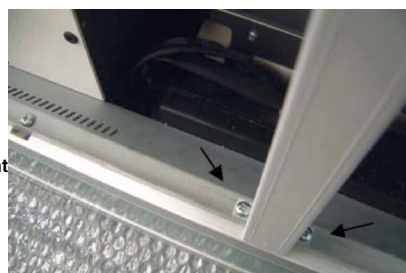
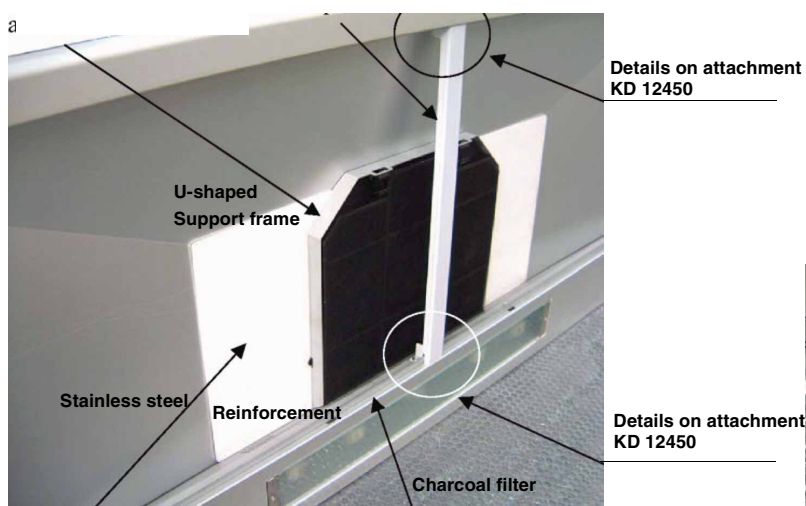
U-shaped support frame Spare-part no. 56 55 18

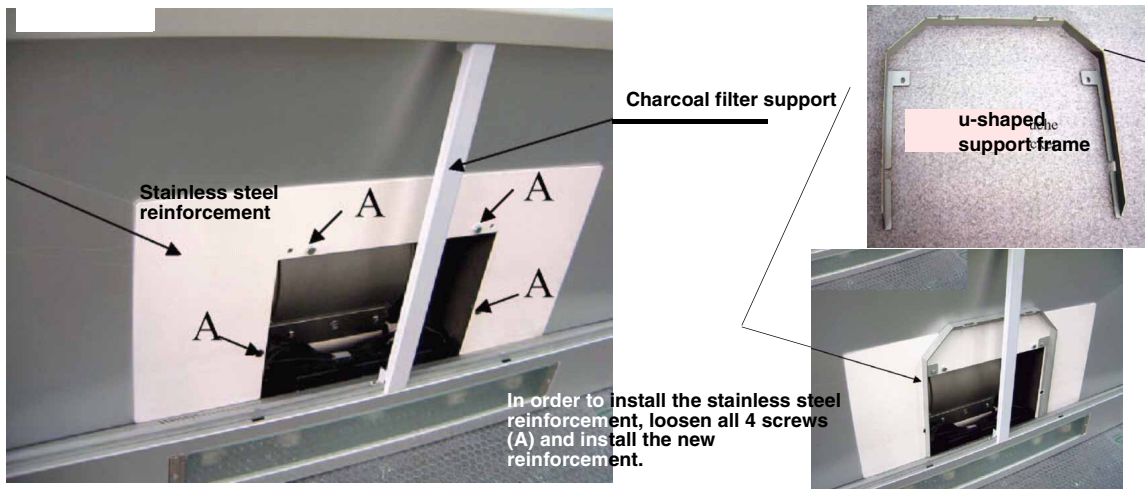
Charcoal filter ZUB 870 Spare-part no. 56 45 11

Additional reinforcement for hoods produced prior to October 2002

KD 9450.0 Stainless steel reinforcement Spare-part no. 56 55 16

KD 12450.0 Stainless steel reinforcement Spare-part no. 5655 17





6. Access to components

6.1 Replacing the aluminium front strip

Unscrew the 2 screws on each side of the upper chimney part (fig. 1).



Fig. 1

Remove the upper and lower chimney parts of the hood (fig. 2).



Fig. 2

Switch off the appliance and disconnect it from the electrical socket if it is fitted with a plug, or, if the appliance is hard-wired by means of a double-pole switch, disconnect the fuse.

Remove the metal filters (fig. 3).



Fig. 3

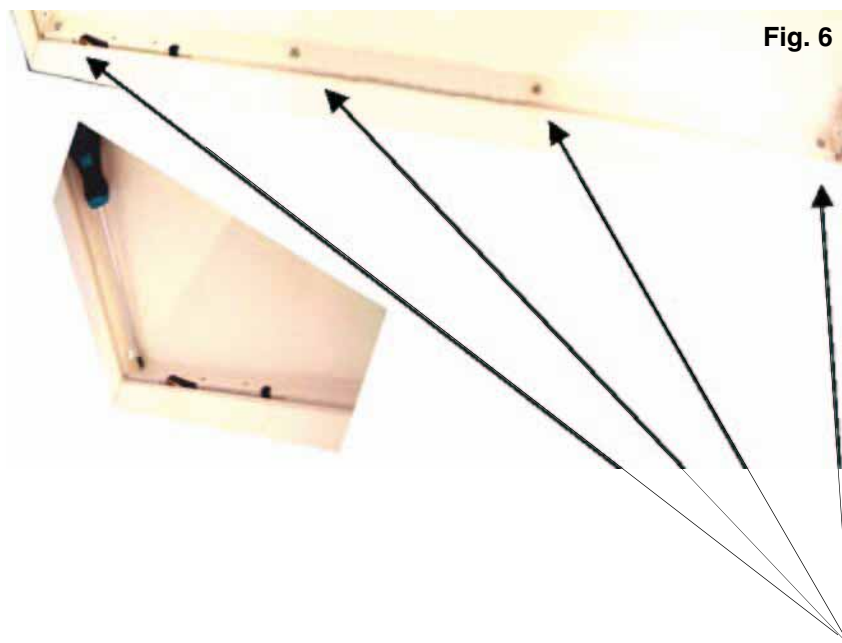
6.2 Disassembling the aluminium front strip



Unscrew the 3 screws on the left-hand side and on the right-hand side of the hood (fig. 5).



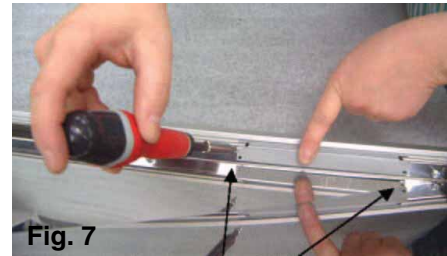
Details fig. 6



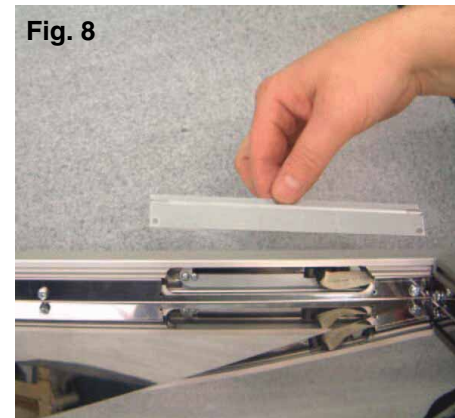
Unscrew the 4 screws on the inner front edge of the hood (fig. 6).

6.3 Removing the switch block

Unscrew the 2 screws on the inner rear cover (fig. 7).



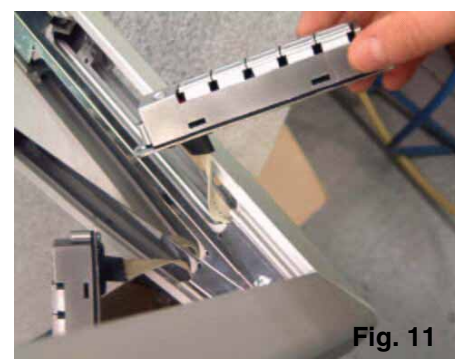
Remove the inner rear cover (fig. 8).



Unscrew the 2 screws on the inner rear cover, (fig. 9 and 10).



Now remove the switch block (fig. 11).



Remove the aluminium front trim (fig. 12).



Fig. 12

6.4 Replacing the right-hand side aluminium trim

To replace the right-hand trim, unscrew the 4 screws (fig. 13)

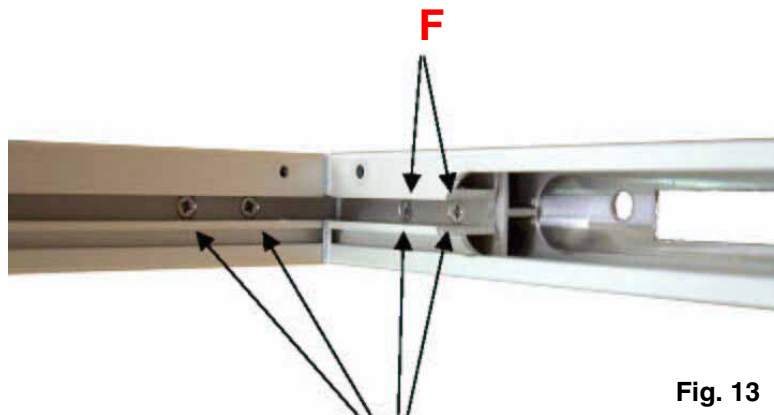


Fig. 13

6.5 Replacing the left-hand side aluminium trim

To replace the left-hand trim, unscrew the 4 screws (fig. 14)

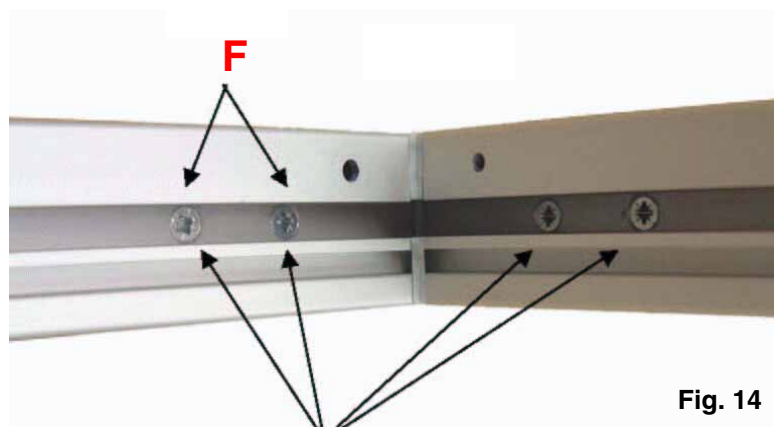


Fig. 14

6.6 Replacing the aluminium front trim

Unscrew the 4 screws illustrated in fig. 13 and 14, item **F**, remove the switch block bracket (fig. 15) and place it in the front strip as indicated in fig. 16.



Ensure the flat multiwires are replaced correctly.

Carefully adjust the position of the aluminium front trim to prevent any damage to the flat multiwires.

Fit the aluminium front trim with the 10 screws as indicated in fig. 4, 5 and 6, on page 12, and fig. 17.



Re-position the control box in the aperture in the aluminium front trim.

Fit the switch block as indicated on page 14.

6.7 Replacing the control panel

Remove the switch block as indicated on page 14.

Take the control element in your hand as illustrated (fig. 18).

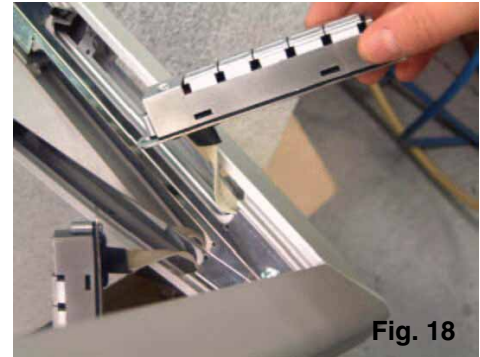


Fig. 18

Loosen the 2 screws on each side of the control box (fig. 19) and then remove the bracket from the control box .

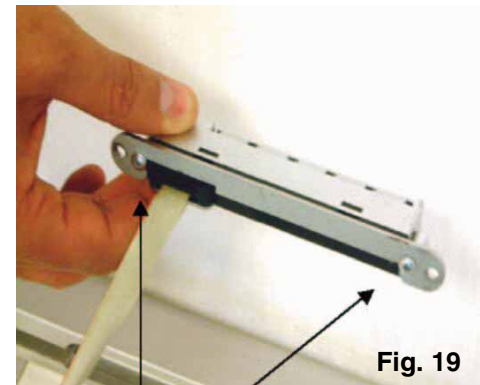


Fig. 19

Loosen and remove the 2 screws (fig. 20).

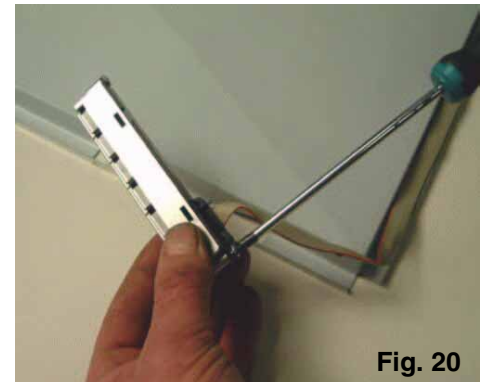


Fig. 20

Remove the rear cover of the control box (fig. 21).

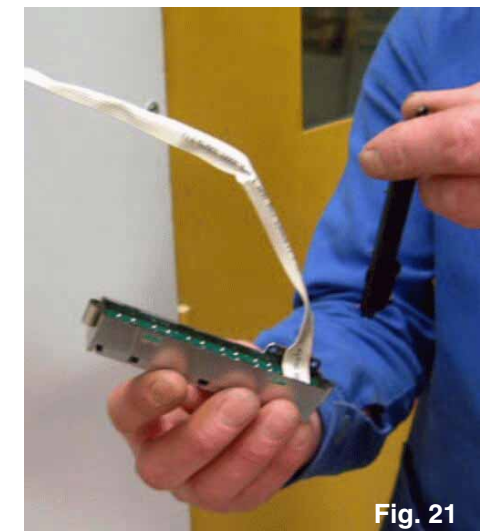
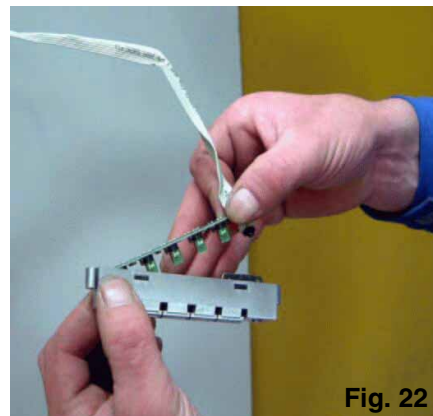


Fig. 21

Remove the control board of the control box (fig. 22).



Disconnect the connector from the control board (fig. 23).

Replace the control board of the control panel.

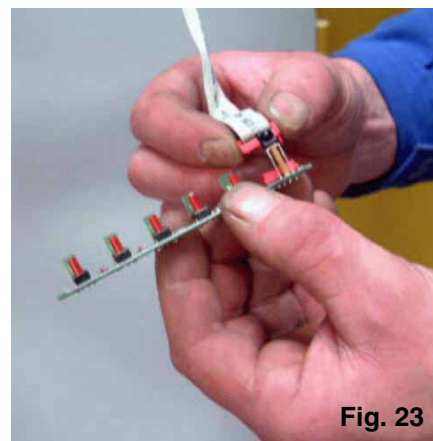
Re-insert in reverse order.

Re-position the control box in the aperture in the aluminium front trim.

Fit the switch block as indicated on page 14.

Switch on the electricity supply to the hood.

Check the different functions of the controls.



6.8 Replacing the halogen lights

Disconnect the hood as indicated on page 12.

Remove the 2 screws on each side of the glass diffuser (fig. 24) and then remove the diffuser (fig. 25).



To ensure the hood functions safely, replace the halogen tube with an identical tube (230V 60W), and then mount the diffuser again.

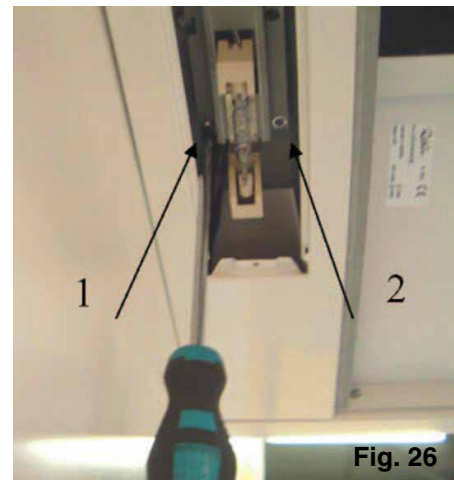
Switch on the electricity supply to the hood.

Check to ensure that the halogen light is working.

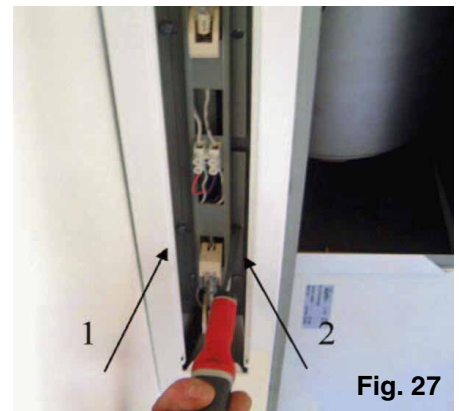
6.9 Replacing the control board

Disconnect the hood from the mains supply as described on page 12. Remove the glass lighting diffuser as explained on page 18. Then remove the metal filters as shown on page 9.

Loosen the two screws (1 and 2) on each side of the bracket which supports the halogen light (fig. 26).



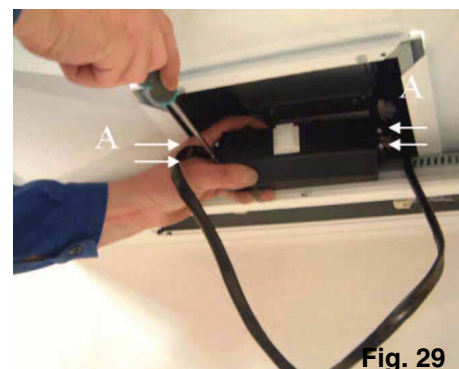
Loosen the two screws (1 and 2) from the housing of the control board (fig. 27).



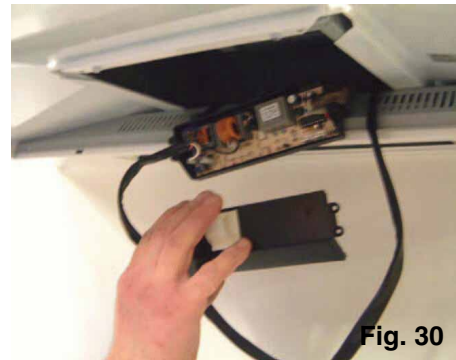
Remove the housing with the control board (fig. 28).



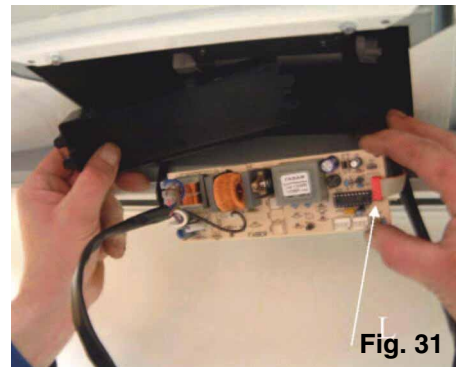
Remove the 4 screws (A) from the control board box cover (fig. 24).



Remove the control board box cover (fig. 30).



Replace the control board (fig. 31).



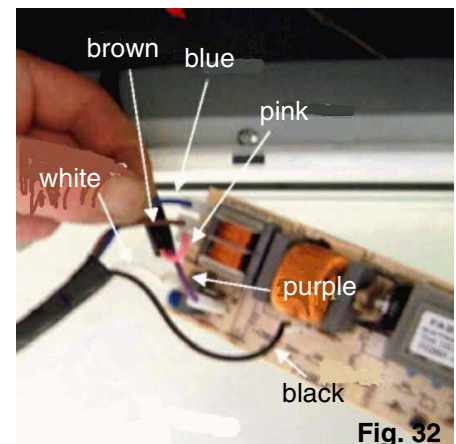
Disconnect the connector L between the control board and the flat multiwires (fig. 32).

Disconnect the wires as indicated in fig. 32.

Replace the control board by reversing the disassembling process.

Switch on the electricity supply to the hood.

Check the different control functions to ensure that the hood is working properly.



6.10 Replacing the flat multiwires of the control panel

Remove the control panel as described on page 17.

Then remove the control board as described on page 19.

Replace the flat multiwires and instal the control board. Then instal the control panel by reversing the disassembling process.

Switch on the electricity supply to the hood.

Check the different control functions to ensure that the control box is working correctly.

6.11 Replacing the processor

Remove the processor as indicated on page 19 and 20.

Disconnect the connector (L) between the control board and the flat multiwires.

Fig. 34

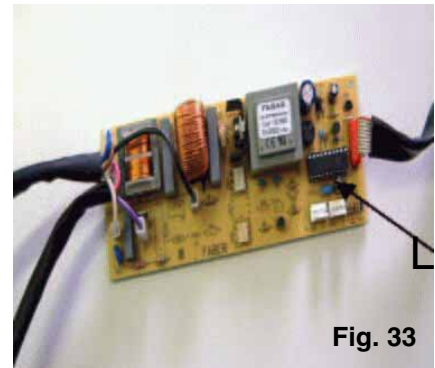
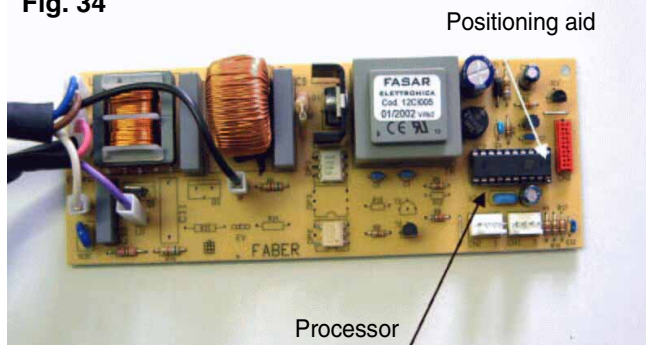


Fig. 33

Remove the processor as indicated in fig. 35 and 36.

Fig. 35

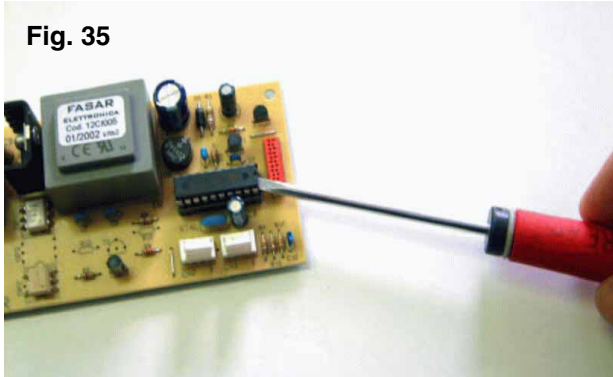
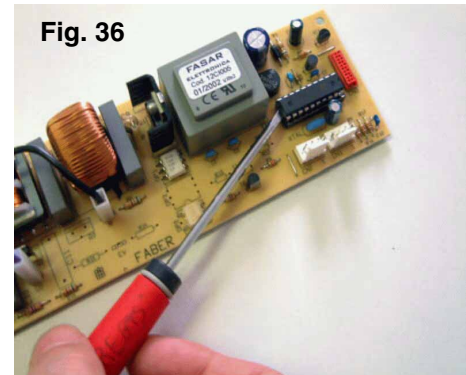
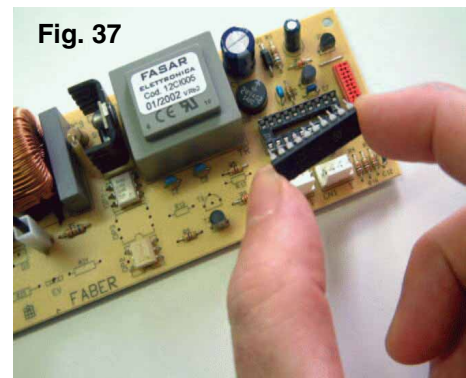


Fig. 36



Remove the processor as indicated in fig. 37.

Fig. 37



Install the new processor correctly using the positioning aid as indicated in fig. 34.

Install the control board by reversing the disassembling process.

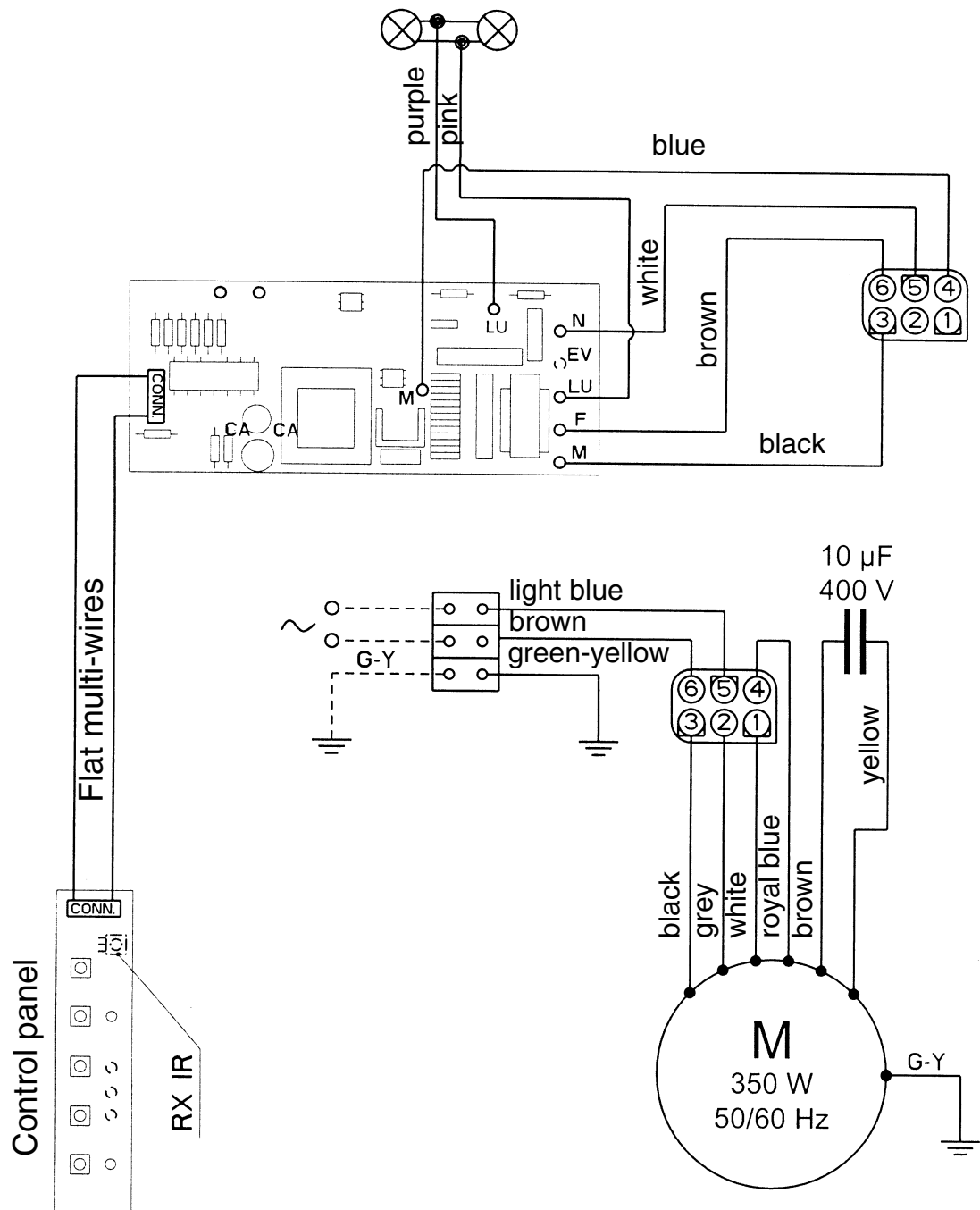
Switch on the electricity supply to the hood.

Check the different control functions to ensure that the hood is working properly.

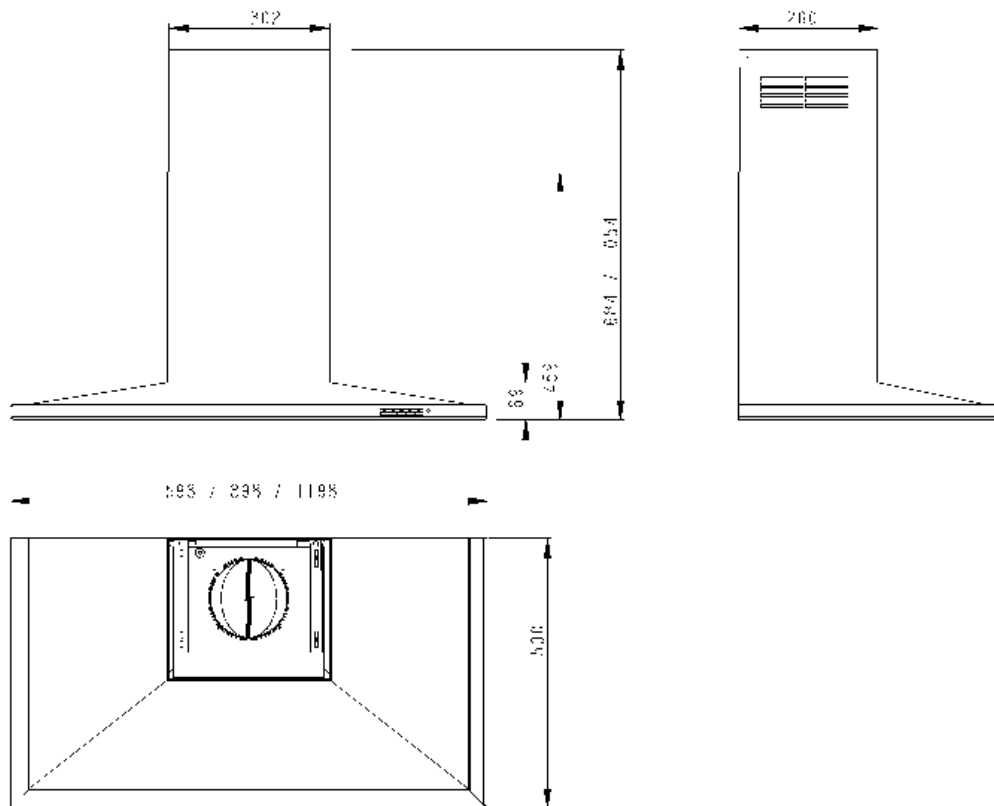
7. Technical data

Voltage/frequency	230V / 50Hz
Air extraction rate (free-blowing)	
MIN setting	440 m ³ /h
MED setting	540 m ³ /h
MAX setting	780 m ³ /h
HIGH-POWER	950 m ³ /h
Electrical connection	470 W
Halogen lighting (high-voltage halogen)	2 x 60 W
Exhaust air connection	150 mm

8. Circuit diagram



8.1 Illustration of dimensions



8.2 Data in decibels

Free-blowing:

Min. setting	42 dB(A)
Med. setting	57 dB(A)
Max. setting	65 dB(A)
High-power setting	69 dB(A)

Attention: *There is currently no standard gauging procedure for these figures.*

These figures may only be used as reference figures for determining the noise level.

A higher number of decibels - dB(A) - is determined in the case of the recirculating air mode.

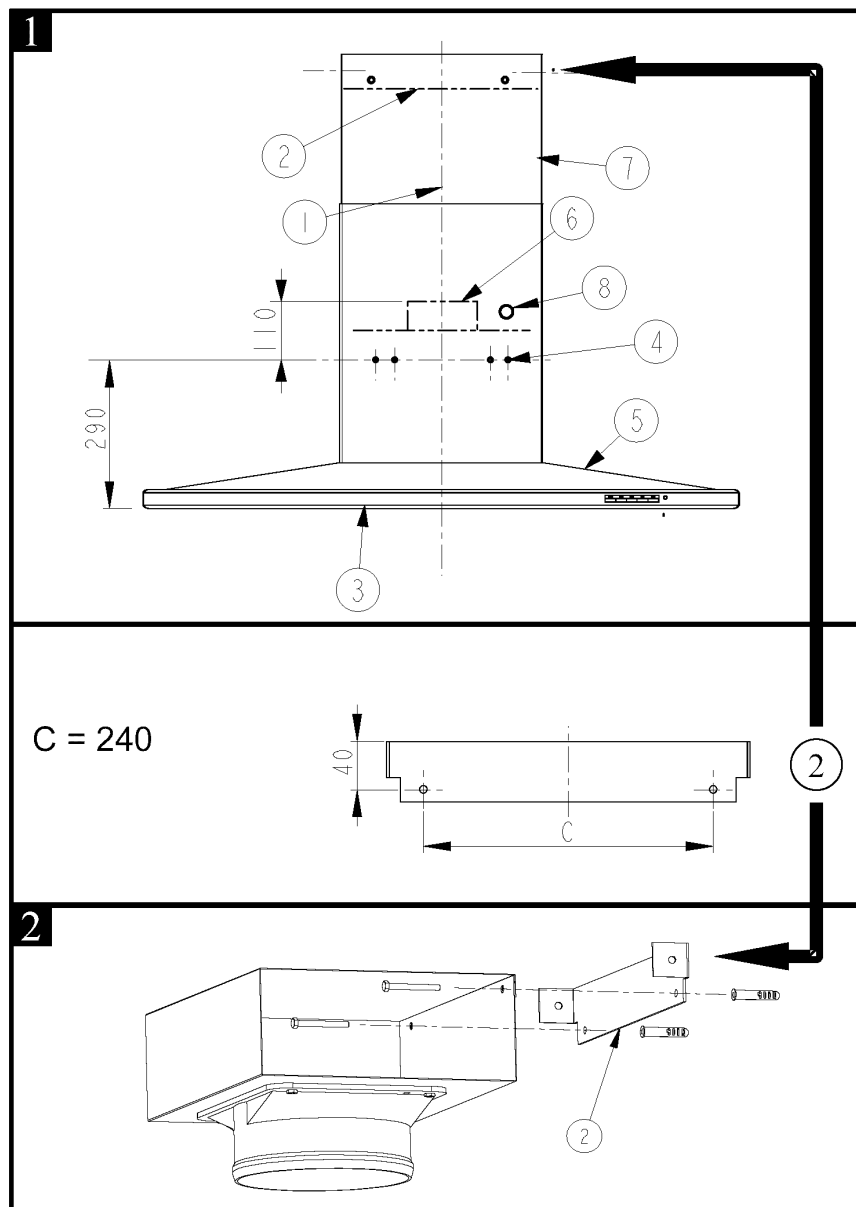
9. Faults and their cause

Attention: Any measures required may only be undertaken by qualified electricians or specialists.

Problem	Probable cause	Comment	Remedy
The extractor hood does not function.	The power cable has not been connected to a live socket.	* *	Check to ensure that the cable has been inserted properly. Check to ensure that the socket is live. Check the plug on the motor.
<p>The extractor hood does not work properly: No light on pressing the LED button no. 1.</p> <p>The light does not go off on pressing the LED button no. 1.</p> <p>The motor does not work when the LED button no. 2 is pressed.</p> <p>The velocity of the ventilator cannot be regulated to the required setting when the (+) and (-) buttons are pressed.</p> <p>The high-power setting cannot be activated by means of pressing the LED button no. 5.</p>	<p>The lamps have burnt out.</p> <p>The switch unit has blocked. The flat multi-wires are damaged. Failure in the connections to the flat multi-wires. The control board does not function. The control board of the switch block does not function.</p>	<p>* * * * *</p>	<p>Replace with the same model and reference.</p> <p>Replace the switch block covering. Replace the flat multi-wires. Replace the flat multi-wires.</p> <p>Replace the control board. Replace the control board of the switch block.</p>
The automatic pre-set stop of the additional velocity after 5 minutes does not function.		* *	Replace the processor. Replace the control board.

Problem	Probable cause	Comment	Remedy
Problems with automatic functions: Pre-set stop of the cooker hood. Saturation display of the metal grease filters. Saturation display of the charcoal filters. Setup procedure.	This section has been drawn up to ensure a smooth procedure: The majority of problems are the result of application errors.	* *	Firstly take a look at the procedure in the instruction manual. Replace the processor. Replace the control board.
The remote control does not function properly.	The remote control is being used beyond the 30° angle and the 7m-range. The remote transmission lense and the sensor window are dirty. Strong fluorescent light is being used in the same room.	*	Check to see whether the batteries in the remote control are flat. Replace the remote control. Replace the control board of the switch block.

10. Installing the hood



1. Draw a vertical line on the installation surface (wall) for the cooker hood.
(Fig. 1, ①).
2. Screw on the duct support ②. Determine the installation height ③ of the hood in order to position the supports (Fig. 3, ④)
3. The body of the hood ⑤ is attached to the wall supports. Connect the exhaust air duct to the fan outlet of the hood ⑥ .
4. Check the adjustment and the positioning of the cooker hood from the outside with the 5x10 screws of the supports and with the two 5 x 25 mm screws.
5. Once everything has been adjusted, secure the cooker hood with the fastening screw ⑧ against unintentional extension. This positive fastening screw is indicated by means of coloured marking, to be found in the top part of the appliance casing.

