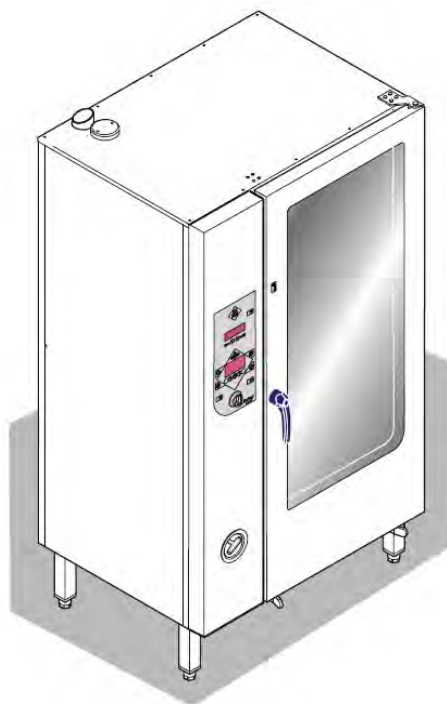


CE & UL Version

Replacement instructions

SmartCombi™ & ClassicCombi™

Electric and Gas



Model	Serial-No. / date	
	from	thru
Electric:		
ESC / ECC 615	all	
ESC / ECC 620	all	
ESC / ECC 115	all	
ESC / ECC 120	all	
ESC / ECC 215	all	
ESC / ECC 220	all	
Gas:	all	
GSC / GCC 615	all	
GSC / GCC 620	all	
GSC / GCC 115	all	
GSC / GCC120	all	
GSC / GCC215	all	
GSC GCC 220	all	

From software 3.00

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Keyboard pcb replacement instructions

Valid for:

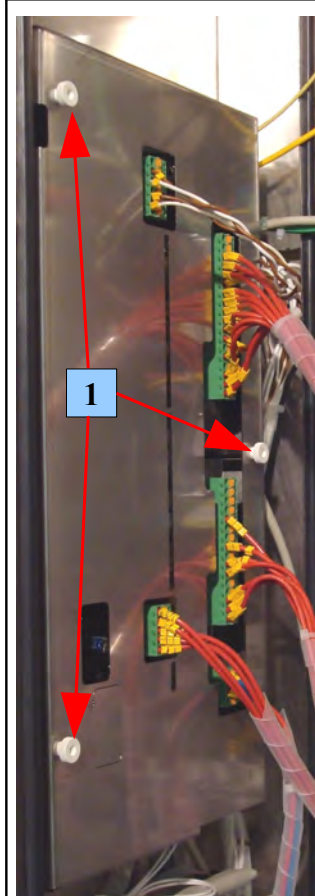
MM203745

Arrangements:

Disconnect the unit from the power supply, to avoid any damages of the pcb! Open front panel.

Pcb's can be damaged by static charges. Use e.g. an antistatic wristband during the work. If possible do not touch the surface of the board!

Disassembling:

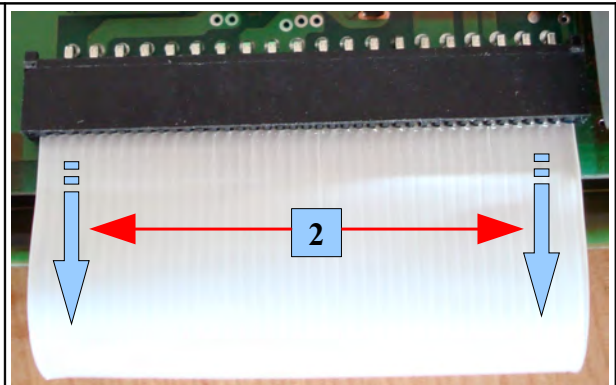


Version 20.x

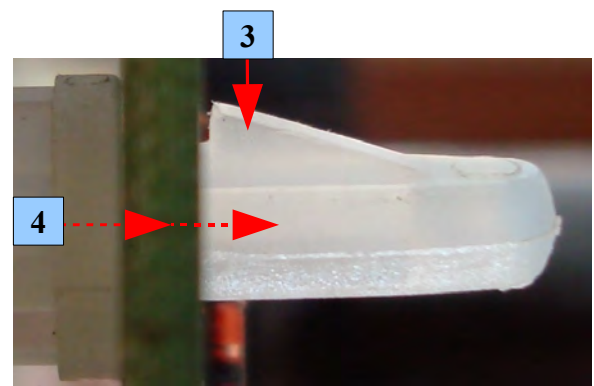


Version 6.x / 10.x

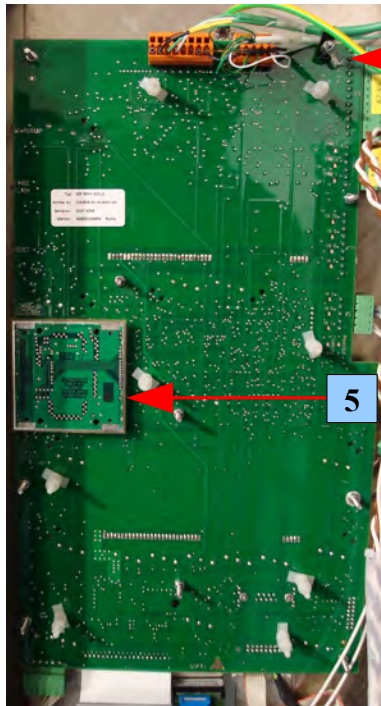
- Remove all plugs carefully (mounted from the front). Depending on the unit type, the number of plugs can be different
- Remove protection box [1]. (Only at 20.x units)



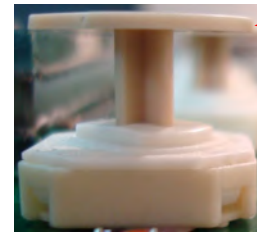
- Pull ribbon cable from the relay pcb evenly.



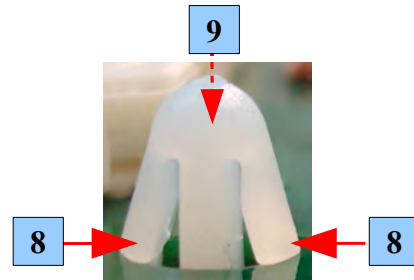
- Remove relay pcb from the keyboard pcb.
- Unlock (push) each plastic clip [3] and pull out the relay pcb carefully [4].



- Pull out flash modul [5].
- Remove all plugs from the keyboard pcb. Depending on the unit type, the number of plugs can be different.
- Remove cord grip [6].
- Remove all wires at plug X11 and X16. Using a “precision” (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire (note down configuration!).
- Remove all nuts and take out the keyboard pcb [6].



- Remove all button caps [7].



- Unlock (push) and take out plastic caps [8,9].

Assembling:

- Mount all caps and clips on the the new keyboard pcb. Fasten all nuts easily and check buttons function parallel. The used self nuts are self locking nuts.
- Mount all plugs and probe wires at the keyboard pcb.

X11							
brown	black	green	white	brown	black	brown	black
B5	B4	B3	B2				

X16				
white	green/red	green/blue	green/yellow	green
B1				

Schematic of probe connection

- Plug flat ribbon cable. Replace cable, if pre-damaged. Mount black cord grip.
- At keyboard pcb's with white control LED's, the ground resistor on X9 has to be removed. The resistor is already on board.
- Mount protection cover, if available.
- Mount all plugs at the relay pcb.
- Close and lock front panel.
- Connect unit to the power supply and check performance.
- Crosscheck function of all buttons with the help of the service menu -> **Button-Test**.

Relay pcb replacement instructions

Valid for:

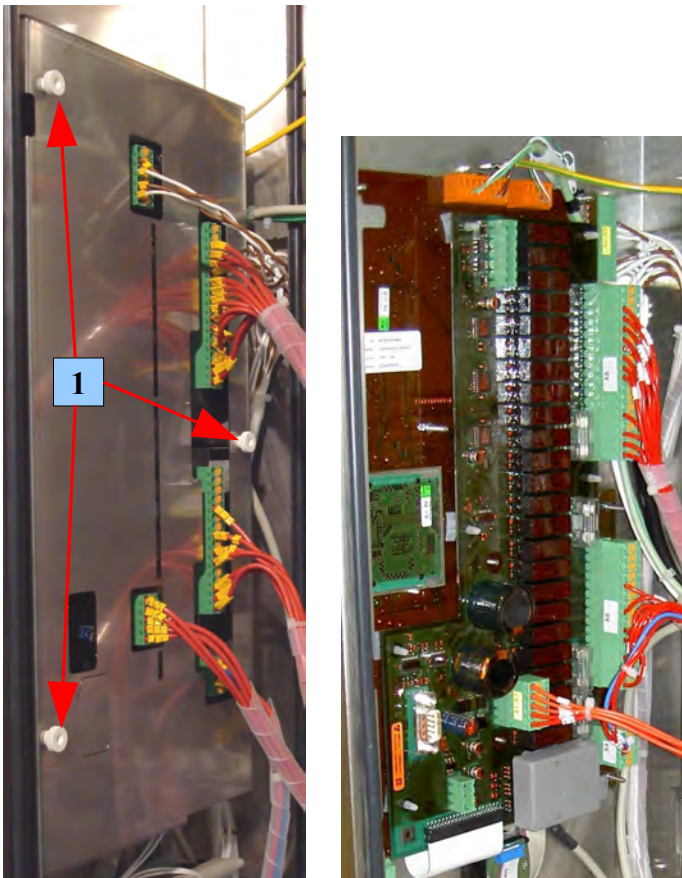
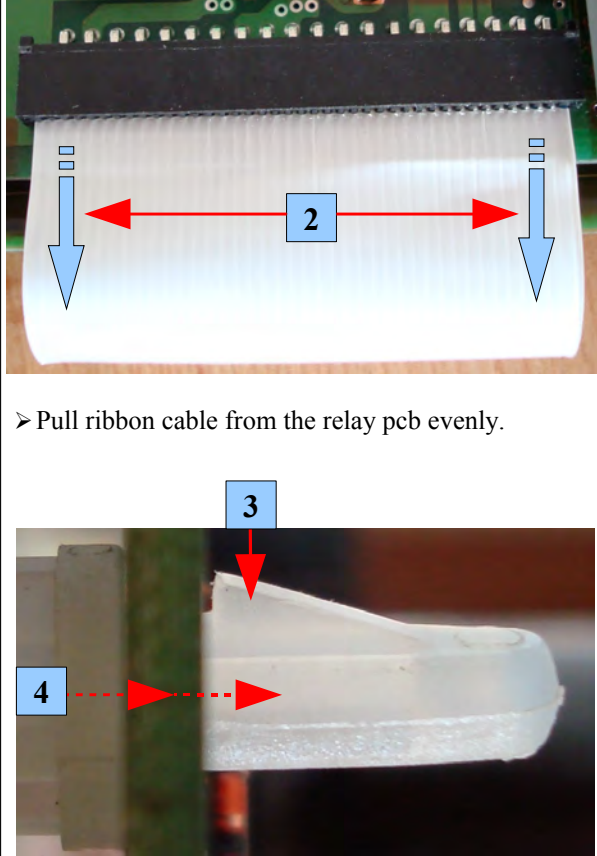
MM203747

Arrangements:

Disconnect the unit from the power supply, to avoid any damages of the pcb! Open front panel.

Pcb's can be damaged by static charges. Use e.g. an antistatic wristband during the work. If possible do not touch the surface of the board.!

Disassembling:

 <p>Version 20.x</p> <p>Version 6.x / 10.x</p> <ul style="list-style-type: none"> ➤ Remove all plugs carefully (mounted from the front). Depending on the unit type, the number of plugs can be different ➤ Remove protection box [1]. (Only at 20.x units) 	 <p>➤ Pull ribbon cable from the relay pcb evenly.</p> <p>➤ Remove relay pcb from the keyboard pcb.</p> <p>➤ Unlock (push) each plastic clip [3] and pull out the relay pcb carefully [4].</p>
---	---

Assembling:

- Mount new relay pcb.
- Plug flat ribbon cable. Replace cable, if pre-damaged.
- Mount protection cover, if available.
- Mount all plugs at the relay pcb.
- Close and lock front panel.
- Connect unit to the power supply and check performance.

Flash modul replacement instructions

Valid for:

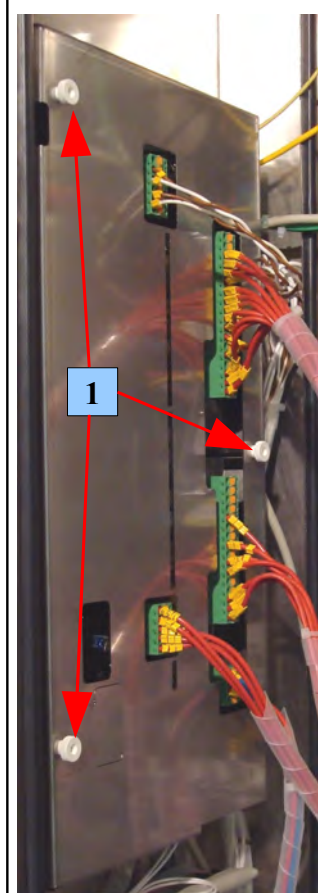
MM203748

Arrangements:

Disconnect the unit from the power supply, to avoid any damages of the pcb! Open front panel.

Pcb's can be damaged by static charges. Use e.g. an antistatic wristband during the work. If possible do not touch the surface of the board.!

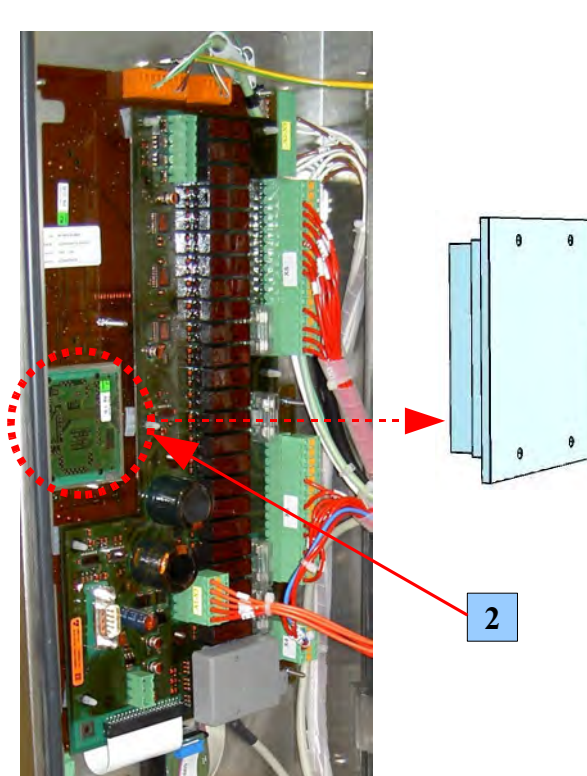
Demontage:



Unit version 20.x

Only at 20.x units with protection box:

- Remove all plugs carefully (mounted from the front). Depending on the unit type, the number of plugs can be different
- Remove protection box [1].



- Pull out flash modul carefully [2].

Assembling:

The assembly has to be carried out in reversed order. The Flash modul is equipped with a double connection. Therefore the modul can be plugged arbitrarily.

Keyboard pcb replacement instructions

Valid for:

MM202690

Arrangements:

Disconnect the unit from the power supply, to avoid any damages of the pcb! Open front panel.

Pcb's can be damaged by static charges. Use e.g. an antistatic wristband during the work. If possible do not touch the surface of the board.!

Disassembling:



Unit version 20.x

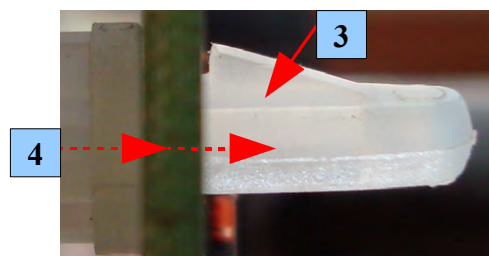
Unit version 6.x / 10.x

- Remove all plugs carefully (mounted from the front). Depending on the unit type, the number of plugs can be different.
- Remove protection box [2]. (Only at 20.x units)

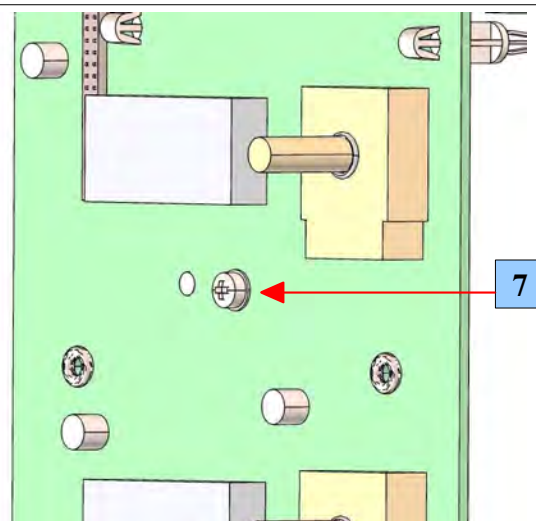
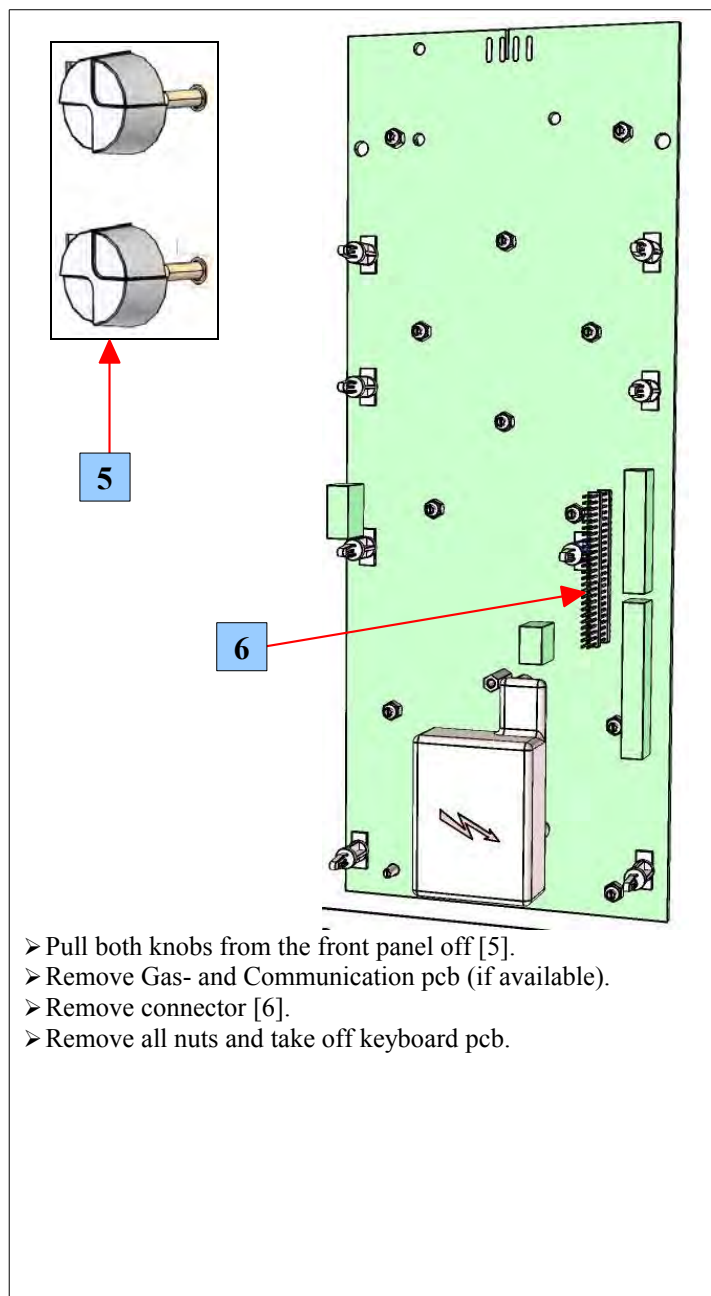


Example at unit version 6.x / 10.x with single core temperature probe.

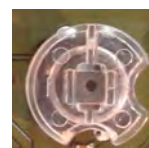
- Remove all wires at plug X11 and X16. Using a "precision" (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire (note down configuration!).
- Remove earth screw [3] (interconnects both pcb's).



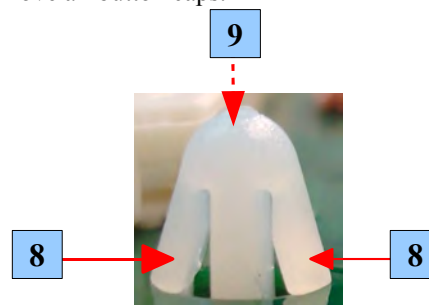
- Remove control pcb from the keyboard pcb.
- Unlock (push) each plastic clip [4] and pull out the relay pcb carefully [5]. Notice! The pcb is connected to the keyboard pcb by a connector.



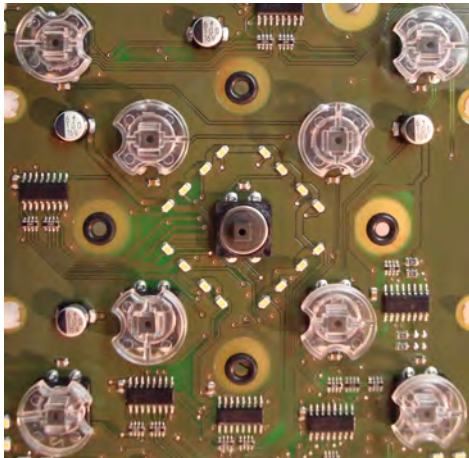
- Loosen ground screw[7] and remove connection piece.
- Remove glued seals from the pcb and put seals on the mounting bolts of the front panel.
- Remove seals from both controller axes .



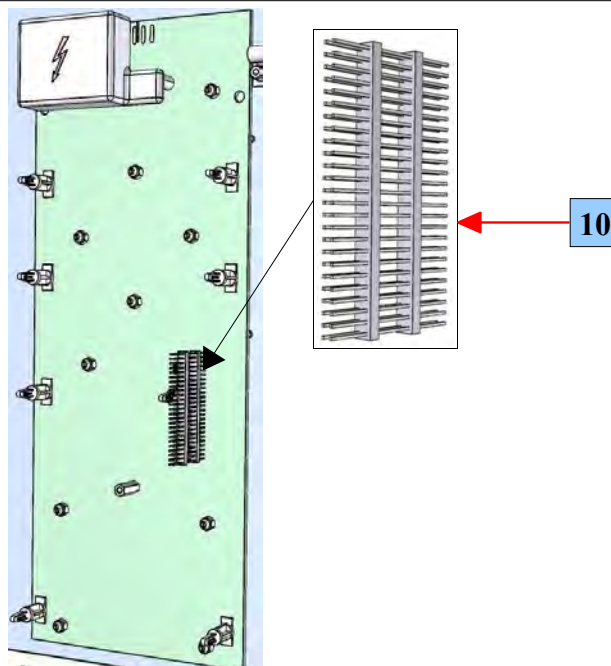
- Remove all button caps.



Assembling:



- Mount all caps and clips on the the new keyboard pcb.. Don't forget the earth connection!
No cap may mount on the center button. (no function)!
- Mount keyboard pcb. Fasten all nuts easily and check buttons function parallel
The used self nuts are self locking nuts.



- Mount connector.
- Mount control pcb.
- Mount gas and communication pcb, if available.
- Mount earth ground connection [10].
- Connect temperature probe wires.
- Mount protection cover (if available) and plugs.
- Close and lock front panel.
- Final test with the help of the service menu -> **bd5** (Button and display test).

X12				
white	green/red	green/blue*	green/yellow*	green*
B1				

X11							
black	brown	black	brown	white	green	-	-
B2		B3		B4			

Assignment (* = only at optional 4 point core temp. probe)

Control (main) pcb replacement instructions

Valid for:

MM202676

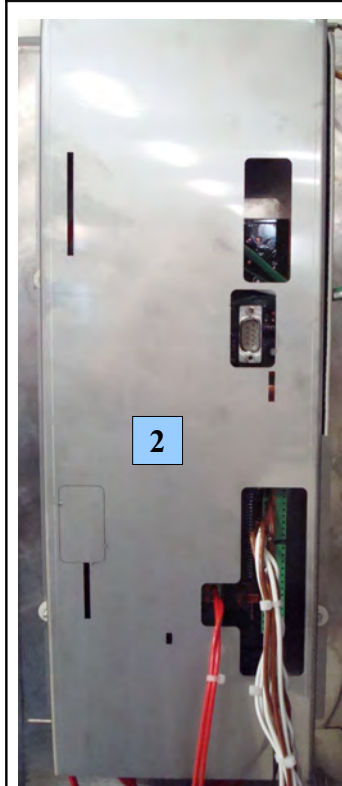
Arrangements:

Disconnect the unit from the power supply, to avoid any damages of the pcb! Open front panel.

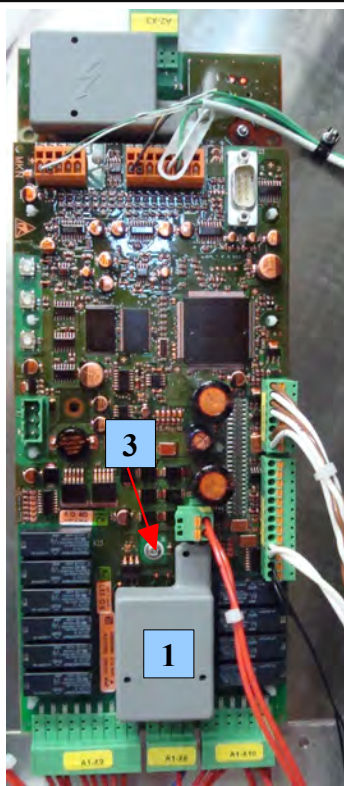
Pcb's can be damaged by static charges. Use e.g. an antistatic wristband during the work. If possible do not touch the surface of the board.!

Note: Two fuses are behind the small protection cover [1]. Checking these first of all. A broken fuse is possibly the failure cause!

Disassembling:

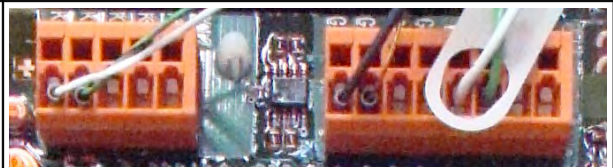


Unit version 20.x



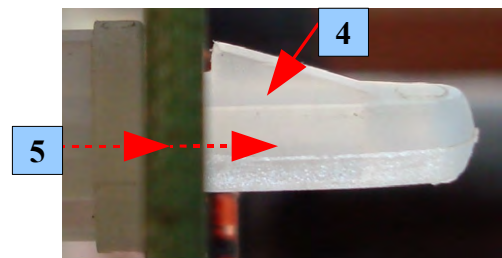
Unit version 6.x / 10.x

- Remove all plugs carefully (mounted from the front). Depending on the unit type, the number of plugs can be different.
- Remove protection box [2]. (Only at 20.x units)



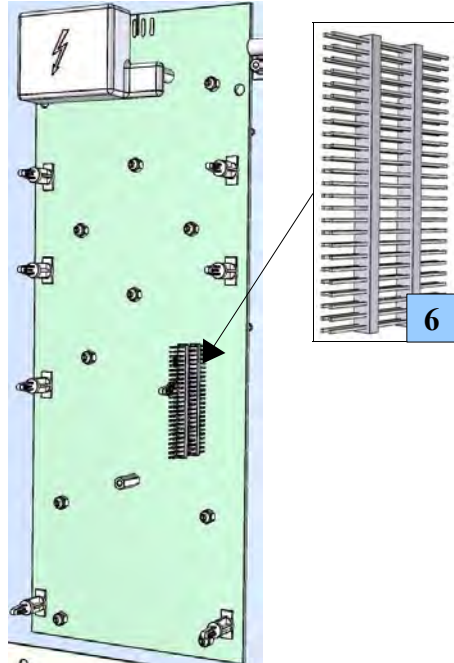
Example at unit version 6.x / 10.x with single core temperature probe.

- Remove all wires at plug X11 and X16. Using a "precision" (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire (note down configuration!).
- Remove earth screw [3] (interconnects both pcb's).



- Remove control pcb from the keyboard pcb.
- Unlock (push) each plastic clip [4] and pull out the relay pcb carefully [5]. Notice! The pcb is connected to the keyboard pcb by a connector.

Assembling:



X12				
white	green/red	green/blue*	green/yellow*	green**
B1				



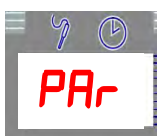






X11							
black	brown	black	brown	white	green	-	-
B2		B3		B4			

Assignment (* = only at optional 4 point core temp. probe)


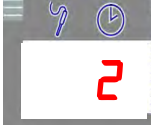
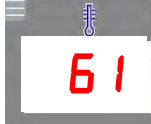
- Check connector [6] and replace if damaged.
- Mount new control pcb.
- Mount earth screw[3] interconnects both pcb's).
- Mount plugs and protection cover (if available).
- Close and lock front panel.
- Switch on the power supply and carry out the configuration.

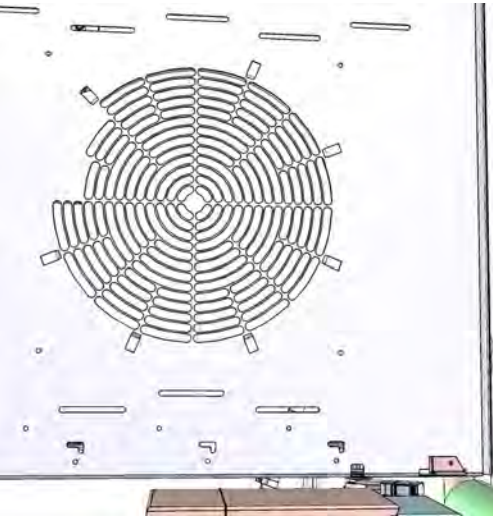
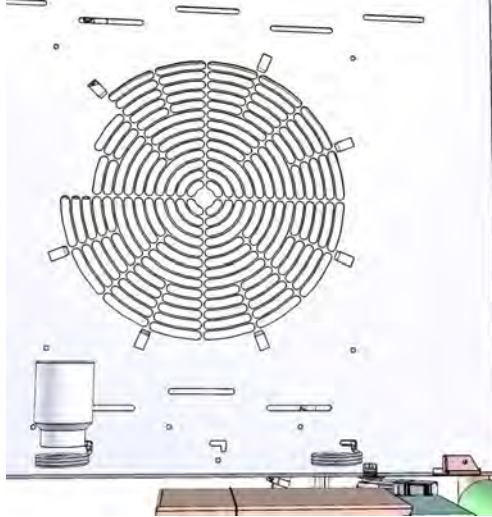
Software configuration

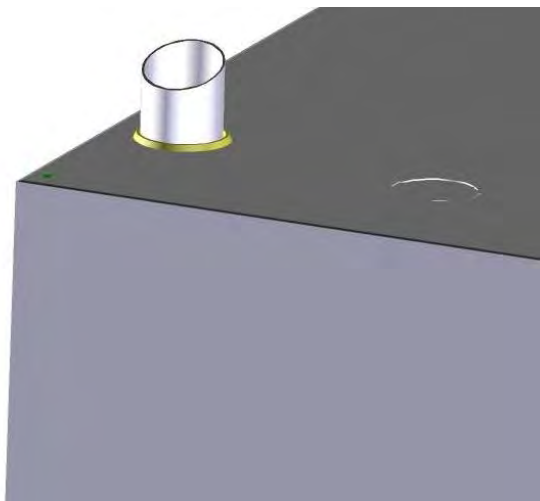
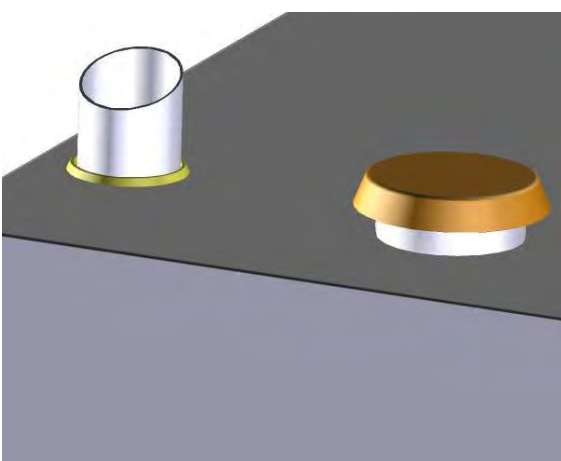
To enter the Service menu do the following:

1.		Switch the unit on	
2.		Press Flexi button and choose with the upper knob PA_r (parameter)	
3.		Press Start/ Stop- Button and on the lower displays shows 000 .	
4.		Enter Password 777 with the lower knob	
5.		Press Start/ Stop- Button SOF (Software) is shown on the lower display.	
6.		Select UCF with the lower knob and confirm with START/ STOP. Must flashing in the upper display now. 2 must flashing in the upper display now. You are now in the unit configuration.	


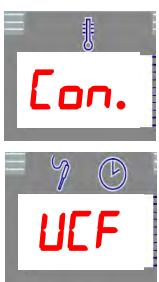



Control keys:

Button	Function	Display reading	
	Toggle between Parameter and value of parameter. The flashing display is always the active display and can be changed.		Parameter selection
	<u>Upper knob</u> Parameter selection		Parameter value
	<u>Lower button</u> Parameter value		

Parameter-No.	Funktion	Adjustable values	Comments
2	Unit size / type	61 / 11 / 62 / 12 / 21 / 22	61 = HansDampf 6.1 11 = HansDampf 10.1 62 = HansDampf 6.2 12 = HansDampf 10.2 21 = HansDampf 20.1 22 = HansDampf 20.2
1	Heating power source	EL / GAS	El = Electric unit Gas = Gas unit
140 141 142	Serial no. (8 columns)	00 - 99 000 - 999 / 000 - 999	140: 1 – 2 Stelle 141: 3 – 5 Stelle 142: 6 – 8 Stelle
170	WaveClean™	off / on	off= deactivated (standard) on = activated (option)
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  Air baffle without WaveClean cartridge holders Unit without WaveClean </div> <div style="text-align: center;">  Air baffle with WaveClean cartridge holders Unit with WaveClean </div> </div>			
At 20.x floor units must be checked, if WaveClean pumps are available underneath the unit			

Parameter-No.	Funktion	Adjustable values	Comments
246	Core temperature probe 2 wires at terminal X12 = Single point probe 5 wires at terminal X12 = Multi point probe	no / - 1- / -4-	no = no probe / probe deactivated -1- = One point single probe (Standard) -4- = four point multi probe (Option)
266	Fan control type	C2 / FI	C2 = Contactor controlled FI = Frequency controlled
398	DryTronic (Fresh air pipe)	0 / 1	0= deactivated (standard) 1 = activated (option)
 Unit without DryTronic		 Unit with DryTronic	
406	Ext. Hood control	off / on	Off = deactivated (standard) On = Ext. hood control activated (At units with condensation hood HansDampf Air)

Save configuration changes:

	Press STEP button to go back into the service main area.	
	Press FLEXI button. Sto. must appear on the upper display. Press the STEP button three times for going back to the main mask.	
	Switch unit off and on again. -C- (Configuration) may not flashing in the display. Final function check.	

Gas and Communication pcb replacement instructions

Valid for:

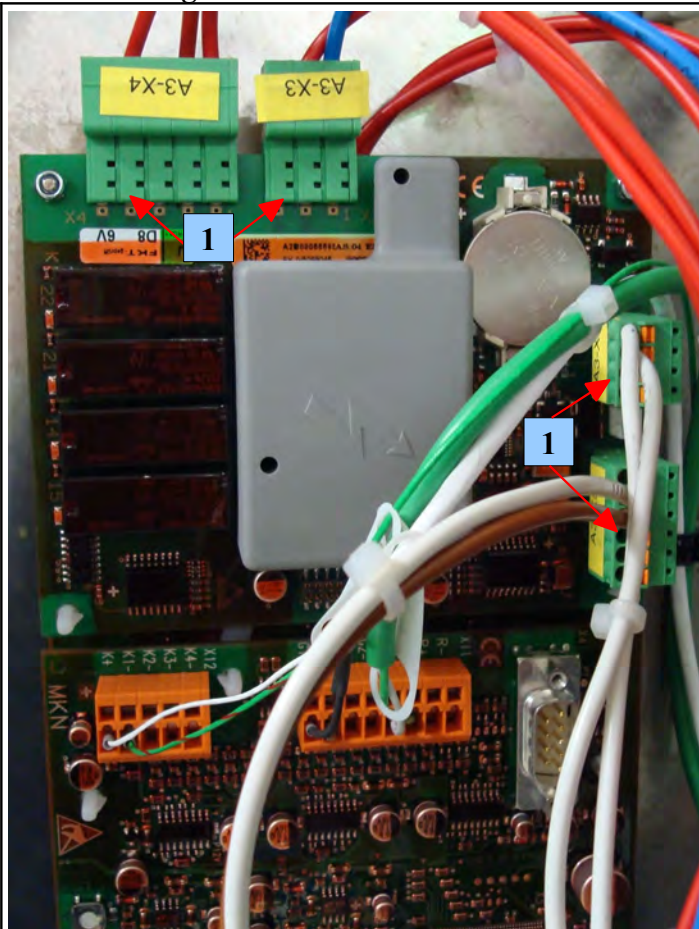
MM202698

Arrangements:

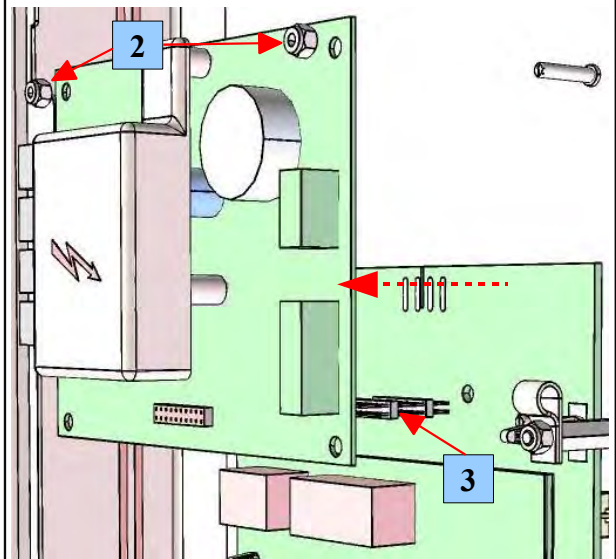
Disconnect the unit from the power supply, to avoid any damages of the pcb! Open front panel.

Pcb's can be damaged by static charges. Use e.g. an antistatic wristband during the work. If possible do not touch the surface of the board.!

Disassembling:



- Remove protection box (Only at 20.x floor units).
- Remove all plugs [1] from the gas and communication pcb.



- Remove nuts [2].
- Unlock (push) each plastic clip and pull out the pcb carefully.
Notice! The pcb is connected to the keyboard pcb by a connector [3]!

Assembling:

- The assembly has to be carried out in reversed order.

Chamber probe replacement instructions

Valid for:

SmartCombi/ ClassicCombi	MM203689
--------------------------	----------

Arrangements:

Disconnect the unit from the power supply.

Remove left side wall and open front panel. At the floor version 20.x the protection cover must be removed in addition.

- Disconnect chamber probe from terminal X11. Using a “precision” (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire.

B2 = Chamber probe 1 (upper one at 20.x)

B3 = Chamber probe 2 (only at 20.x, lower one at HansDampf 20.x)

- Remove cord grip

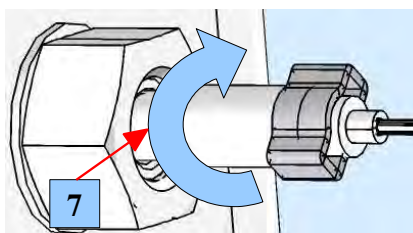
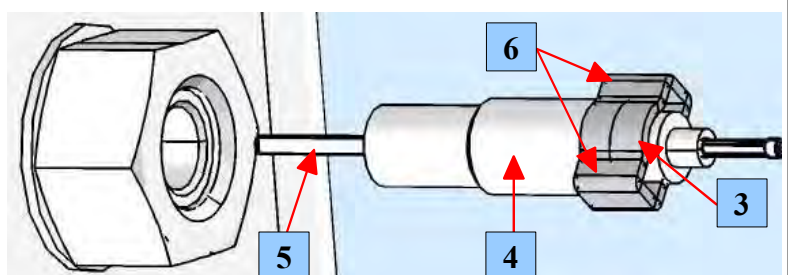
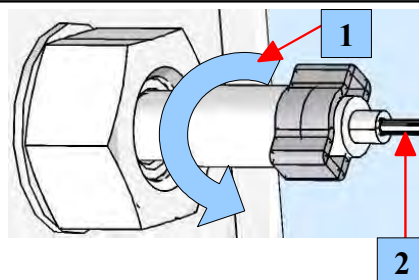
X11							
brown	black	green	white	brown	black	brown	black
B5		B4		B3		B2	

Assignment SmartCombi

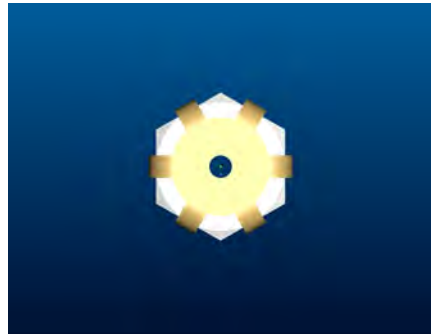
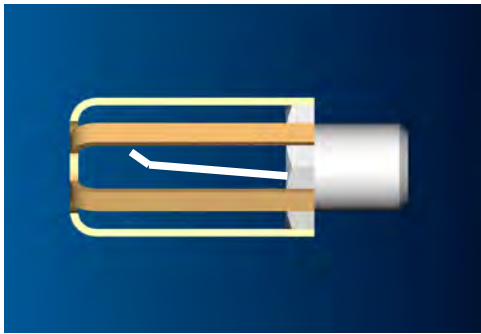
X11					
black	brown	black	brown	white	green
B2		B3		B4	

Assignment ClassicCombi

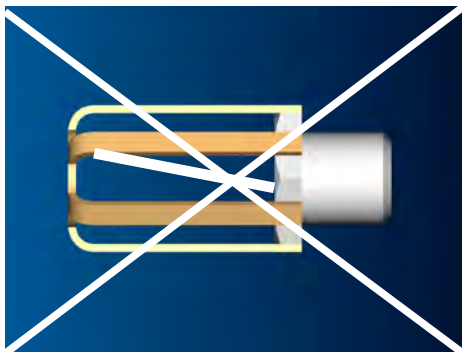
- The probe cable is directed through a hose. This goes behind the cabinet to the chamber probe. The probe is located at the right cabinet side.
- The hose is fixed with cable clips. Loosen clips.
- Turn out the probe incl. the teflon jacket from the fresh air pipe [1].
- Pull out the probe of the teflon jacket [2] with a tongs. Fastening the end of the new probe to the old probe with insulating tape because this is used as a pull cord now. Pull cable through the hose.
- Mount clamp [3] and teflon jacket [4] at the now humidity probe [5].
- Squeezing clamp with crusher or side cutting pliers at the two external surfaces [6] completely together.
- Turn prepared probe inside the fresh air pipe [7].



- Mount chamber probe as follows. Housing has to be mounted in a way that in upper position (12 clock) is no bar of the housing.



- Do not mount the temperature probe with black marking like the following:



- Connect wires on terminal X11 and mount cord grip.
- Fix directing hose with cable clips.
- Mount protection cover, if available.
- Mount side wall
- Close and lock front panel.

Humidity probe replacement instructions

Valid for:

MM203991

Arrangements:

Disconnect the unit from the power supply.

Remove left side wall and open front panel. At the floor version 20.x the protection cover must be removed in addition.

- Disconnect humidity probe from terminal X11. Using a “precision” (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire.

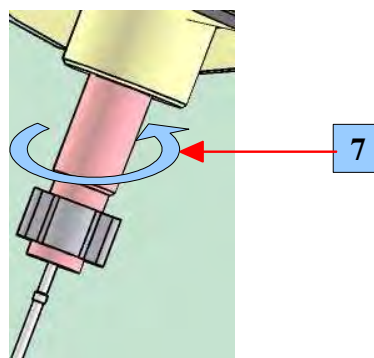
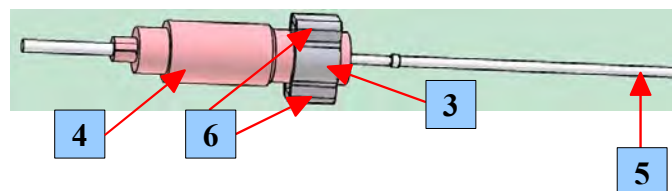
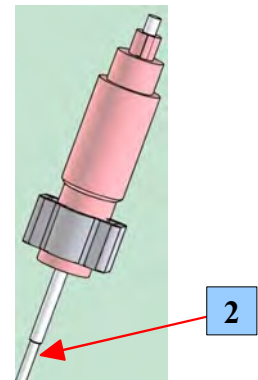
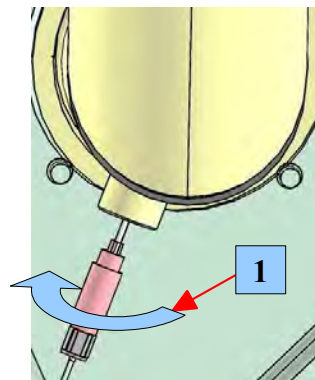
B5 = Humidity probe

- Remove cord grip

X11							
brown	black	green	white	brown	black	brown	black
B5		B4		B3		B2	

Assignment of terminal X11

- The probe cable is directed through a hose. The probe is located at fresh air pipe which is mounted at the left cabinet side.
- The hose is fixed with cable clips. Loosen clips.
- Turn out the probe incl. the teflon jacket from the fresh air pipe [1].
- Pull out the probe of the teflon jacket [2] with a tongs. Fastening the end of the new probe to the old probe with insulating tape because this is used as a pull cord now.
- Pull cable through the hose.
- Mount clamp [3] and teflon jacket [4] at the now humidity probe [5].
- Squeezing clamp with crusher or side cutting pliers at the two external surfaces [6] completely together.
- Turn prepared probe inside the fresh air pipe [7].
- Connect wires on terminal X11 and mount cord grip.
- Fix directing hose with cable clips.
- Mount protection cover, if available.
- Mount side wall
- Close and lock front panel.



Core temperature probe replacement instructions

Valid for:

SmartCombi	ClassicCombi	MM203697	MM203688
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Arrangements:

Disconnect unit from the power supply

Unit version 615, 620, 115, 120, 215 & 220 Electric: Unlock and open front panel.

Only at unit version 215 & 220 Gas: Unlock and open front panel and remove the left side wall.

At the floor version 215 & 220 the protection cover for the electronic must be removed in addition.

- Disconnect core temperature probe from terminal X12 respectively from X16. Using a “precision” (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire.

B1 = Core temperature probe

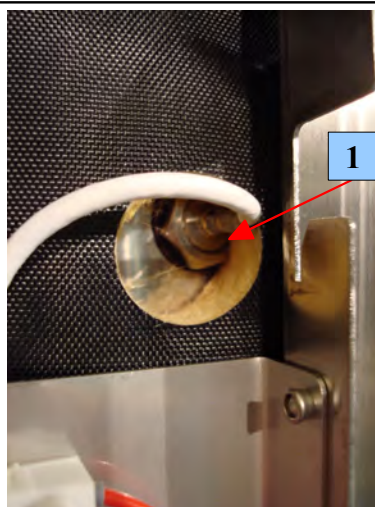
- Remove cord grip

X16				
white	green/red	green/blue*	green/yellow*	green*
R1				
Assignment SmartCombi				

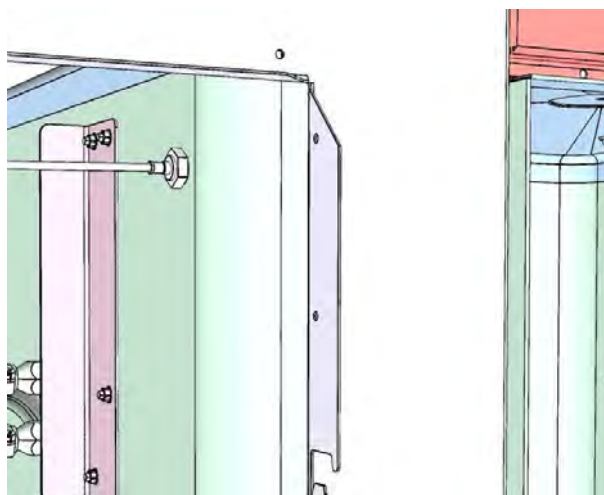
X12				
white	green/red	green/blue*	green/yellow*	green*
R1				
Assignment ClassicCombi				

* = only at optional 4 point core probe

- Remove core temperature probe.
The probe is located at the front upper cabinet corner.
- Mount new probe in reversed order.



Unit version 6xx / 1xx



Unit version 2xx

Drain probe replacement instructions

Valid for:

SmartCombi	ClassicCombi	MM203693	MM203990
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Arrangements:

Disconnect the unit from the power supply.

Remove left side wall and open front panel. At the floor version 20.x the protection cover must be removed in addition.

- Disconnect drain probe from terminal X11.
Using a “precision” (small) flat head screwdriver remove each wire from the connector by pressing on the spring loaded lock on top of each wire.

B4 = drain probe

- Remove cord grip

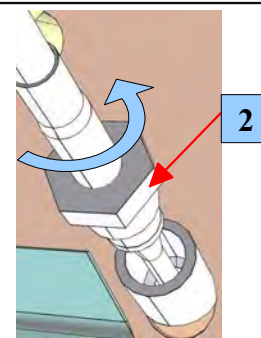
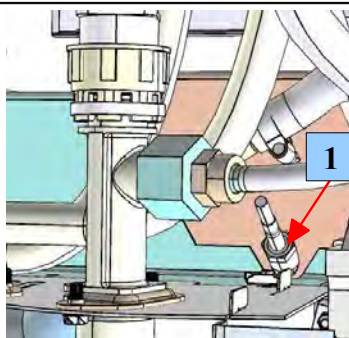
X11							
brown	black	green	white	brown	black	brown	black
B5	B4	B3	B2				
Assignment SmartCombi							

X11					
black	brown	black	brown	white	green
B2	B3	B4			
Assignment ClassicCombi					

SmartCombi and ClassicCombi with Option WaveClean:

The drain probe is screwed in from the left side of the trap[1].

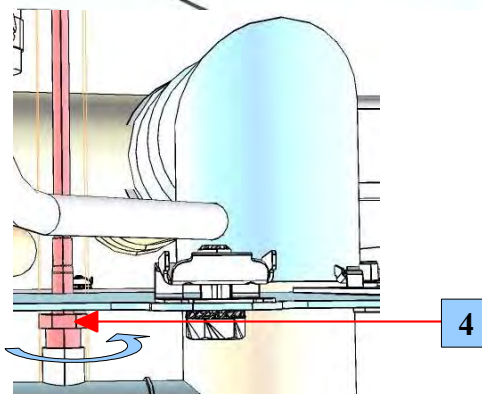
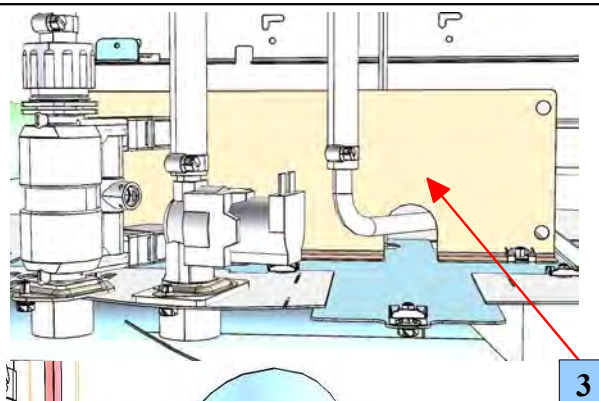
- Remove drain probe [2].
- Mount new drain probe in reversed order.



ClassicCombi without WaveClean:

The drain probe is located at the drain pipe underneath the unit.

- Take out protection plate [3] by removing the three screws.
- Remove drain probe [4].
- Mount new drain probe in reversed order.



Reed contact switch (door switch) replacement instructions

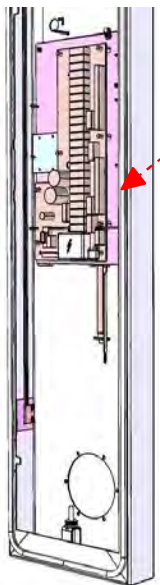
Valid for:

SmartCombi	ClassicCombi	MM203028	MM202722
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Arrangements:

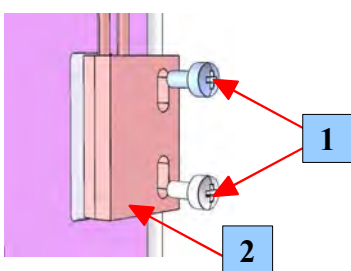
Disconnect the unit from the power supply.

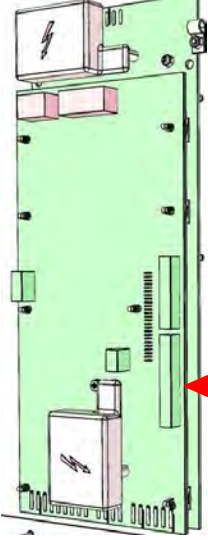
Replacement of the reed contact switch at units with right hinged doors:



4
3
2 Reed contact
1 Reed contact

Assignment SmartCombi



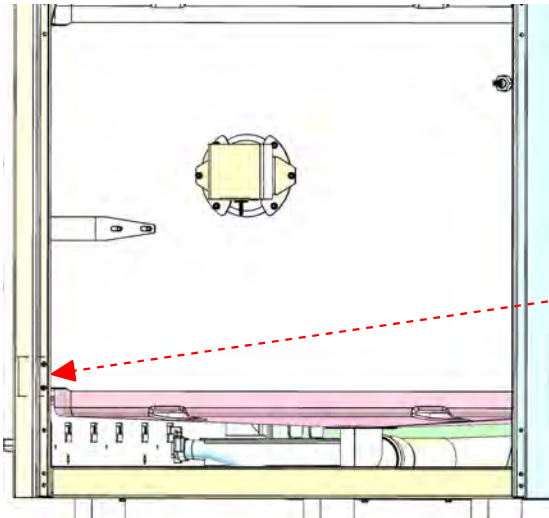


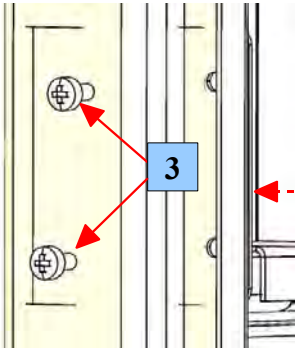
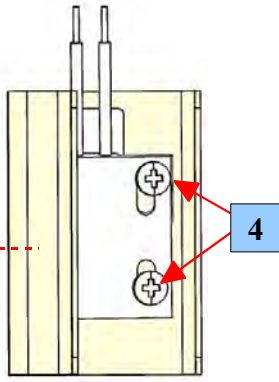
12
11
10
9
8
7
6
5
4
3
2 Reed contact
1 Reed contact

Assignment ClassicCombi

- Unlock and open front panel. Loose screws [1] and take out the reed contact switch [2].
- Pull plug X2 (located at the right hand side on the keyboard pcb) and disconnect cables from clamp 1 and 2.
- The assembly has to be carried out in reversed order.

Replacement of the reed contact switch at units with left hinged doors:



- Remove right unit side wall. Loose screws [3] and take out mounting plate incl. The reed contact switch.
- Loose screws [4] from the mounting plate and remove reed contact switch
- Disconnect both cables.
- The assembly has to be carried out in reversed order.

Pressure switch replacement instructions

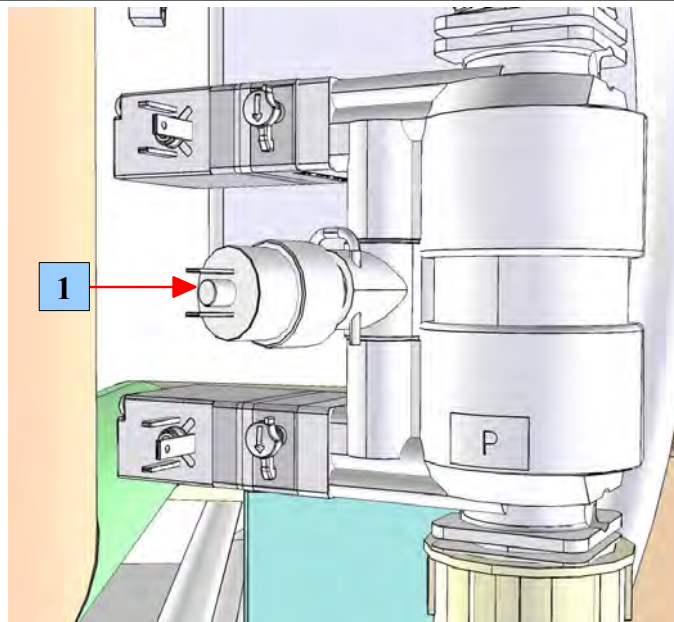
Valid for:

SmartCombi	ClassicCombi	MM202601
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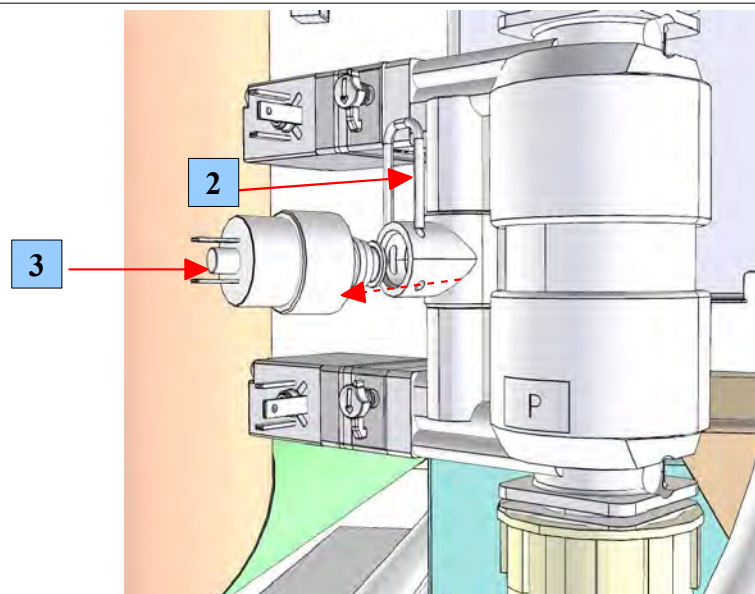
Arrangements:

Disconnect the unit from the power supply. Close water tap on site and relieve pressure on the supply site. Remove left side panel.

Disassembling:



- Remove both wires from the pressure switch [1].



- Pull out spring clip [2]
- Take out the pressure switch [3].

Montage:

- The assembly has to be carried out in reversed order.
- Final function test.
- Mount side panel.

AST unit replacement instructions

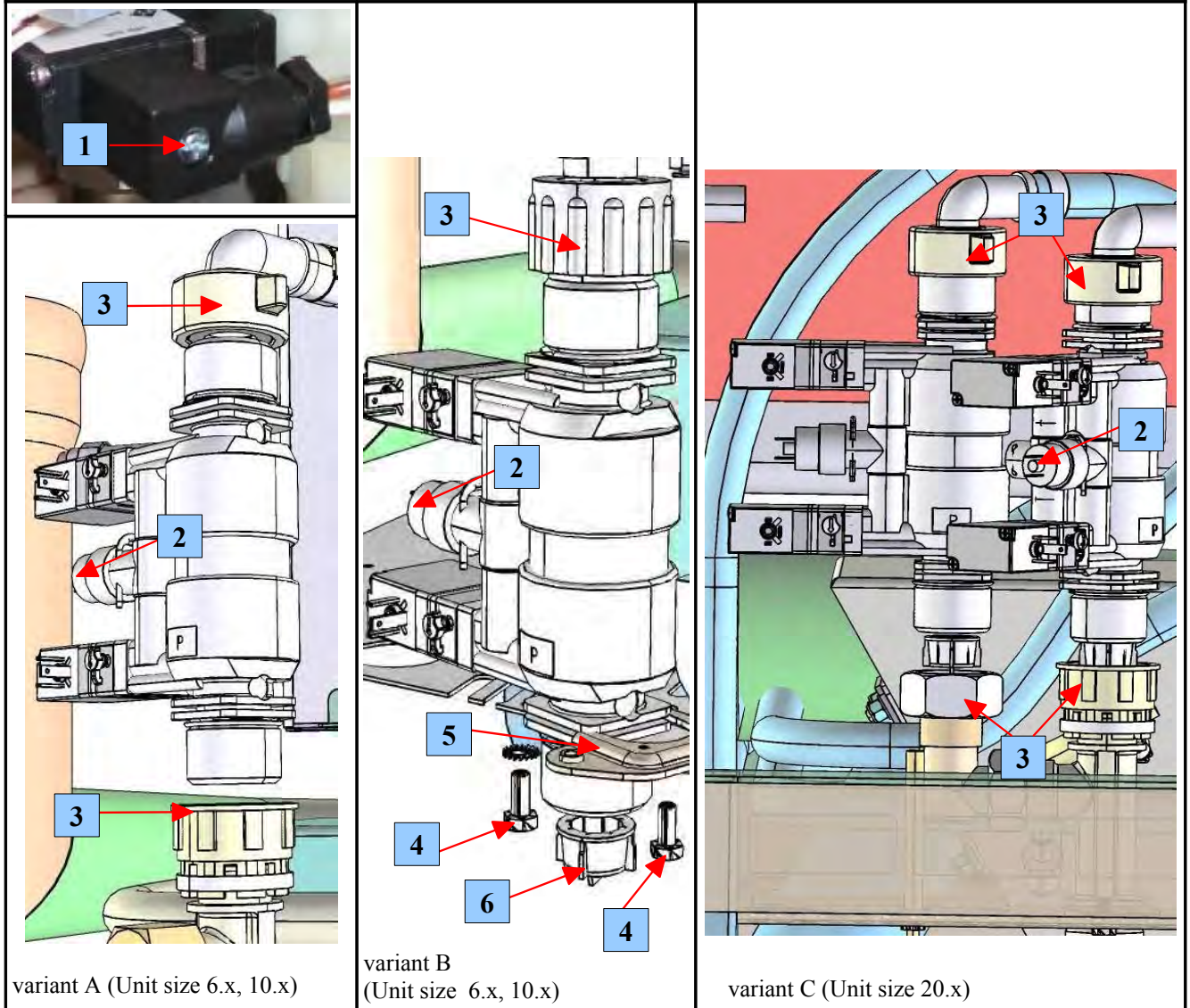
Valid for:

MM203832	MM203831
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Arrangements:

Disconnect the unit from the power supply. Close water tap on site and relieve pressure on the supply site. Remove left side panel.

Disassembling:



- Remove screws [1] at both connections and remove plug.
- Remove wires from the pressure switch [2] (if available).
- Unmount DynaSteam unit by loosen the screwed fitting [3]. The water supply must be disconnected at version B. Afterwards remove the mounting screws from the bottom plate [4] and remove holding plate [5].

Assembling:

- The assembly has to be carried out in reversed order. The „P“ marking must be at the entry (bottom) side. Ensure that the water inlet filter [6] (MM201134) has inserted.
- Final function test with the service menu (service menu -> **10 Water-Test**).
- Mount side wall.

Rectifier replacement instructions

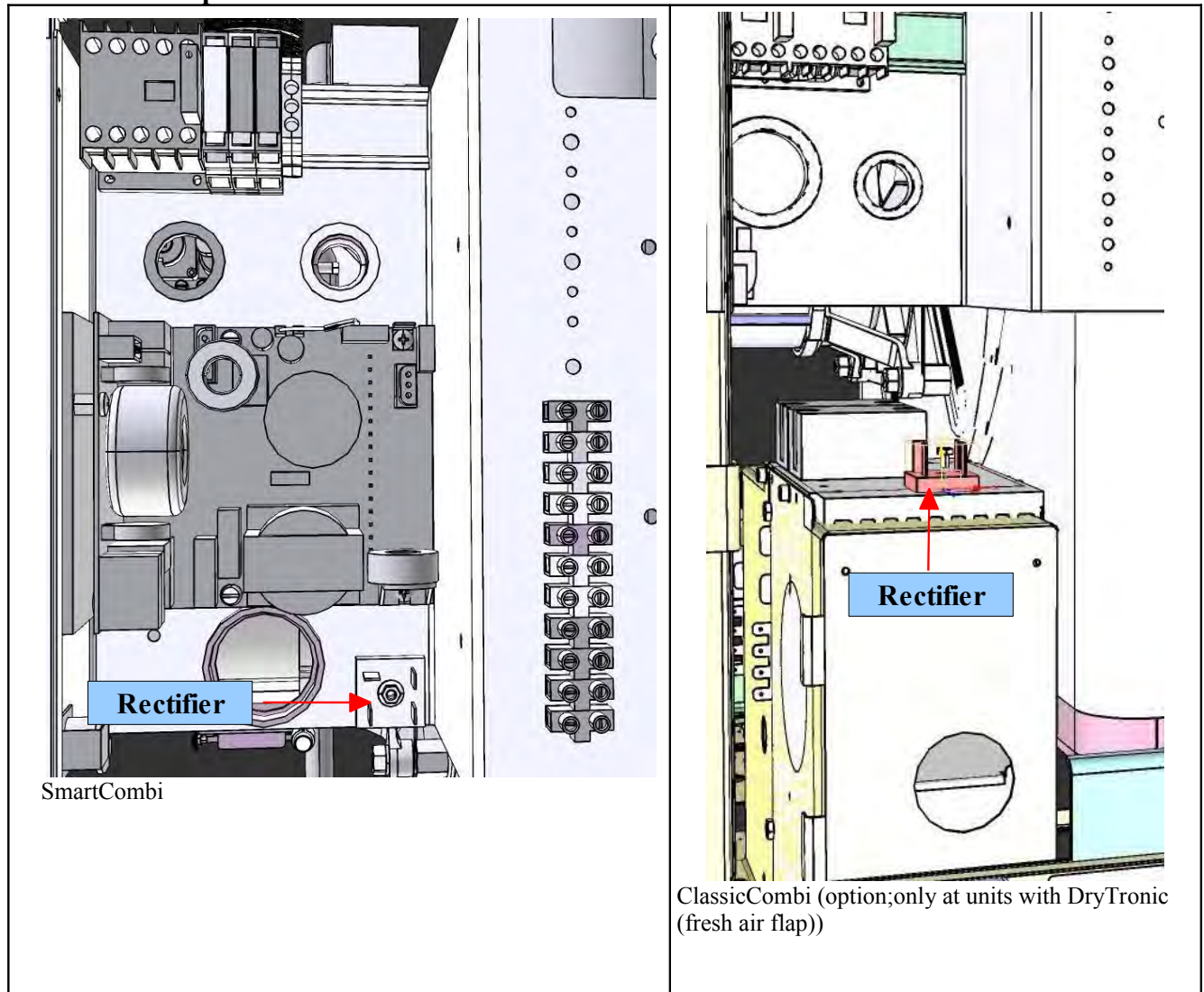
Valid for:

SmartCombi	ClassicCombi	MM203442
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Arrangements:

Disconnect the unit from the power supply. Unlock and open front panel.

Location of the part:



Mounting instructions:

- Write down the cable configuration before removing the wires!
- Check fuse F4 which is located on the electric mounting plate (beside contactor K1) as well as fuse F4 (SmartCombi) or rather fuse F2 (ClassicCombi) on the relay board!
- Final function check (Servicemenü -> **5 Relay-Test** -> **K8 Fresh air flap**).

Lift magnet replacement instructions

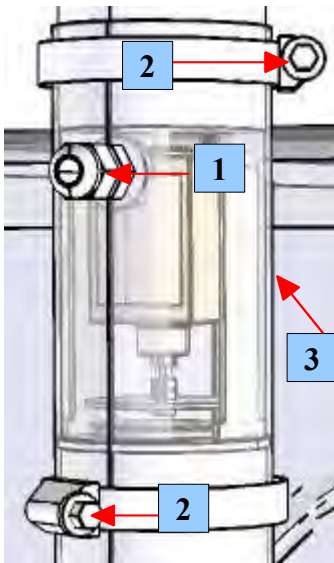
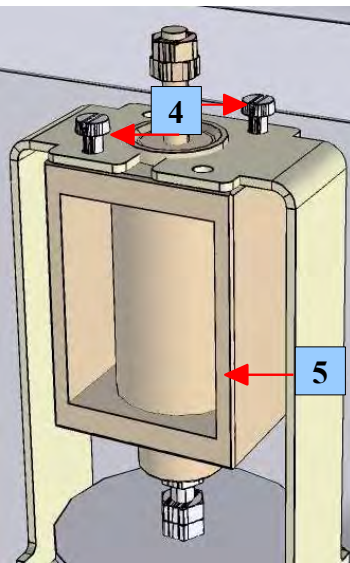
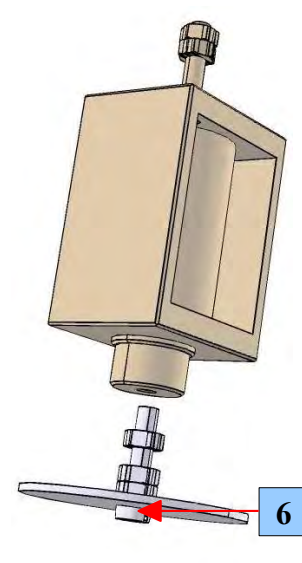
Valid for:

SmartCombi	ClassicCombi	MM203672	MM202621
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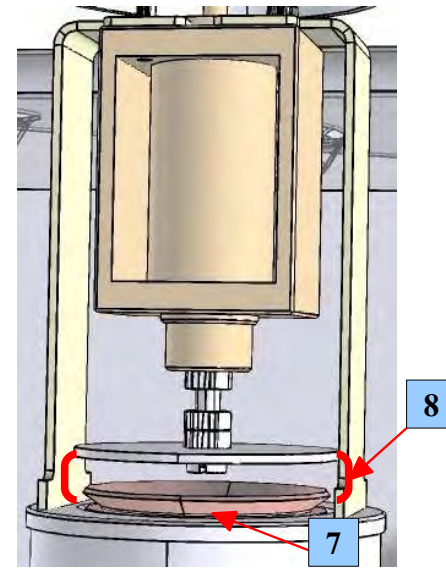
Arrangements:

Disconnect the unit from the power supply. Remove the left side wall

Disassembling:

 <ul style="list-style-type: none"> ➤ Remove plugs from the supply cables and unscrew cable connection. ➤ Unfasten both clamps [2]. ➤ Pull silicon hose [3] upstairs. 	 <ul style="list-style-type: none"> ➤ Dismount both screws [4] and remove lift magnet [5]. 	 <ul style="list-style-type: none"> ➤ Dismount lift mechanism [6].
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Assembling:

	<ul style="list-style-type: none"> ➤ The assembly has to be carried out in reversed order. ➤ Replace seal [7] #211080 if necessary ➤ The lift mechanism has to be glued with thread locker (etc. Loctite). ➤ The height of stroke [8] must be between 5 – 7 mm. ➤ Pull cables through the cable connection and mount plugs #203730. ➤ Carry out a final check with the help of the service area. (Configuration menu -> 5 Relay-Test -> K8 Lift magnet) ➤ Mount left side wall.
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Frequency controller replacement instructions

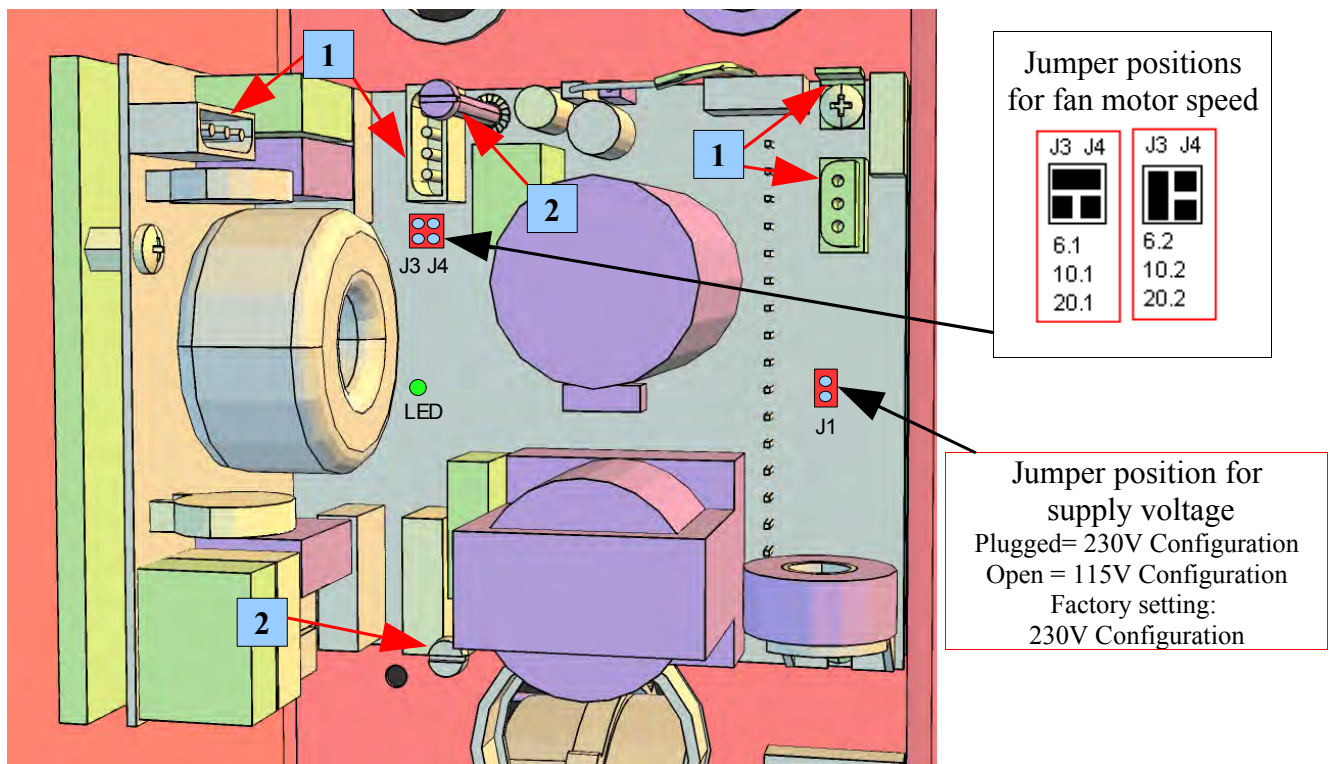
Valid for:

☐ All units with frequency fan motor control MM203784 MM203794

The following illustrations show the replacement at the unit size 6xx & 1xx. This is transferable for all appliances versions and variants.

Arrangements:

Disconnect the unit from the power and gas supply. Wait at least 3 minutes until the capacitors on the controller have unloaded themselves! Open front panel.



6.1 = 615
 6.2 = 620
 10.1 = 115
 10.2 = 120
 20.1 = 215
 20.2 = 220

Disassembling:

- Pull plugs [1].
- Remove both mounting screws[2].
- Pull out the frequency controller forward. Angle easily if necessary.

Assembling:

- Check configuration of the frequency converter before mounting! (compare with the dismounted frequency converter).
- The assembly has to be carried out in reversed order.
- Close and lock front panel
- Connect unit to the power supply and check performance.

Fan Motor replacement instructions

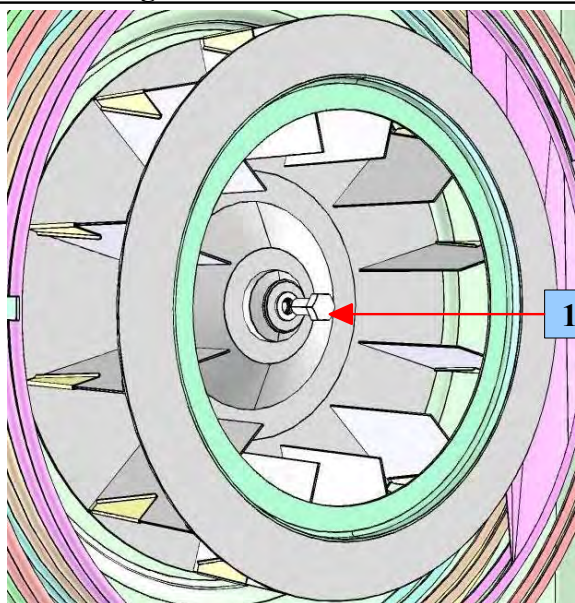
Valid for:

SmartCombi	Classic Combi	MM203771	MM203673	MM202673
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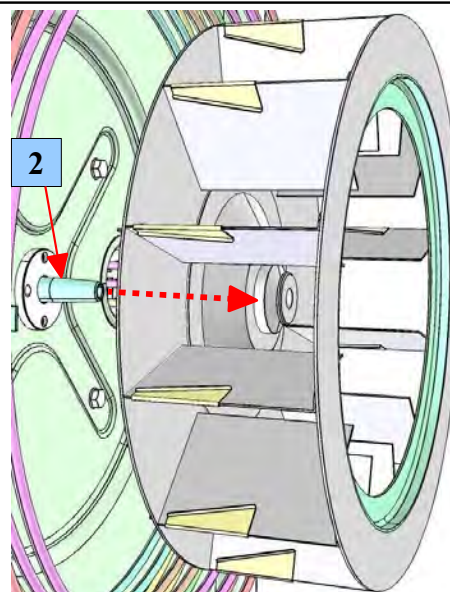
Arrangements:

Disconnect the unit from the power supply. Remove the left side wall and the air baffle inside the chamber. The water supply pipe (inside the chamber) does not have to be removed mandatory.

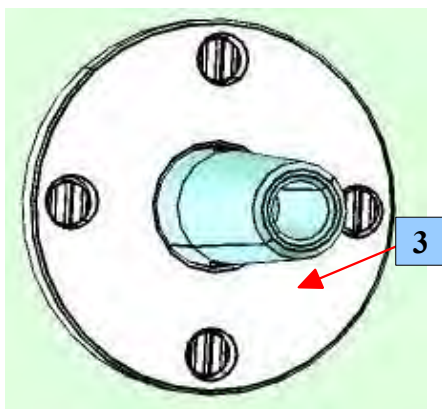
Disassembling:



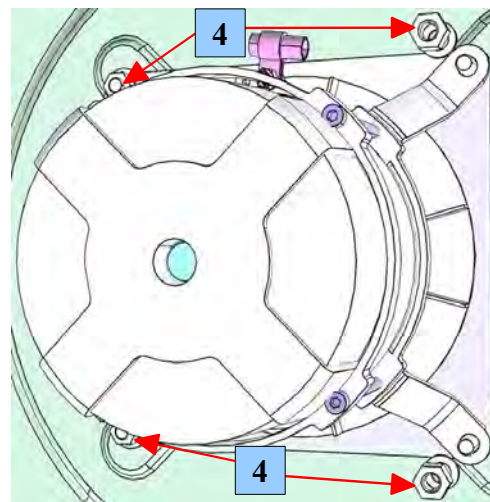
- Unmount hexagon screw of the fan wheel [1]. Attention! Use gloves when holding the fan wheel.



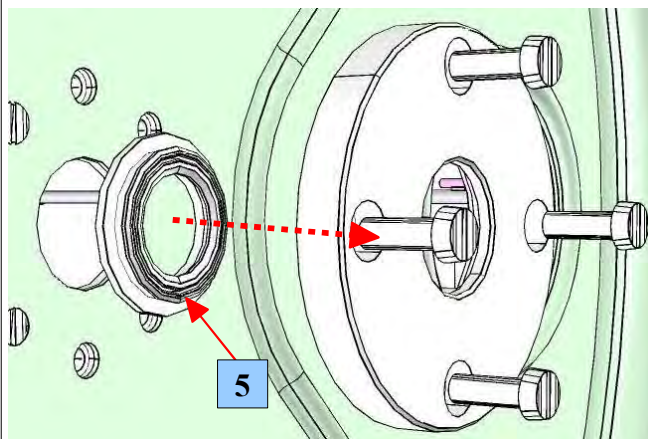
- Remove fan wheel from the conical shaft with a puller (tripod tool) [2]. Also follow the instructions of the corresponding tool.



- Loosen the four screws of the shaft plate [3] by one turn.



- Disconnect all electrical connections at the fan motor.
- Loose all fixed water hoses.
- Remove screws [4] and take out the motor.



- Turn out the screws and remove shaft plate
- Remove shaft seal [5].

Assembling:

- The assembly has to be carried out in reversed order.
- Replace shaft ring seal [5] #211084 !
- Mount shaft plate loosely by hand.
- Place a small amount of grease (high temp. resistant, food safe) on the motor shaft (very thinly, not at the cone area of the shaft)
- Mount the fan motor by applying the 4 nuts [4]. Torque: 20 Nm.
- Turn the shaft slowly by hand and tighten the four screws from the plate [3] easily.
- Plug fan wheel and mount hexagon screw [1]. Torque: 30Nm.
- Connect all plugs.
- Fix all hoses at the motor.
- Carry out final performance check
- Mount air baffle and left side wall.

Solid state relay (lighting) replacement instructions

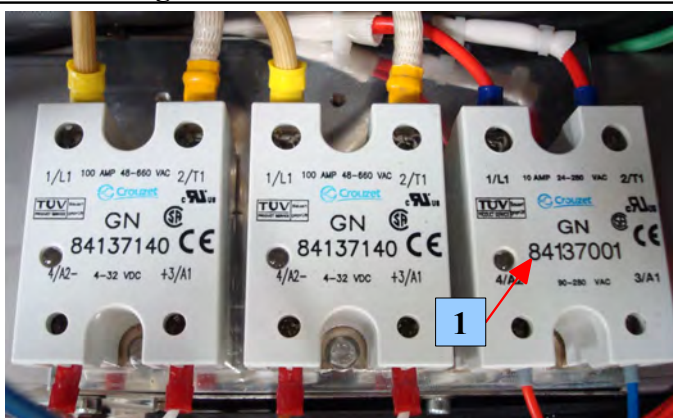
Valid for:

SmartCombi	MM203669
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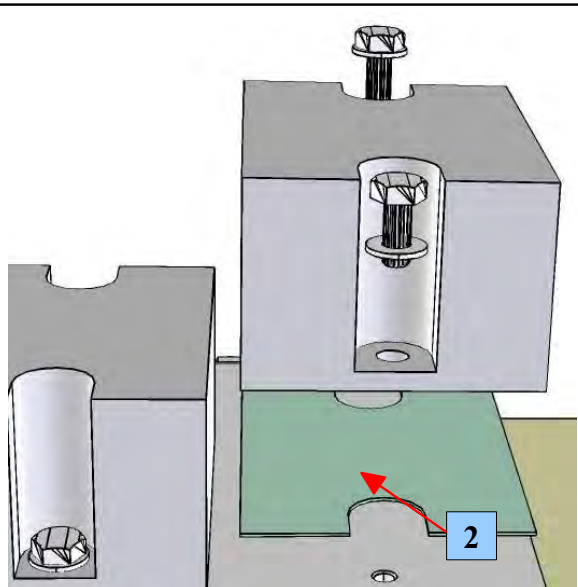
Arrangements:

Disconnect the unit from the power supply. Unlock and open front panel as well or remove left side wall.

Disassembling:



- Unmount solid state relay (SSR (10A)) [1].



Assembling:

- Clean heat sink surface (Remove heat conductor foil).
- Connect wires to the new SSR.
- Mount SSR with new heat conductor foil on the heat sink [3](#203671).
- Final function test.
- Close and lock front panel as well as mount the side wall.

Solid state relay (heating system) replacement instructions

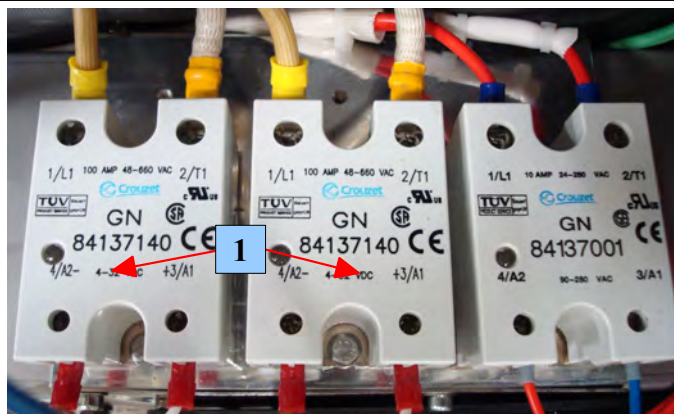
Valid for:

SmartCombi	ClassicCombi	MM203668
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Arrangements:

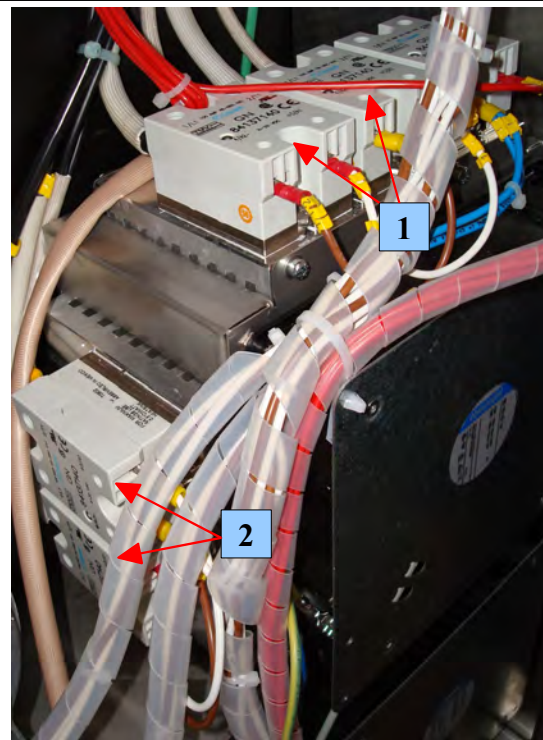
Disconnect the unit from the power supply. Remove left side wall.

Disassembling:



Location at 6xx & 1xx

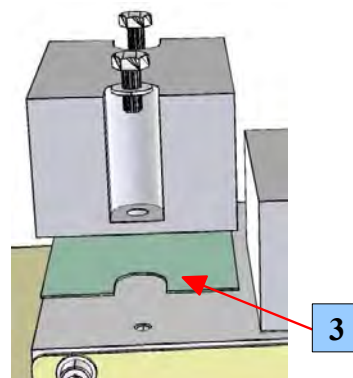
- Unmount solid state relay (SSR (10A)) [1,2].
Additional note for 20.x floor units:
The SSR's [1] energizing the upper element, the SSR's [2] the lower heating element.



Location at 2xx

Assembling:

- Clean heat sink surface (Remove heat conductor foil).
- Connect wires to the new SSR.
- Mount SSR with new heat conductor foil on the heat sink [3] (MM203671).
- Final function test.
- Close and lock front panel as well as mount the side wall.



Heating element replacement instructions

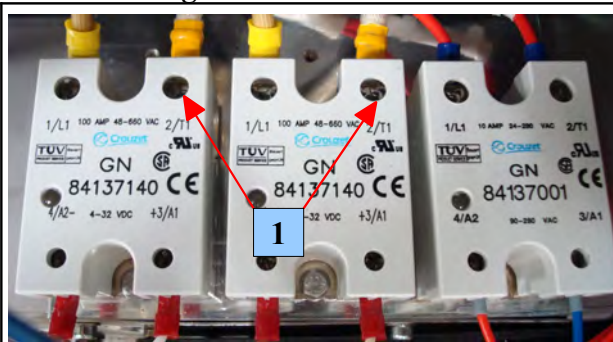
Valid for:

SmartCombi	ClassicCombi
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Arrangements:

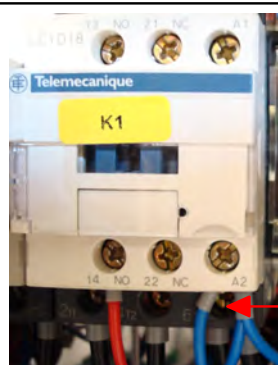
Disconnect the unit from the power supply. Remove left side wall and open front panel. Take the air baffle out of the cabinet.

Disassembling:



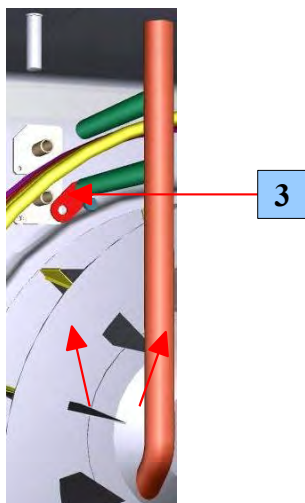
Example at SmartCombi 6xx & 1xx

- Disconnect the wires [1] from both 100A SSR's.

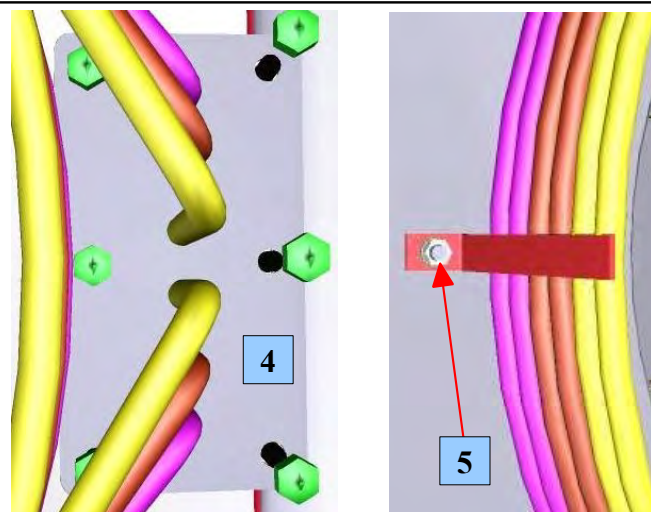


Main contactor K1

- Disconnect wire from main contactor K1, clamp 6 [2].
- Removing cable straps with which the wires are fixed.



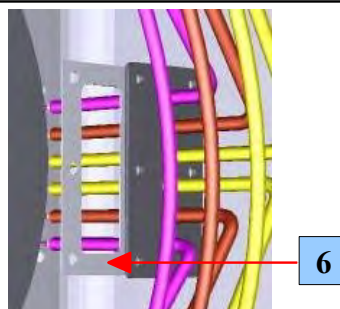
- Remove water supply pipe [3] (Unmount screw, pull pipe).



- Remove all nuts at the heating element flange[4].
- Remove nut from front mounting bracket [5].
- Take out the the heating element.

Assembling:

- The assembly has to be carried out in reversed order. The seal [6] (MM211083) must be replaced.
- Torque for the nuts of the heating element flange: 8 Nm.



Gas valve replacement instructions

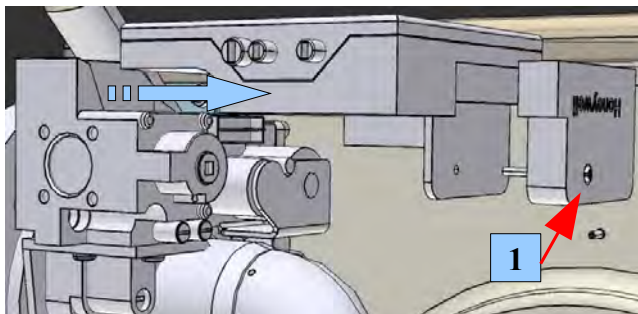
Valid for:

MM201181	MM201183
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Arrangements:

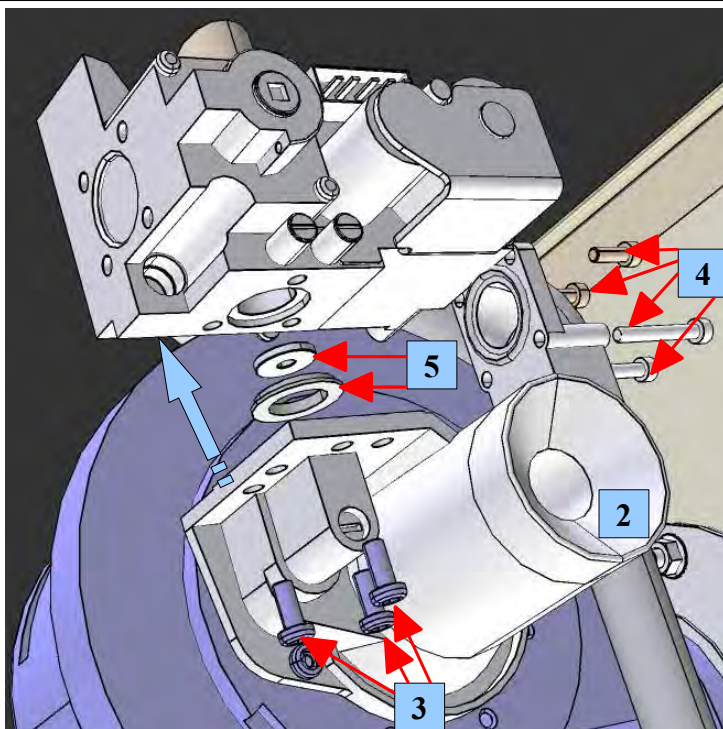
Disconnect the unit from the power and gas supply. Remove the left side wall.

Disassembling:



Remove ignition box:

- Loose screw [1] and remove plastic cover.
- Disconnect electrical connections and pull box from the gas valve.

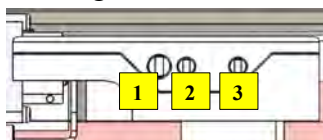


Remove gas valve:

- Pull out the plugged air hose from the Venturi pipe [2].
- Remove screws [3] at the Venturi pipe and take out the gas valve.
- Remove gas supply hose by unscrewing the four screws [4]
- Take orifice and sealing [5] out of the gas valve.

Assembling:

- The assembly has to be carried out in reversed order. Take care that the sealing [5] is not pre-damaged. Use Anti-Seize for the screws [3,4]! Locking torque 3Nm.



Ignition box schematic: **1** = Glow electrode (white / black); **2** = 24V supply voltage (red); **3** = Ionisation electrode (flame detection(white))

- Finally, a gas leakage test as well the CO₂ calibration has to be carried out! (see also installation or service manual)
- Final performance test and mount side wall.

Gas blower replacement instructions

Valid for:

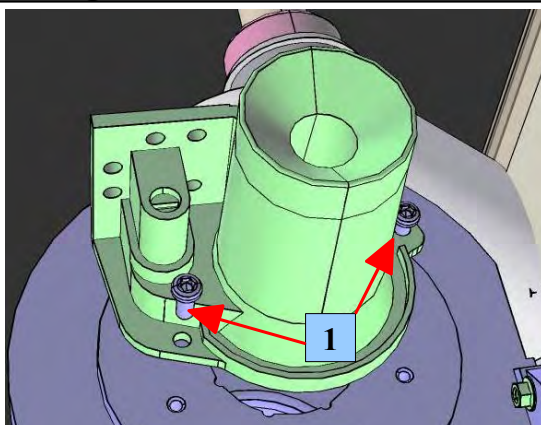
MM203994	MM202606
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Arrangements:

Disconnect the unit from the power and gas supply. Remove the left side wall.

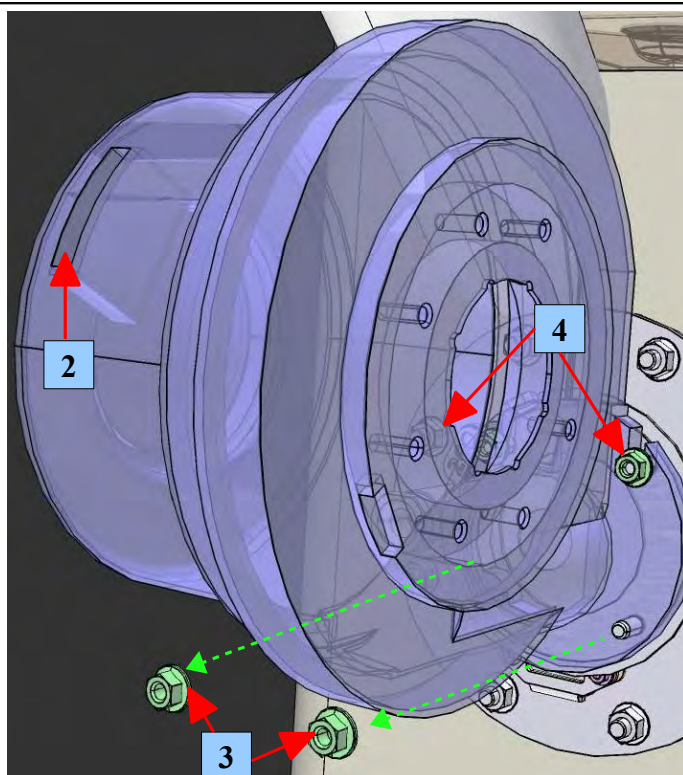
Disassemble gas valve according to mounting instructions No.21 HD_02/2008.

Disassembling:



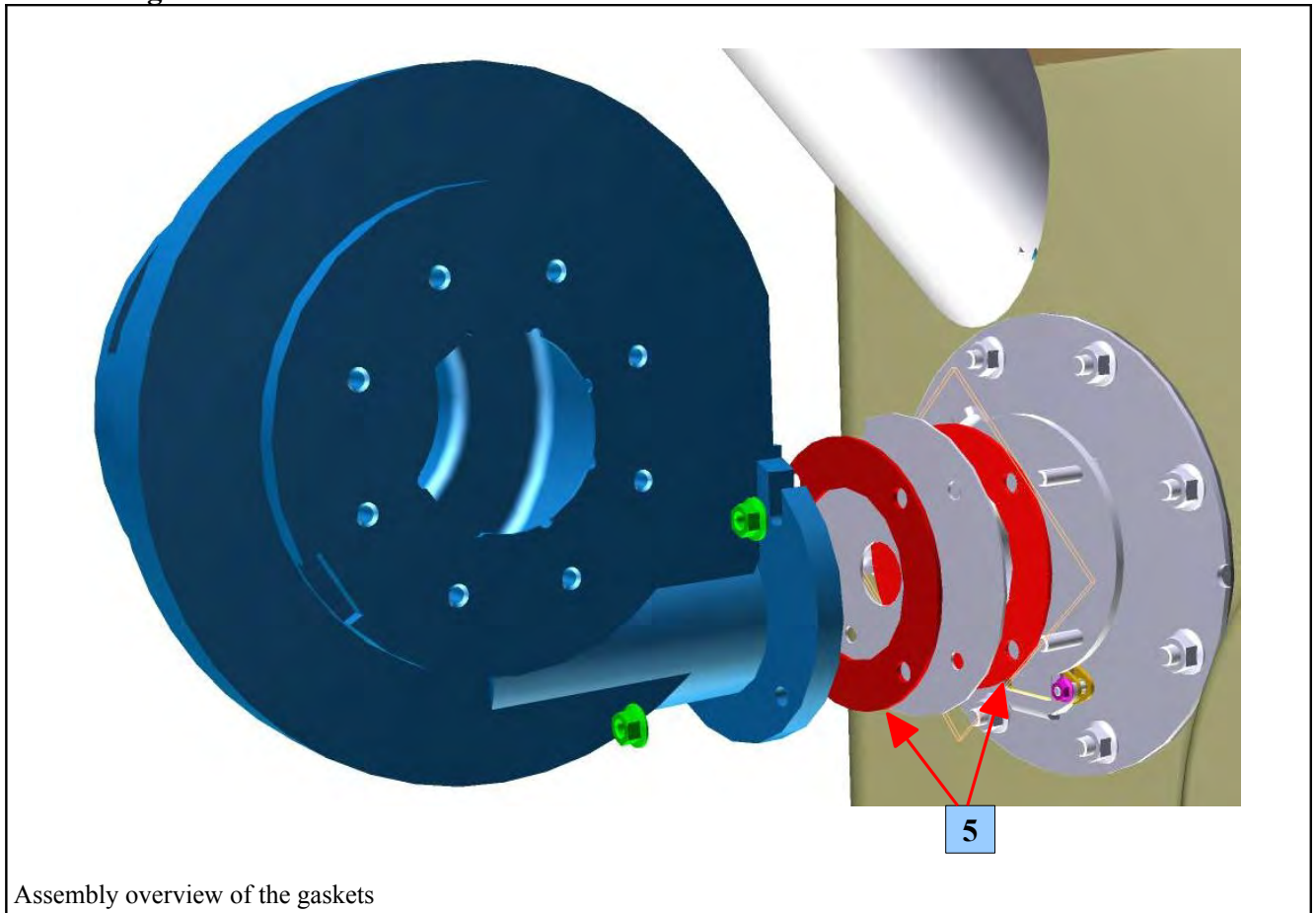
Remove Venturi pipe:

- Loose screws [1] lösen and take out the Venturi pipe.



Remove gas blower:

- Pull plug [2].
- Remove lower nuts [3]
- Remove upper nuts [4] and take out the gas blower.

Assembling:

- The assembly has to be carried out in reversed order. Both gaskets [5] (MM211142) must be replaced. Use Anti-Seize for the screws / nuts [1,3,4].
Locking torques:
Gas blower flange [3,4] 5Nm.
Venturi air mixing pipe [1] 3Nm.
- Mount gas valve according to mounting information No.21 HD_02/2008.
- Finally, a gas leakage test as well the CO2 calibration has to be carried out! (see also installation or service manual)
- Final performance test and mount side wall.

Gas burner replacement instructions

Valid for:

All gas units

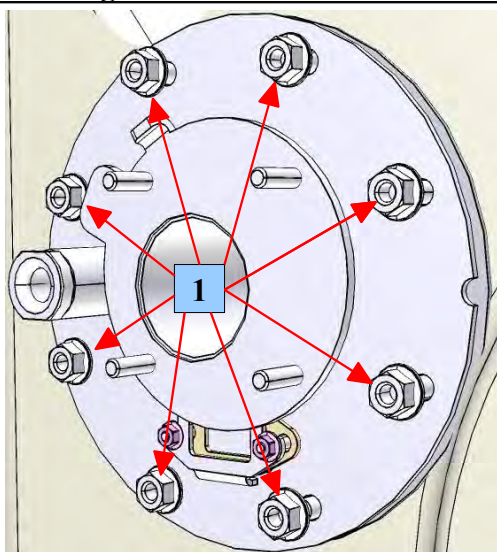
Arrangements:

Disconnect the unit from the power and gas supply. Remove the left side wall.

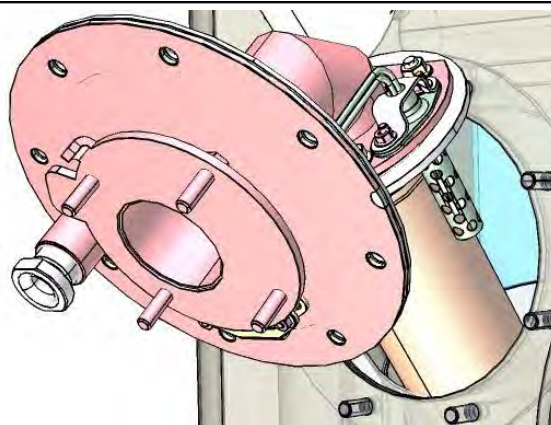
Disassemble gas valve according to mounting instructions No.21 HD_02/2008.

Disassemble gas blower according to mounting instructions No.22 HD_02/2008.

Disassembling:

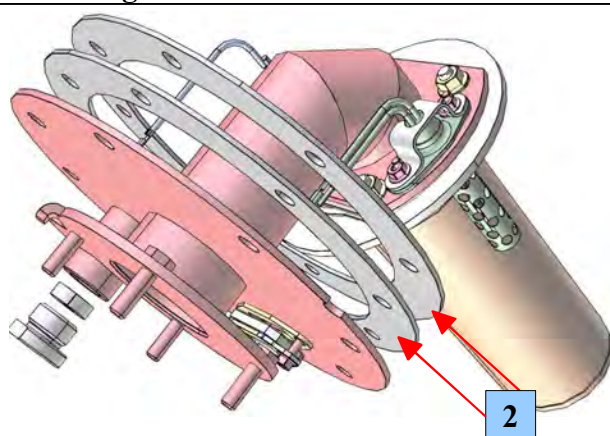


- Remove nuts [1].
- Disconnect the cable from the glow electrode at the transformer



- Take out the gas burner.

Assembling:



Assembly overview of the gaskets

- The assembly has to be carried out in reversed order. Both gaskets [2] (MM211143) must be replaced. Use Anti-Seize for the nuts [1]
Locking torque: 8 Nm.
- Mount gas blower and valve according to the mounting instructions.
- Finally, a gas leakage test as well the CO2 calibration has to be carried out! (see also installation or service manual).
- Final performance test and mount side wall.

Gas heat exchanger replacement instructions

Valid for:

All gas units

Arrangements:

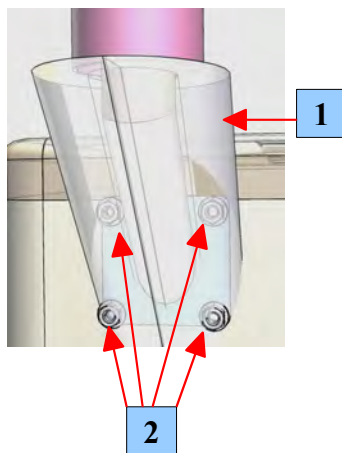
Disconnect the unit from the power and gas supply. Remove left side wall and the air baffle inside the chamber. Unscrew water supply pipe (remove screw and pull pipe).

Disassemble gas valve according to mounting instructions No.21 HD_02/2008.

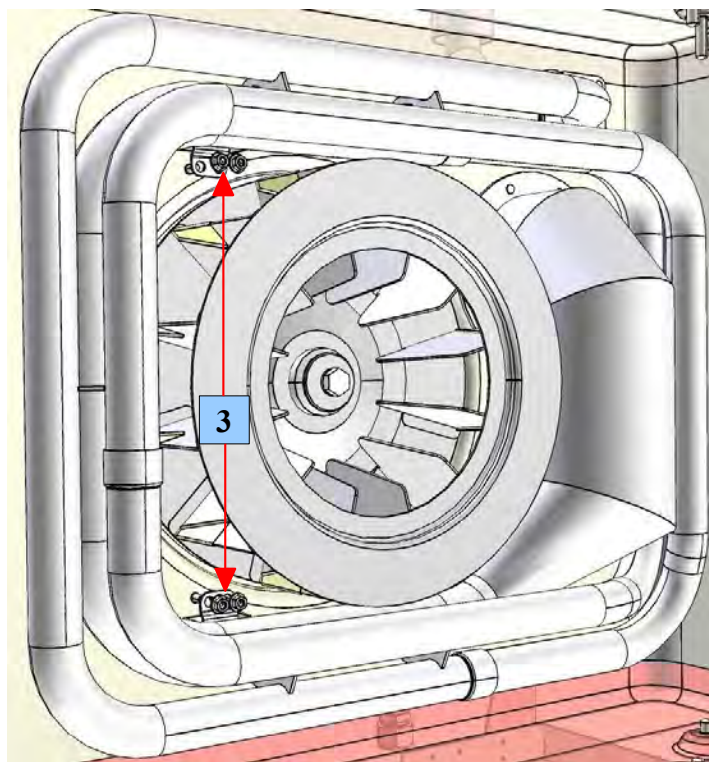
Disassemble gas blower according to mounting instructions No.22 HD_02/2008.

Disassemble gas burner according to mounting instructions No.23 HD_02/2008.

Demontage:

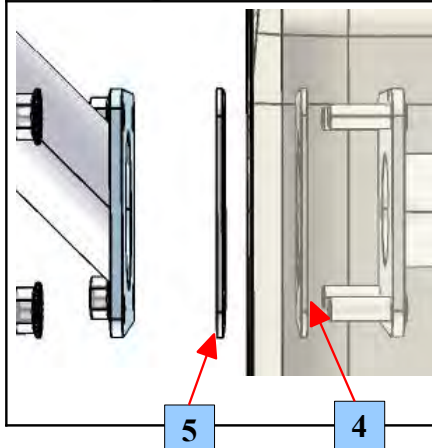


- Remove gas exhaust pipe [1] insulation.
- Unscrew nuts [2] .



- Remove nuts [3]. (Positions can be different).
- Take out brackets and the gas heat exchanger.

Assembling:



- The assembly has to be carried out in reversed order. The gaskets [4,5] (MM211144) must be replaced. Plug gasket [4] on the heat exchanger in advance. Don't forget to fix the insulation!
- Use Anti-Seize for all nuts [2,3,4,5]!
- Locking torque for all nuts: 8 Nm.
- Mount gas burner, gas blower and gas valve according to the mounting instructions.
- Finally, a gas leakage test as well the CO2 calibration has to be carried out! (see also installation or service manual)
- Final performance test and mount side wall.

Ionisation & glow electrode replacement instructions

Valid for:

MM201176	MM201177
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Arrangements:

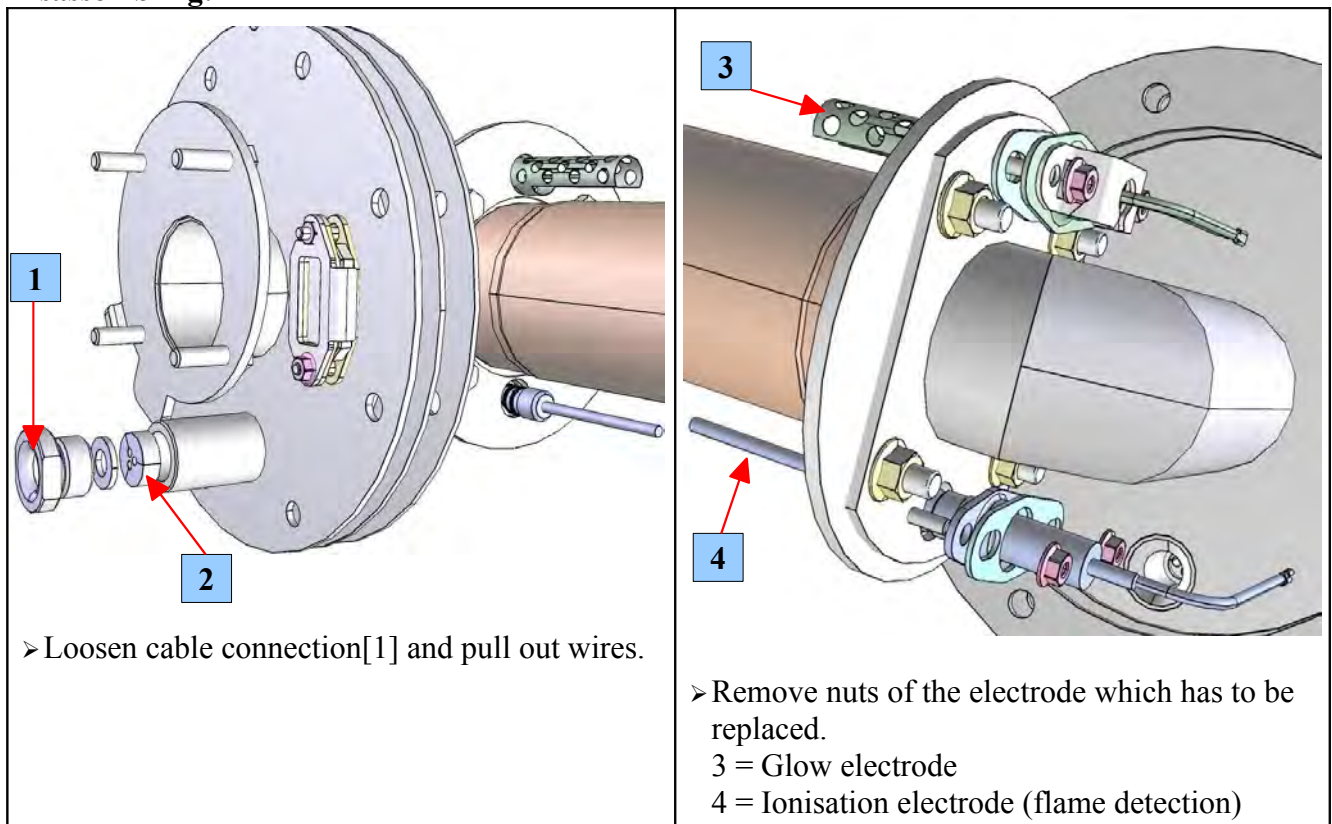
Disconnect unit from the gas and electrical supply.

Disassemble gas valve according to mounting instructions No.21 HD_02/2008.

Disassemble gas blower according to mounting instructions No.22 HD_02/2008.

Disassemble gas burner according to mounting instructions No.23 HD_02/2008.

Disassembling:



Assembling:

- The assembly has to be carried out in reversed order. The seal at the cable connection has to be changed [2] (MM211137). Use Anti-Seize for all nuts.
- Make sure that no metal hairs of the burner be in the area of the ionization electrode [4]!
- If necessary, remove (shave burner surface in this area) longer "hairs" to prevent a ground shortcut.
- Mount gas burner, blower and valve according to mounting information.
- Finally, a gas leakage test as well the CO2 calibration has to be carried out! (see also installation or service manual)
- Final performance test and mount side wall.

Gas burner pipe replacement instructions

Valid for:

All gas units

Arrangements:

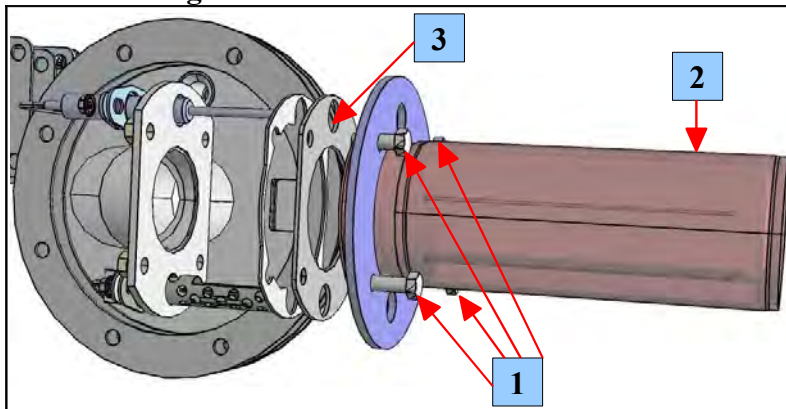
Disconnect unit from the gas and electrical supply.

Disassemble gas valve according to mounting instructions No.21 HD_02/2008.

Disassemble gas blower according to mounting instructions No.22 HD_02/2008.

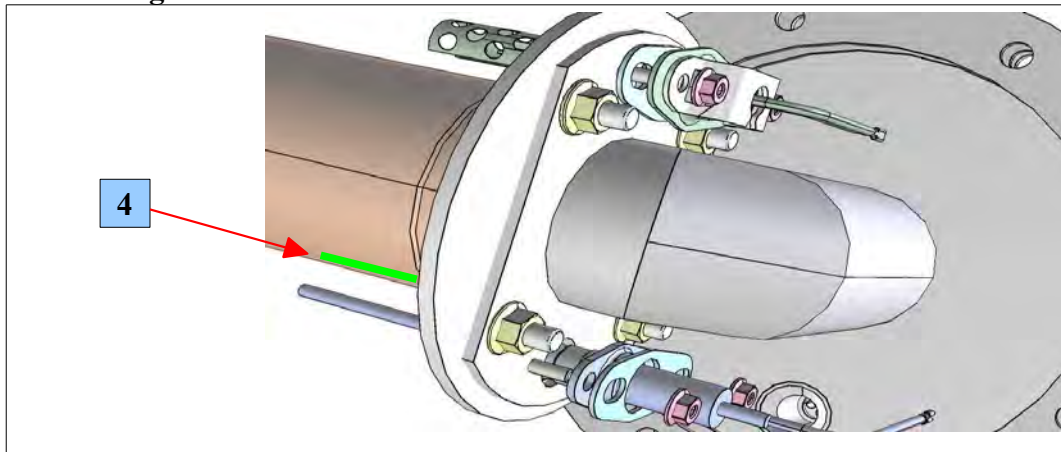
Disassemble gas burner according to mounting instructions No.23 HD_02/2008.

Disassembling:



➤ Loosen screws[1] and remove burner pipe [2].

Assembling:



- The assembly has to be carried out in reversed order. The seal at the burner pipe [3] (MM211141) must be replaced. Use Anti-Seize for all nuts [1]!
- Make sure that no metal hairs of the burner be in the area of the ionization electrode [4]!
- If necessary, remove (shave burner surface in this area) longer "hairs" to prevent a ground shortcut.
- Mount gas burner, blower and valve according to mounting information.
- Finally, a gas leakage test as well as the CO₂ calibration has to be carried out! (see also installation or service manual)
- Final performance test and mount side wall.

Transformer (for glow electrode) replacement instructions

Valid for:

MM203999

Arrangements:

Disconnect unit from the gas and electrical supply. Remove left side wall

Disassembling:

Notice:

The floor version 2xx is equipped with two transformers:

Upper transformer for upper glow electrode,
lower transformer for lower glow electrode.

- Check fuse in advance [1]
- Remove all plugs from the transformer.
- Take out transformer by removing the screws [2].



Unit version 2xx

Assembling:

- The assembly has to be carried out in reversed order.
- Final function test.
- Mount side wall.

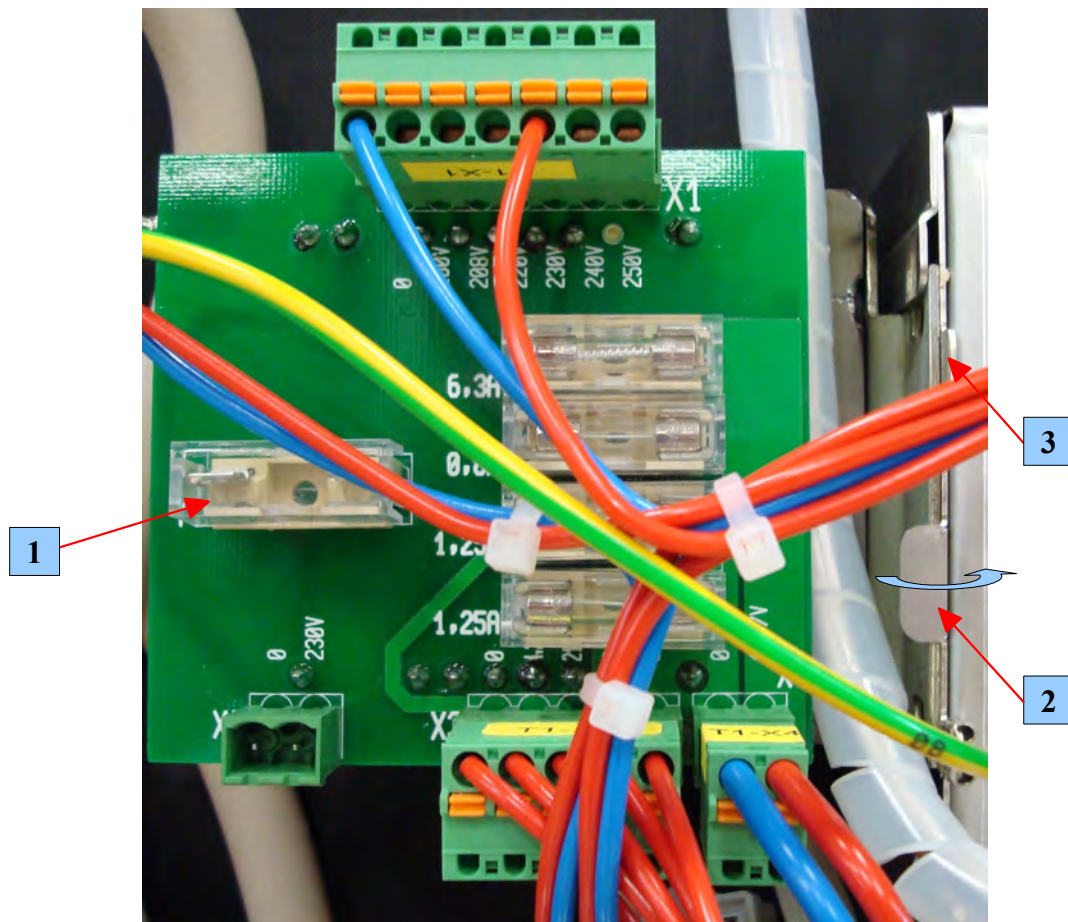
Main transformer replacement instructions

Valid for:

MM202604	MM203818
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Arrangements:

Disconnect the unit from the power supply and remove left side wall.



Variant electric version

Disassembling:

Notice:

The fuse[1] must be only required at gas units!

- Check all fuses in advance!
- Remove all plugs from the transformer.
- Remove transformer. This is secured by a bent metal clip. Bend these back and take out transformer.

Assembling:

- The assembly has to be carried out in reversed order.
- Secure transformer by bending the metal clip.
If this may cracked, us the additional one [3].
- At Gas units the fuse [1] must be inserted!
- Mount side wall.

Replacement instructions cabinet bulbs

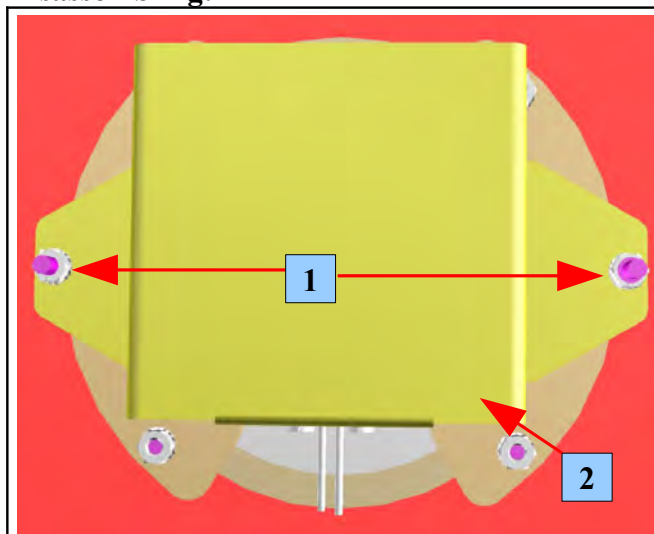
Valid for:

SmartCombi	ClassicCombi	MM203679	MM202620
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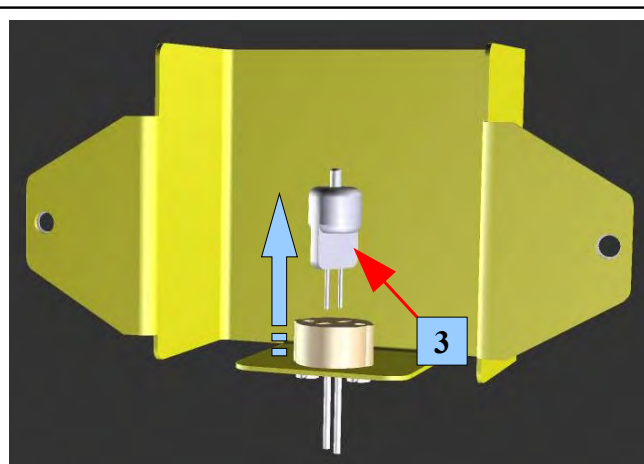
Arrangements:

Remove right side wall.

Disassembling:



- Remove both nuts [1]. These can be covered by the cabinet insulation.
- Remove reflector plate [2].



- Take out halogen bulb from the socket [3].

Assembling:

- Put new bulb into the socket carefully. Don't touch the bulb glass with the fingers (use cloth or paper).
- Mount reflector.
- Final function test.
- Mount side wall.

Drain solenoid valve replacement instructions

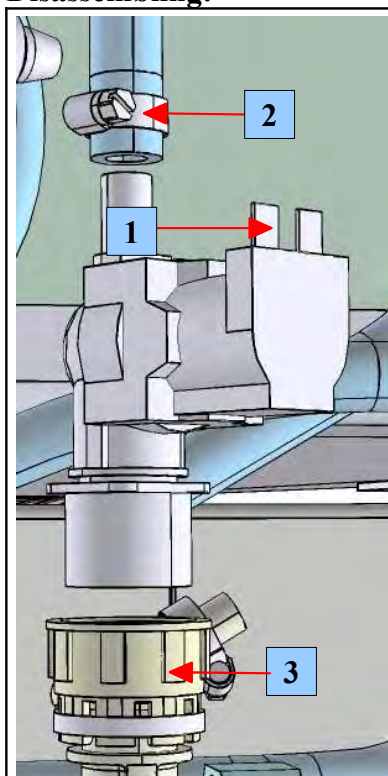
Valid for:

MM201192	MM201193	MM201160
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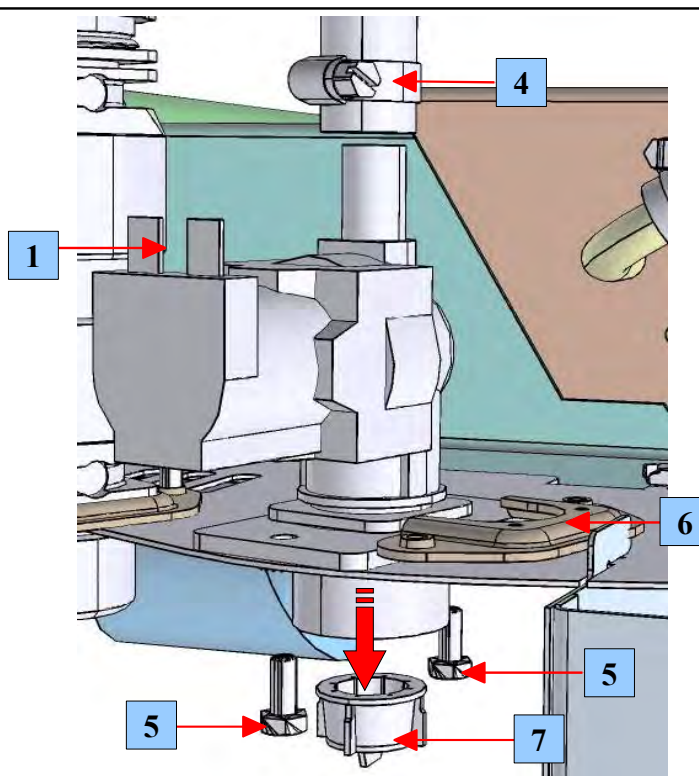
Arrangements:

Disconnect unit from the power supply. Close water tap on site and relieve pressure on the supply site. Remove left side panel.

Disassembling:



Variant A (Units with hand shower)



Variant B (Units without hand shower)

- Remove plugs from the valve [1].
- Variant A: Loosen clamp [2] and screwed fitting [3]. Remove hose.
- Variant B: Loosen clamp [4] and remove hose. Afterwards remove the mounting screws from the bottom plate [5] and remove holding plate [6]. Take out the water filter [7] and clean, if necessary.

Assembling:

- The assembly has to be carried out in reversed order. Ensure that the water inlet filter [6] (MM201134) has inserted.
- Final function test with the service menu (-> **11 Drain cooling test**). Close side wall.

WaveClean pump replacement instructions

Valid for:

MM203825	MM203826
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Disassembling:

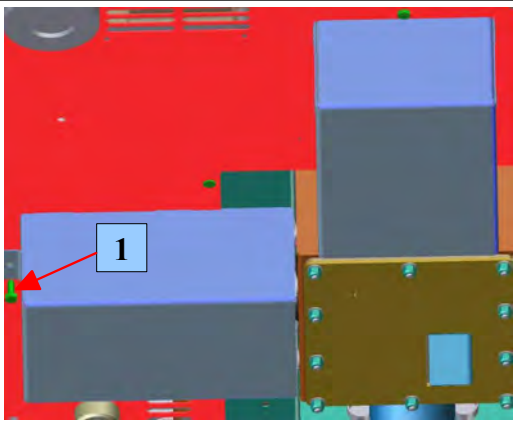

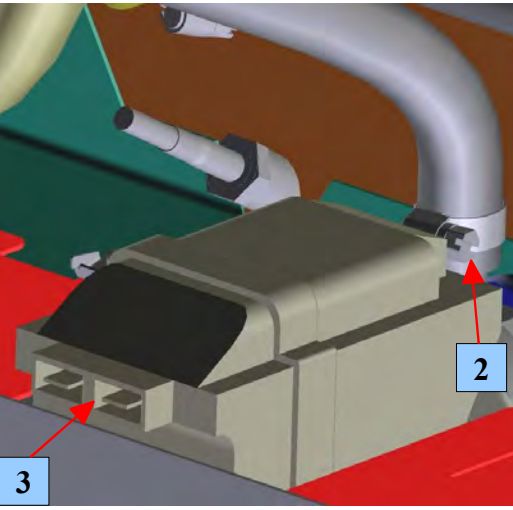
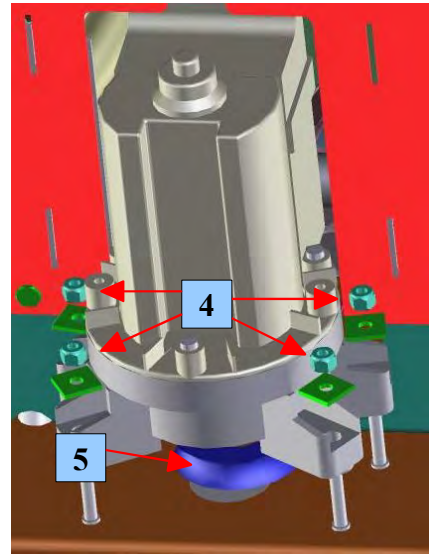
Remove left side wall.

Preparations before removing the WaveClean cycle pump: Carry out the relay test K24 at the Service menu „777“. The trap will be emptied by the WaveClean drain pump.

Preparations before removing the WaveClean drain pump:: Remove air baffle. Carry out the relay test K16 at the Service menu „777“. The WaveClean cycle pumps now the water from the trap into cabinet. Collect the water with a container until no water will be cycled anymore

Disconnect unit from the power supply. Close water tap on site.

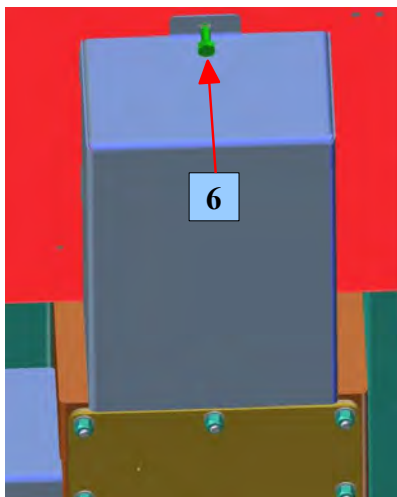
Mounting instructions for the WaveClean cycle pump 615, 620, 115, 120:

 <p>➤ Remove screw from the left protection box [1].</p>	 <p>➤ Remove protection box</p>
 <p>➤ Loosen clamp [2] and pull hose from the pump. ➤ Remove wires from the pump[3].</p>	 <p>➤ Remove nuts [4] and remove pump from the trap! Note, that water could leak out of the trap!</p>

Assembling:

- The assembly has to be carried out in reversed order. The gasket [5] (#211131) between pump and trap should be exchanged.
- Switch on the power and open water tap.
- Final function test with the help of the service menu -> WaveClean Test. Close side wall.

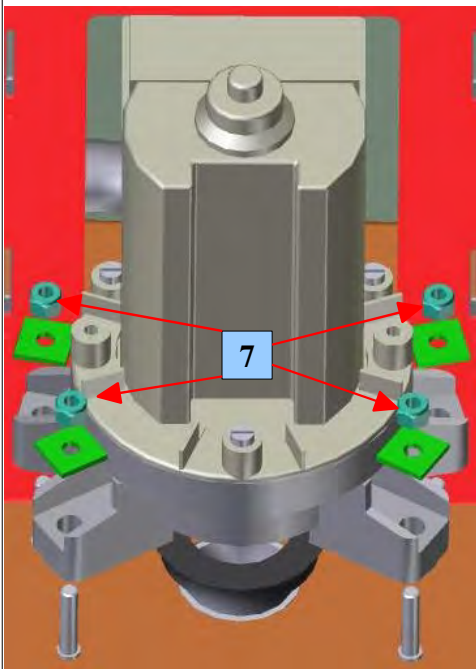
Mounting instructions for the WaveClean drain pump 615, 620, 115, 120:



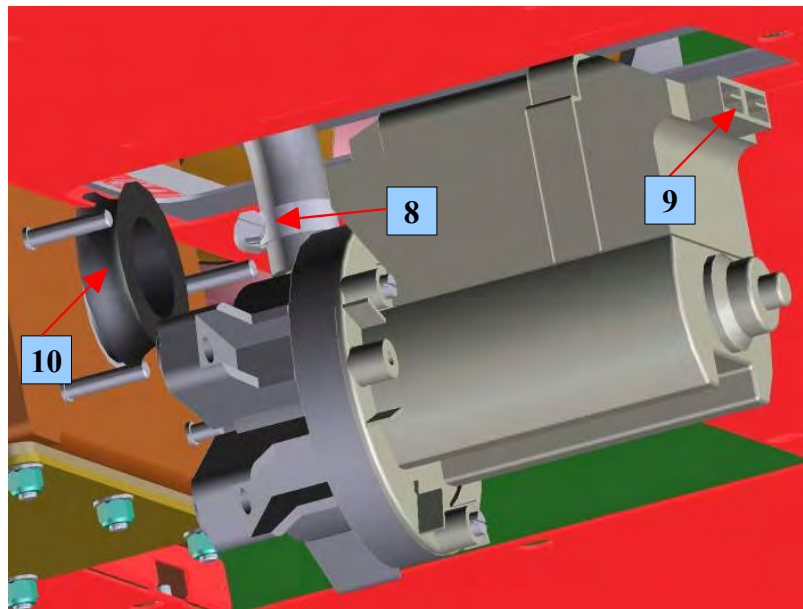
➤ Remove screw from the front protection box [6].



➤ Remove protection box.



➤ Remove nuts [7] and remove pump from the trap! Note, that water could leak out of the trap!

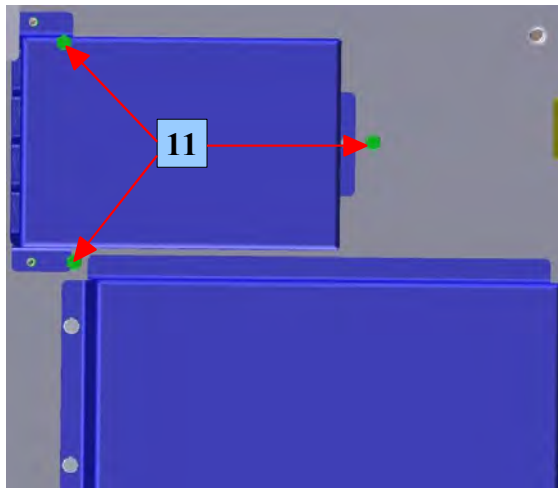


➤ Loosen clamp [8] and pull hose from the pump.
➤ Remove wires from the pump [9].

Assembling:

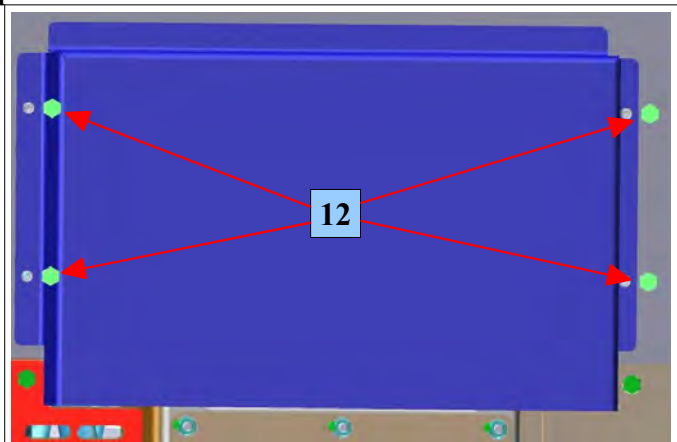
- The assembly has to be carried out in reversed order. The gasket [5] (MM211131) between pump and trap should be exchanged.
- Switch on the power and open water tap.
- Final function test with the help of the service menu -> WaveClean Test. Close side wall.

Mounting instructions for the WaveClean pumps 215 & 220:



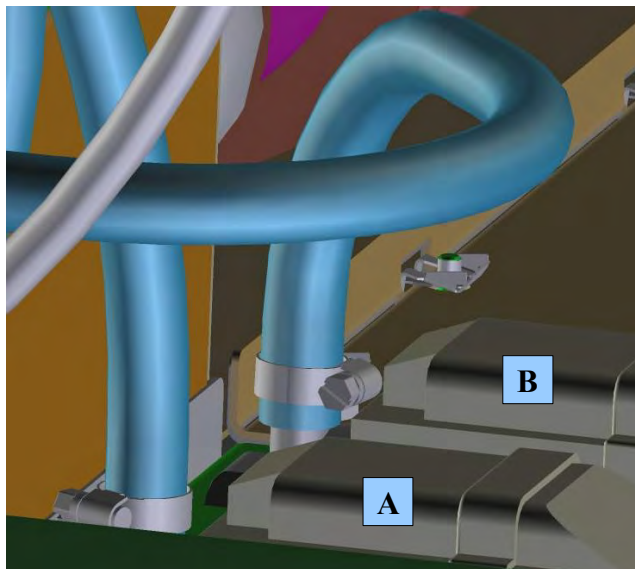
Bottom view

- Take out fresh air box by removing the screws [11].

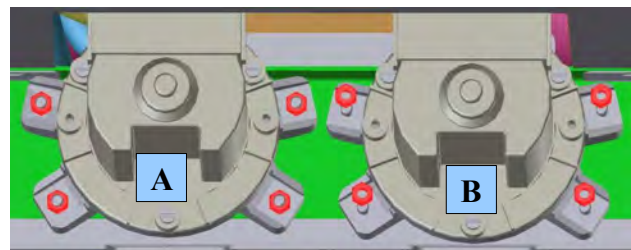


Bottom view

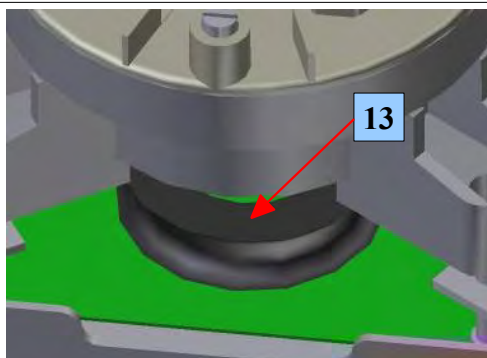
- Take out fresh air box by removing the screws [12].



- Loosen clamp of the pump which has to be changed and pull hose from the pump.
(A = Cycle pump; B = Drain pump).



- Remove nuts of the corresponding pump and take out pump from trap. Note, that water could leak out of the trap! (A = Cycle pump; B = Drain pump).
- Remove wires from the pump.



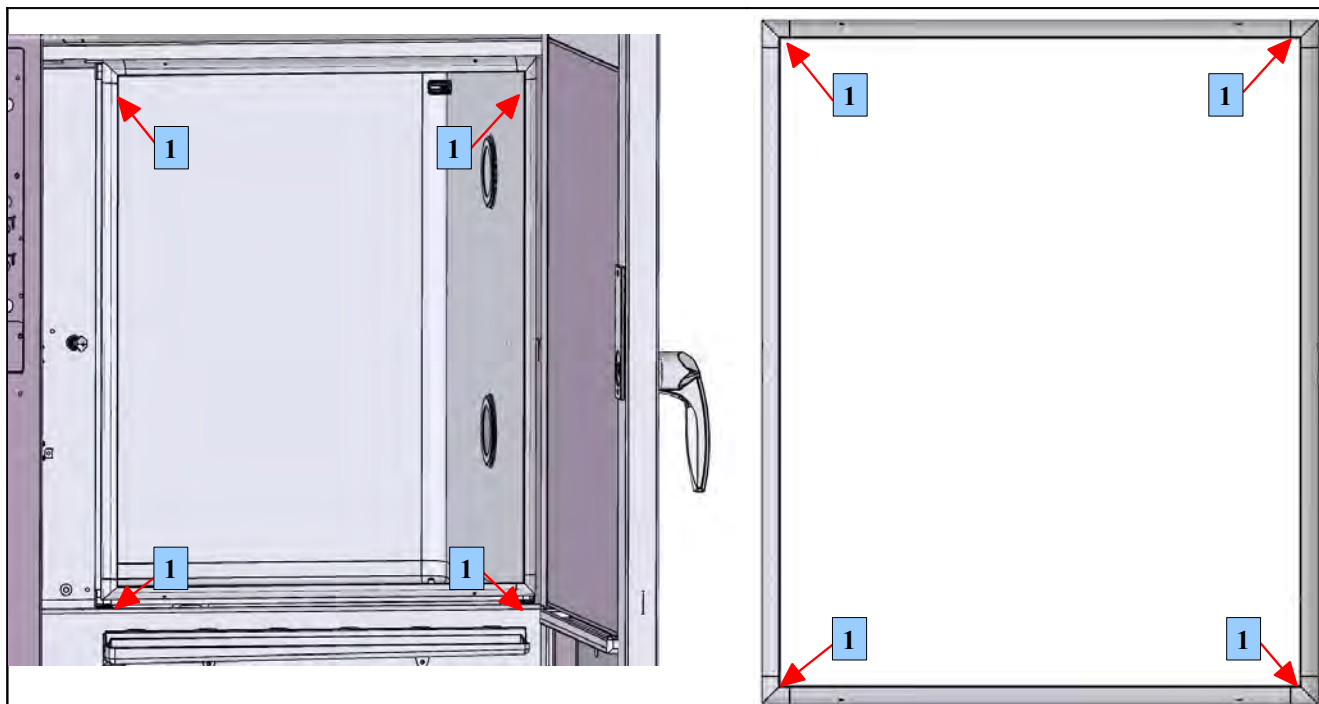
Assembling:

- The assembly has to be carried out in reversed order. The gasket [13] (#211131) between pump and trap should be exchanged.
- Switch on the power and open water tap.
- Final function test with the help of the service menu -> WaveClean Test. Close side wall.

Door gasket replacement instructions

Valid for:

MM211094	MM211095	MM211096
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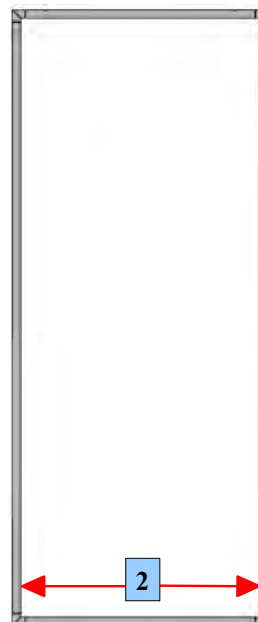
Disassembling and cleaning

- Take out old gasket. Remove contaminations and clean slot of the gasket. Make sure that no residues left of the old gasket.
- To facilitate the installation of the new gasket moisten the gasket and the slot with soap water.

Installation of new gasket

- First push the gasket at the four corners [1].
- Then push the gasket at all sides into the slot. Starting from the corners to the center of the sides.
- Take care that the gasket is pressed in up to the corners everywhere.

Additional note for 2xx floor units



- The door seal has a non-visible, but sensible reinforcement alongside (approximately 150 mm from the corner). Make sure that the reinforcement is beneath [2].

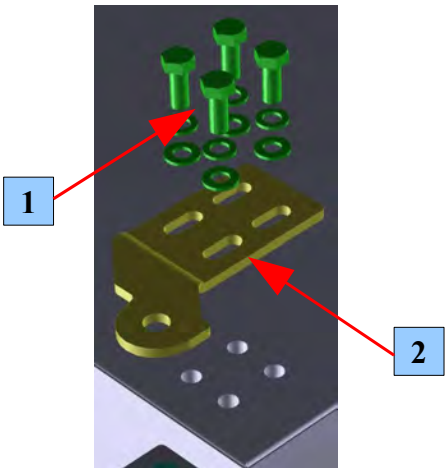
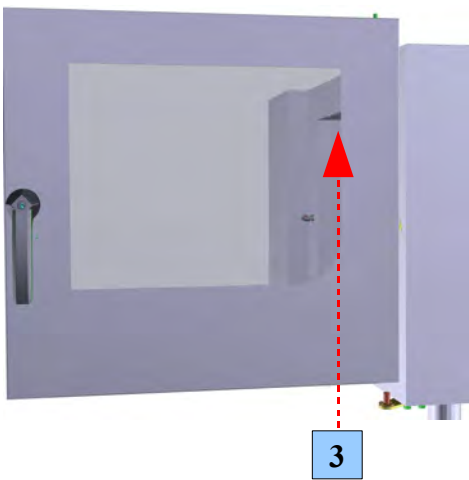
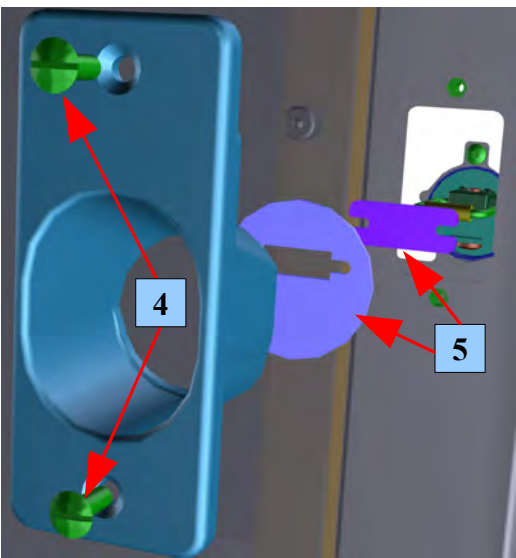
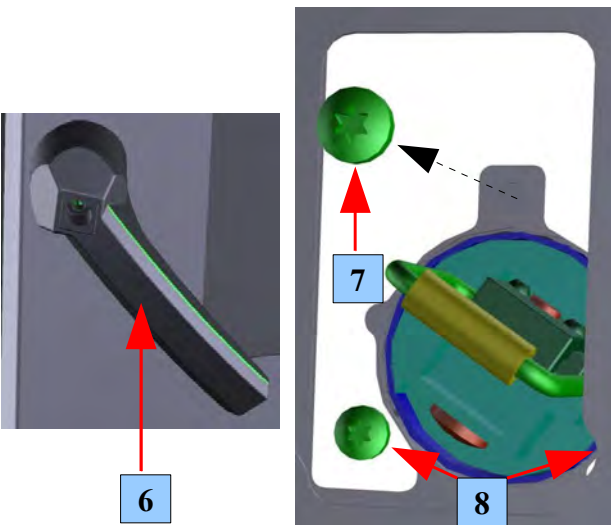
Cabinet door replacement instructions

Valid for:

SmartCombi	ClassicCombi
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The following illustrations show the replacement at unit size 6x/ 1xx with a right . This is, however, transferable for all unit sizes and variants.

Disassembling:

 <p>➤ Close cabinet door. ➤ Mark the position of the upper hinge in advance. ➤ Remove the four screws [1] and take out the hinge [2].</p>	 <p>➤ Open door and hang it out [3].</p>
 <p>➤ Remove screws of the plastic cover [4]. Remove cover. ➤ Remove metal plates [5] from the lock bracket.</p>	 <p>➤ Turn door handle [6] and remove the upper screw from the door lock [7]. ➤ Unscrew both lower screws from the door lock [8].</p>

Mounting instructions:

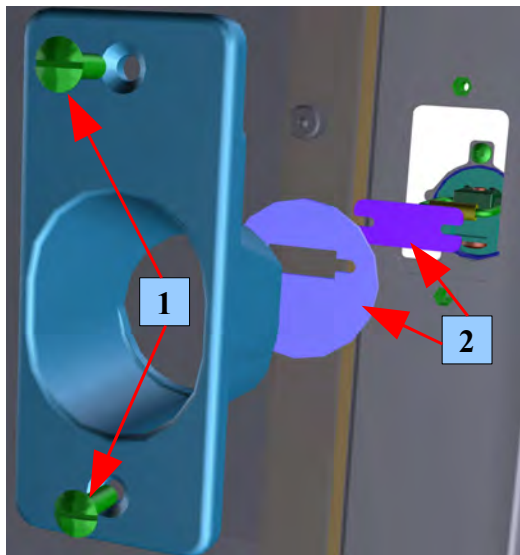
- The assembly has to be carried out in reversed order.
- To not damage the plastic cover. Fasten the screws [4] easily!
- Plug the drip tray from the old door in the new one.
- Adjust door and check tightness

Door lock replacement instructions

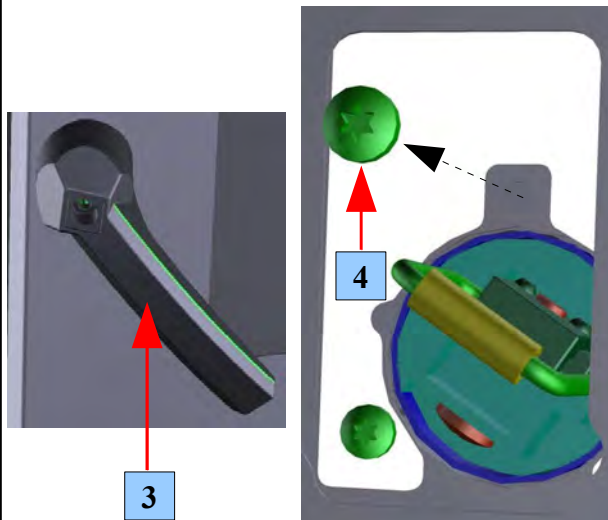
Valid for:

MM207092	MM207094
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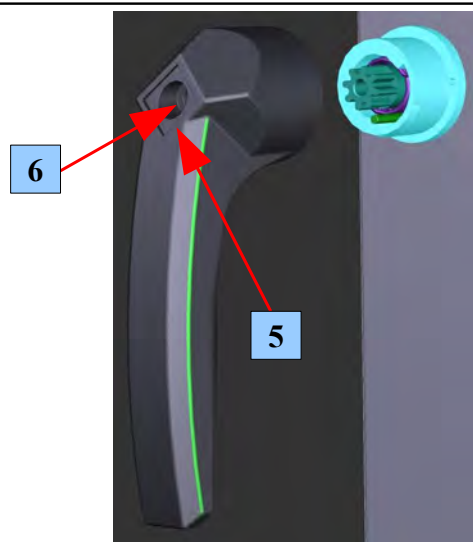
Dismounting instructions:



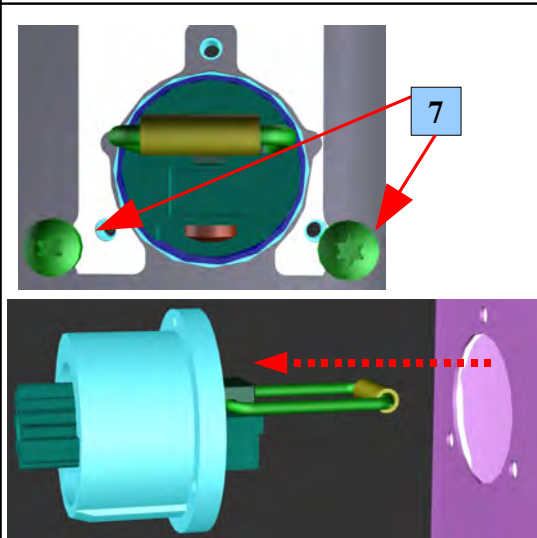
- Open chamber door and remove screws of the cover of the door lock [1]. Remove cover.
- Remove metal plates [2] from the lock bracket.



- Turn door handle [3].
- Remove the upper screw from the door lock [4].



- Remove adhesive label [5] from the door handle.
- Unscrew screw from door handle [6] pull them out. The door must be open!



- Unscrew both lower screws from the door lock [7].
- Remove door lock.

Mounting instructions:

- The assembly has to be carried out in reversed order.
- The door lock is protect against come apart by a binder. Don't remove this until mounting the part!
- The door handle must be mounted in a vertical position on the door lock.
- To not damage the plastic cover. Fasten the screws [1] easily!

Cooling fan replacement instructions

Valid for:

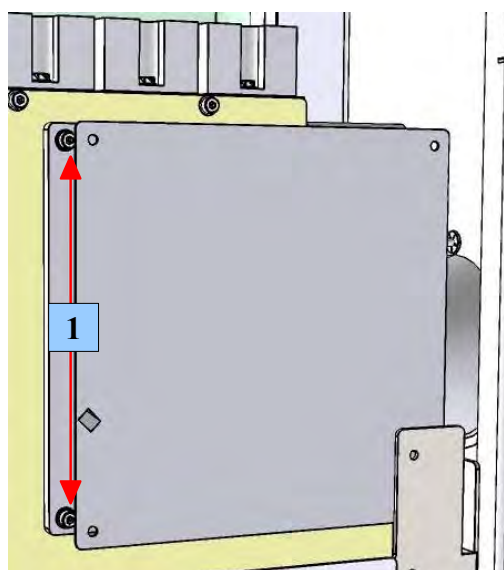
SmartCombi & ClassicCombiUnits with hand shower :	MM202607	MM203926
ClassicCombi without hand shower:	MM202617	MM203819

Arrangements:

Disconnect unit from the power supply.

Disassembling:

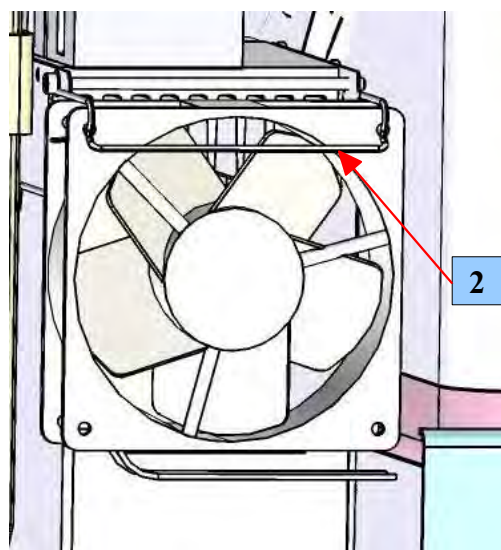
Concerns all units with hand shower as well as all floor versions (2xx):



Sample at unit version 6.x / 10.x (Version 20.x ist equipped with two cooling fans)

- Remove left side wall
- Disconnect electrical connections at the cooling fan.
- Remove mounting screws [1].
- Take out cooling fan.

Concerns units 6xx and 10xx without hand shower:



- Unlock and open front panel.
- Disconnect electrical connections at the cooling fan.
- Unlock securing clip [2].
- Take out cooling fan

Assembling:

The assembly has to be carried out in reversed order.

Replacement instructions hose reel for hand shower

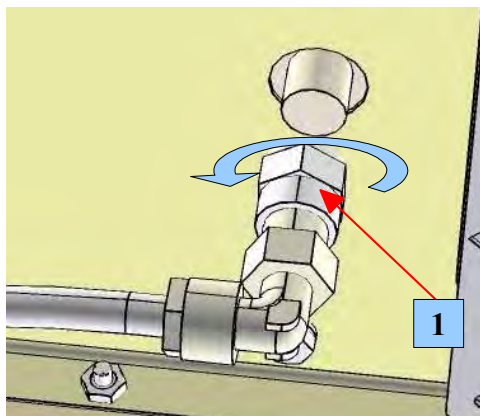
Valid for

MM204410

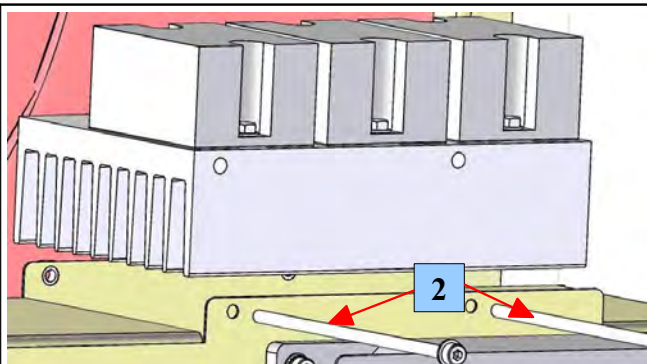
Arrangements:

Disconnect unit from the power supply. Close water tap on site and relieve pressure on the supply site. (Press hand shower). Remove left side wall and open front panel. Turn hand shower from the hose.

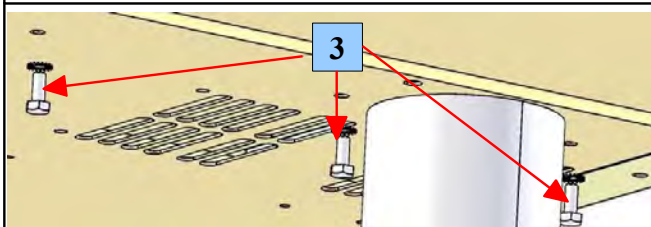
Disassembling at 615, 620, 115 & 120:



- Remove water supply connection from the hose reel.

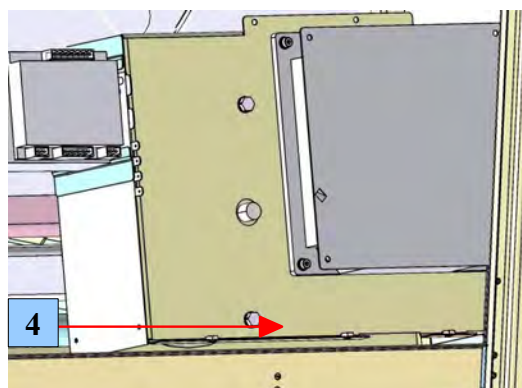


- Take out heat sink together with solid state relays. To this both screws [2] have to be dismantled. Fastening heat sink e.g. with cable fastener if necessary.
- Disconnect all electrical connections (transformer, cooling fan, ground).



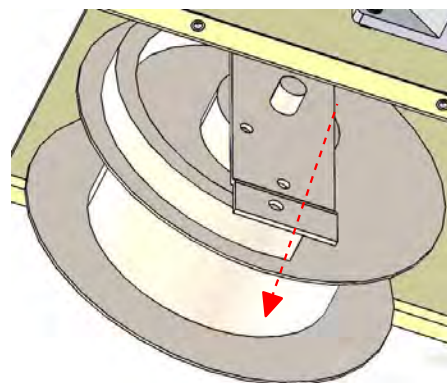
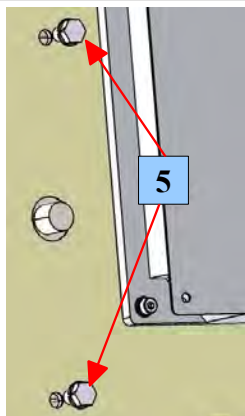
Bottom view

- Remove mounting screws from the hose reel box [3].

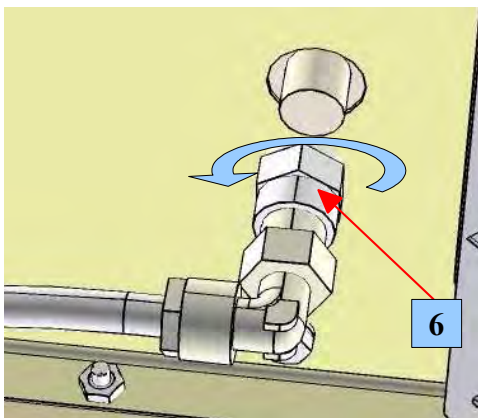


- Take out hose reel box to the left [4].

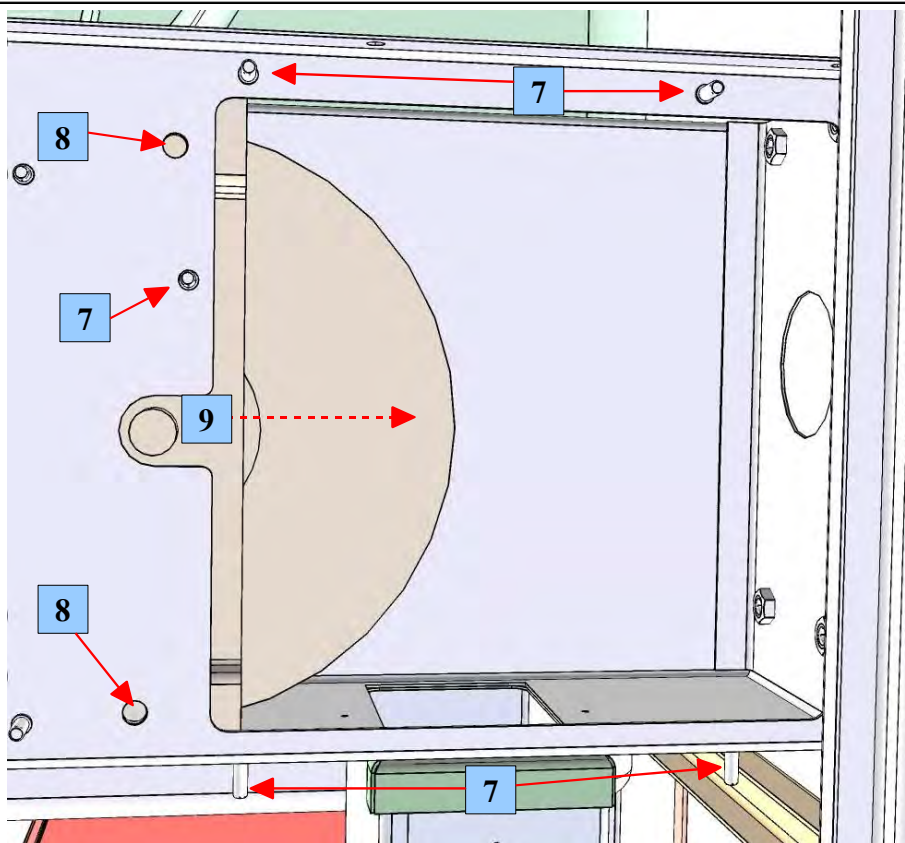
- Remove both hose reel mounting screws [5] at the hose reel box.



- Take out hose reel.

Disassembling at 215 & 220:

- Remove water supply connection [6] from the hose reel.



- Disconnect electrical connections from the lower cooling fan.
- Loosen nuts [7] and remove cover plate.
- Remove both hose reel mounting screws [8] at the hose reel box.
- Take out hose reel [9].

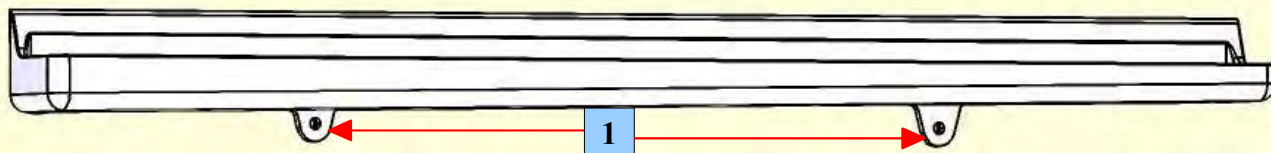
Assembling:

- The assembly has to be carried out in reversed order.
- Attention! The new hose reel is delivered preloaded!
- The water connection [1, 6] at the hose reel has to be sealed.

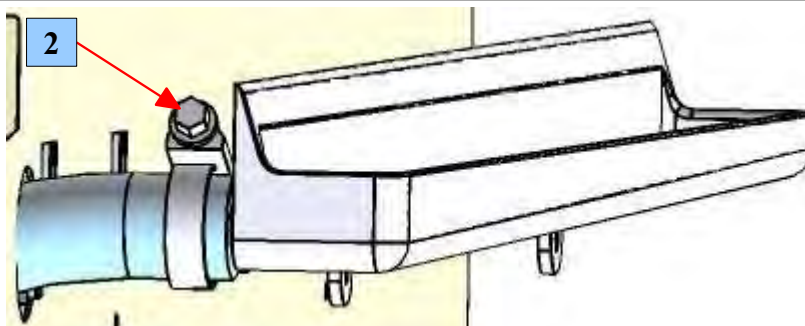
Unit collecting tray replacement instructions

Valid for:

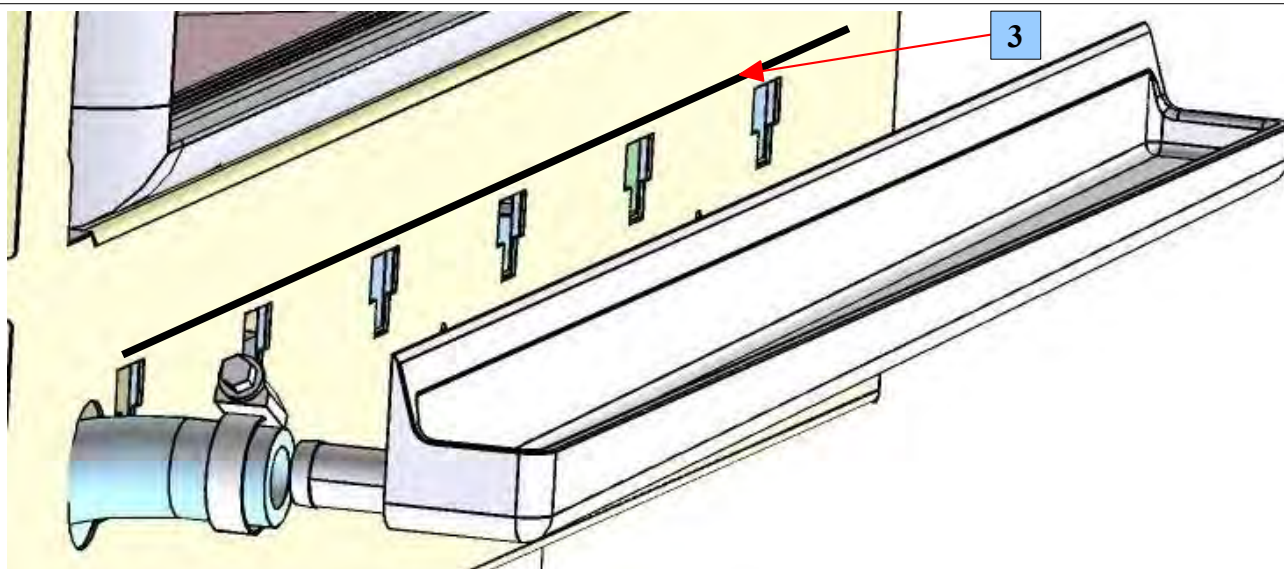
SmartCombi	ClassicCombi	MM202107
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- Remove rivets (drill out) [1].



- Remove collecting tray.
- Loosen hose clamp [2] and pull off hose.



- Mount new tray. Seal these up with a small amount of silicone [3].
- Fix tray with rivets (MM208003).

