Electric Induction Range Service Manual
US/CND

Last Update 3 May 2023

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Any printed copy could be out of date. Please always check the online version for updates.
The contents are subject to change without notice.

CONTENTS

Note: When servicing the RANGE, health and safety issues must be considered at all times. Specific safety issues are listed below with their appropriate icon. These are illustrated throughout the service information to remind service people of the health and safety issues

1.1.1 Electrical Safety

WARNING! TO AVOID ELECTRIC SHOCK! Do not attempt to service this oven without suitable training and qualifications.

Ensure the main power has been disconnected before servicing any part of the oven. If the power is required to be on for electrical fault finding, then **extreme** care should be taken not to make contact with electrical components other than with testing probes. Ensure the oven is turned off when removing any electrical component or connection.

1.1.2 Electrostatic Discharge

An anti-static strap is to be used as electrical static discharge (ESD) protection when servicing electronic components.

1.1.3 Good Working Practices

Ensure the work areas are kept tidy and free of hazards while servicing the oven. On completion of the servicing, ensure the oven and work areas are left clean and tidy.

1.1.4 Insulation Test

Megger test to check insulation.

1.1.5 Sheet Metal Edges

When working around cut sheet metal edges use appropriate gloves or protection to eliminate the chance of receiving a laceration.

1.2.1 Tools

- 7.5V Power Screw/Nut Driver Recommended
- 3” socket extension bar
- Socket SET
- Flexible shaft socket extension
- #1 and #2 Short Phillips Screw driver
- Digital power meter (Voltage – Current)
- Static strap
- Nipper
- Pliers
- Wrenches set

1.2.2 Materials

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2.1.1 Weight

Electric Induction 30”	Full Glass	lbs /Kg =311/141
Electric Induction 36”	Full Glass	lbs /Kg =382/173
Electric Induction 48”	Full Glass	lbs /Kg =467/211
Electric Induction 48”	Glass + Griddle	lbs /Kg =511/231

2.1.2 Power rating

TECHNICAL DATA

MODEL	Electrical Ratings and Maximum Connected Load			
	@ 240/120 Volts 60Hz		@ 208/120 Volts 60Hz	
	Amperes	kW	Amperes	kW
FULL ELECTRIC RANGE 30”	45,8	11,0	48,5	10,0
FULL ELECTRIC RANGE 36” (*)	60,8	14,6	63,9	13,3
FULL ELECTRIC RANGE 48” (**)	84,6	20,3	84,6	17,6

(*) NOTE: The 36” range is provided by a LIMITATION module that maintain the maximum amperage under a limit of 50Amps.

Power management (for 36” model) - (this system could be missing)

The 36” range features a power limitation system. In the unusual case where 4 or 5 inductors of the cooktop are being used on high (L9 or Boost) and the oven is then also turned on, the power is reduced automatically on the cooktop in order to keep the total consumption of the range below 50A.
However, it is unlikely that this level of power will be needed during daily cooking activities and this power limiting event may never be encountered. When the demand falls below 50A again full power capabilities will be restored to the cooktop.

(*) NOTE: The 48” is provided by a LIMITATION module that maintain the maximum amperage under a limit of 50Amps.

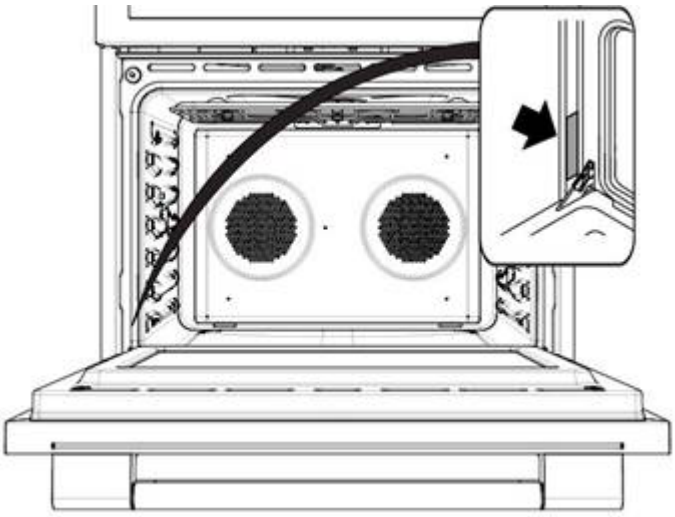
Power management system (for 48” models)

Considering all the power consuming features of this appliance, the theoretical potential cumulative power draw could exceed the required circuit breaker rating of 50 amps.
We must stress that under normal expected daily usage, the probability of this ever happening is exceptionally low. Such a power draw would require that both ovens are operating and all surface elements have been set to their maximum settings simultaneously. This model is equipped with a Fulgor Milano proprietary power management system that will prevent the tripping of circuit breakers in the event of an extreme power use scenario. The system is designed so in the event that 50 amps total draw is exceeded for several minutes, it will enter into ‘POWER MANAGEMENT’ mode in which case 4 of the 5 surface induction elements of the main cooking area will be temporarily reduced in their setting in accordance to the following diagram and description: the rear inductors’ settings will be reduced by 4 or 5 levels and the front inductors will be reduced by 1 or 2 levels. The amount of reduction will be determined by the current power draw at the time the system is engaged. Additionally, any active BOOST and AUTOMATIC HEAT UP functions in this region will be turned OFF to reduce power draw.

You will note that the symbol ‘POWER MANAGEMENT’ will illuminate on the cooking surface during this time. Functionality of the ovens and of the two left-most induction elements will remain unaffected and the central double induction element will still be able to maintain a power level setting of 9. Once the total power draw drops below 42 amps for 30 seconds, the cooktop will return to its full operational ability and previous settings will be restored automatically except for BOOST or AUTOMATIC HEAT UP which would need to be re-initiated if so desired. Again, it is highly unlikely you will ever see the Power Management system engaged during normal daily use.

2.2.1 Location

The product serial number plate is located on the left side profile trim.



2.2.2 Model & Serial Number

The numbers printed on the plate contains the following information:

- Model
- Serial Number
- Electrical ratings

2.3.1	Heating Elements	Volts	Freq.	Watts	Note
	30” and 36” Oven				
	Broil	240	--	3500	
	Bottom	240	--	3000	
	Ring	240	--	1x 2500 or 2x 1300	
	Additional	208	--	775	
	18” Oven				
	Broil	240	--	2100	
	Bottom	240	--	1750	
	Ring	240	--	1x 2500	
	Additional	208	--	700	

2.3.2	Motors	Volts	Freq.	Watts	Note
	Convection Fan	120	60	45	
	Cooling Fan	120	60	45	
	Door Lock Motor	100/120	50/60	5	

2.3.3	Induction Module	Volts	A	Watts	Note
	Module 30”	240	2x16		50/60Hz
	Module 36”	240	3x16		50/60Hz
	Module 48”	240	3+1x16		50/60Hz

- **ELECTRONIC CONTROL**. The oven control consists of a main power board and a display board. An additional power board is derived from the main one removing the power supply parts. It has all the functions of the main one to drive the lower cavity in a double oven. The main power board provides the voltages to the other boards (GND, -5V and -24V for the relays to the lower power board only).
- The three boards share a I2C communication bus (Data and Clock).
- **COOKING MODE & TEMPERATURE SELECTORS**. All ovens have one selector for the cooking modes and one for the set temperature. The cooking mode selector has 4 positions for thermal cavities, 9 for multifunction ones.
- **TEMPERATURE SENSOR**. There is one Pt1000 sensor fixed on the rear wall outside the cavity.
- **HEATING ELEMENTS.** Four heaters are available in multifunction ovens while the ring element is missing in the thermal ones. They are combined together in different ways, depending on the selected mode, but the maximum power never overtakes 3500W.
    - UPPER ELEMENT
    - LOWER ELEMENT
    - RING ELEMENT
    - UPPER EXTERNAL ADDITIONAL ELEMENT
- **CONVECTION FAN.** Convection fan. It works in all convection modes, in Fast Preheat and in Self-Clean. It makes the heat distribution uniform, inside the cavity. According to the oven model, each cavity can be provided with 0, 1 or 2 fans.
- **COOLING FAN SYSTEM.** A cooling fan keeps the internal parts temperature within acceptable values, and removes smoke from the cavity through the catalyzer. There are several by-pass thermostats that when the temperature overtakes the threshold, switching the cooling fan into its full speed. This normally occurs during self-clean only.
- **OVEN LIGHTS.** Halogen 120V lamps. They turn on when a cooking mode starts or when the door is open. It’s also possible to switch the lights on manually by pressing the light button.
- **DOOR LATCH SYSTEM.** A motor actuates the latch mechanism to lock or unlock the door. The motor always rotates in the same direction, and it’s the mechanism that determines the locking or unlocking phases. They take about the same time to complete the half cycle. The door micro switch is checked every time the latch starts to verify that the door is actually closed. If the door is open, the latch icon flashes until the door is closed. A changeover micro switch placed right on the motor shaft and actuated by a 180° cam provides the electronics with the latch position information.
- **INDUCTON COOKTOP.** The cooktop is provided of one induction generator drive by an encoder for each zone.
- **POWER LIMITATION SYSTEM.** (See par 2.1)

IMPORTANT: The MANUAL TEST procedure can be activated only within 5 minutes after power on.

Refer to the above picture to identify the HAWK3 electronic control.

The control must be able to drive multifunction cavities, with one or two convection fans, and thermal cavities. Different oven models are possible as described in the following table.

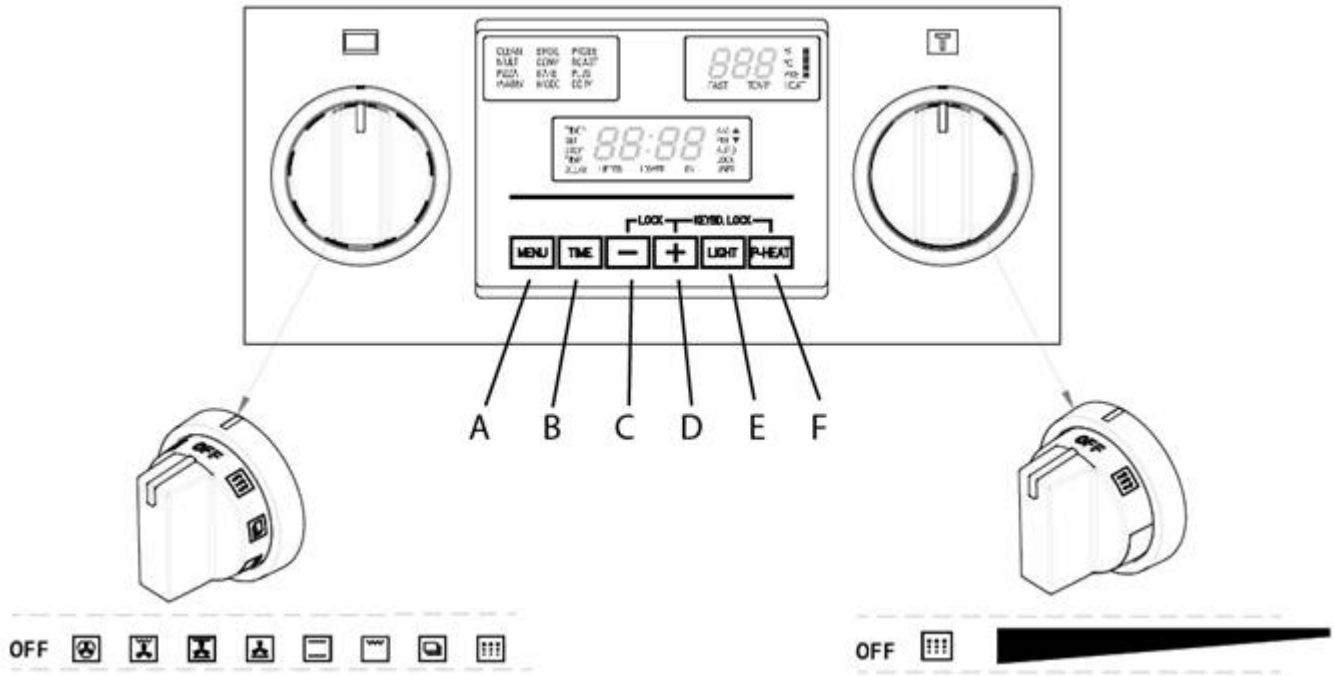
N°	SIZE	OVEN	MAIN CAVITY	
n 03	30” or 36”	SINGLE	CONVECT 2 FANS	**80C**
N 15	48”	DOUBLE	CONVECT 1 FAN + CONVECT 2 FANS	**80C**

The manual test procedure must be completed and confirmed as per the instructions in this section. If the control has never been configured before, the display shows **F11Err** at power up. Once a configuration has been accepted, the failure disappears.
At every POWER-UP, the control runs a latch auto-test cycle. The lock icon flashes while the latch is moving.

- Hold **[A]** and **[F]** button at the same time, for about 3 seconds, and check that all the display elements and the buzzer turn on for about 5 seconds.
- Press [+] to enter test mode then press [+] to get into the next step. Press [-] to come back to the previous one.
- Check the display board SOFTWARE VERSION (d05).
- Check the main power board SOFTWARE VERSION (P18).
- Check whether the oven model has been correctly detected.

Otherwise:

- Hold **[A]** key, the oven model starts flashing on the display.
- Hold **[C]** / **[D]** keys in order to select the correct model n01 to n13 according to the table above.
- Hold **[A]** again to confirm.



(OTHERWISE CHECK WHETHER THE CONFIGURATION HAVE BEEN SET PROPERLY, AS DESCRIBED AT THE BEGINNING)

IMPORTANT: The MANUAL TEST procedure can be activated only within 5 minutes after power on.

Refer to the above picture to identify the MODULAR LED electronic control.

The control must be able to drive multifunction cavities described in the following table.

N°	SIZE	OVEN	MAIN CAVITY	
n 03	30” or 36”	SINGLE	CONVECT 2 FANS	80C
N 15	18” + 48”	DOUBLE	CONVECT 1 FAN + CONVECT 2 FANS	80C

The manual test procedure must be completed and confirmed as per the instructions in this section. If the control has never been configured before, the display shows **F11Err** at power up. Once a configuration has been accepted, the failure disappears.

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- Hold **[A]** and **[F]** button at the same time, for about 3 seconds, and check that all the display elements and the buzzer turn on for about 5 seconds.
- Press [+] to enter test mode then press [+] to get into the next step. Press [-] to come back to the previous one.

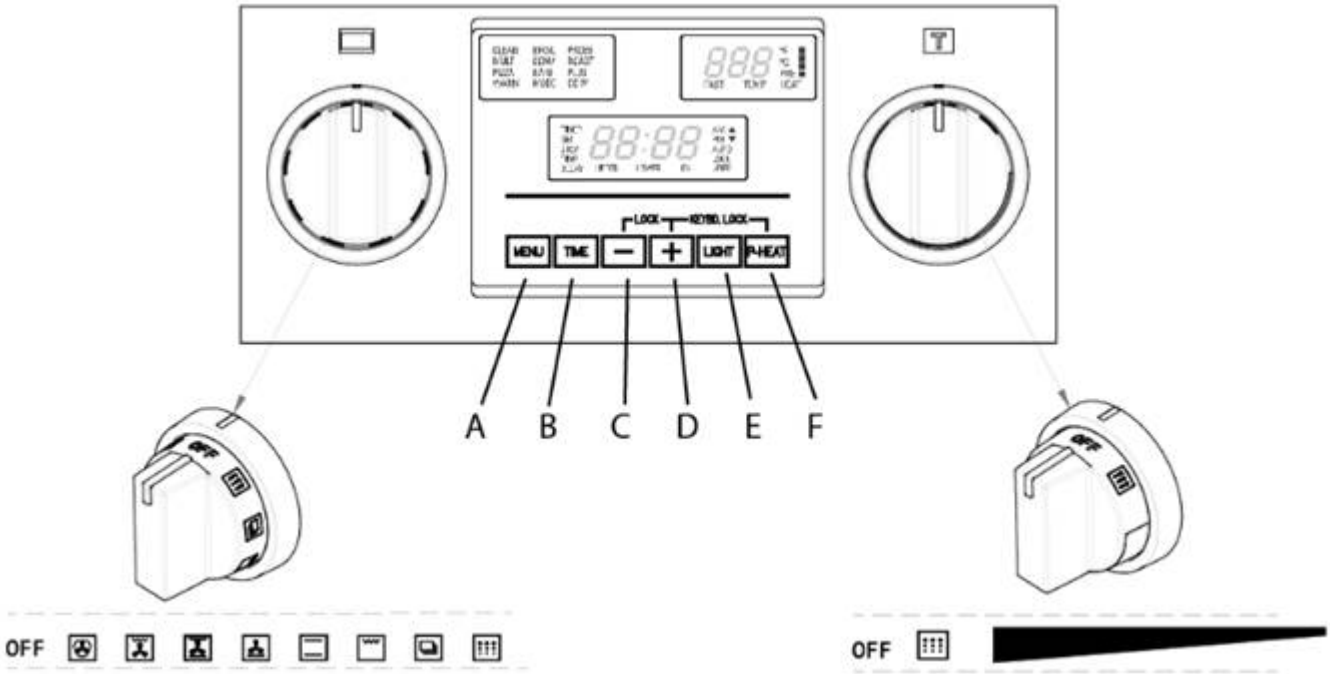
- Even if the oven model has been correctly detected it have to be confirmed.
- Hold **[A]** key, the oven model starts flashing on the display then confirm by pressing **[A]** key
  Otherwise:
- Hold **[C]** / **[D]** keys in order to select the correct model in according to the table above.
- Hold **[A]** again to confirm.

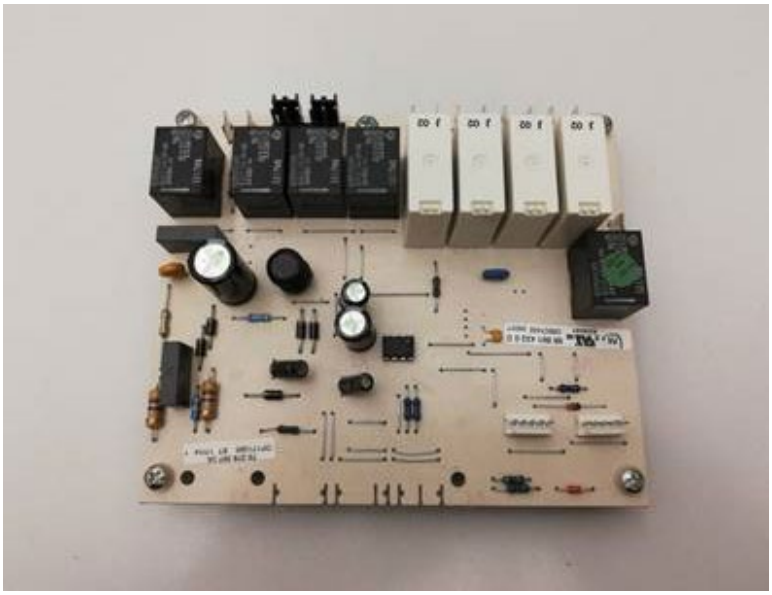
A reboot is performed and the control runs a latch auto-test cycle. The lock icon flashes while the latch is

moving.

As soon as the run is finished:

- Check the SW DISPLAY (***) press [+]
- Check the SW KNOBS (***) press [+]
- Check the SW POWER BOARD (***) press [+] to start the Manual Test **2.6**



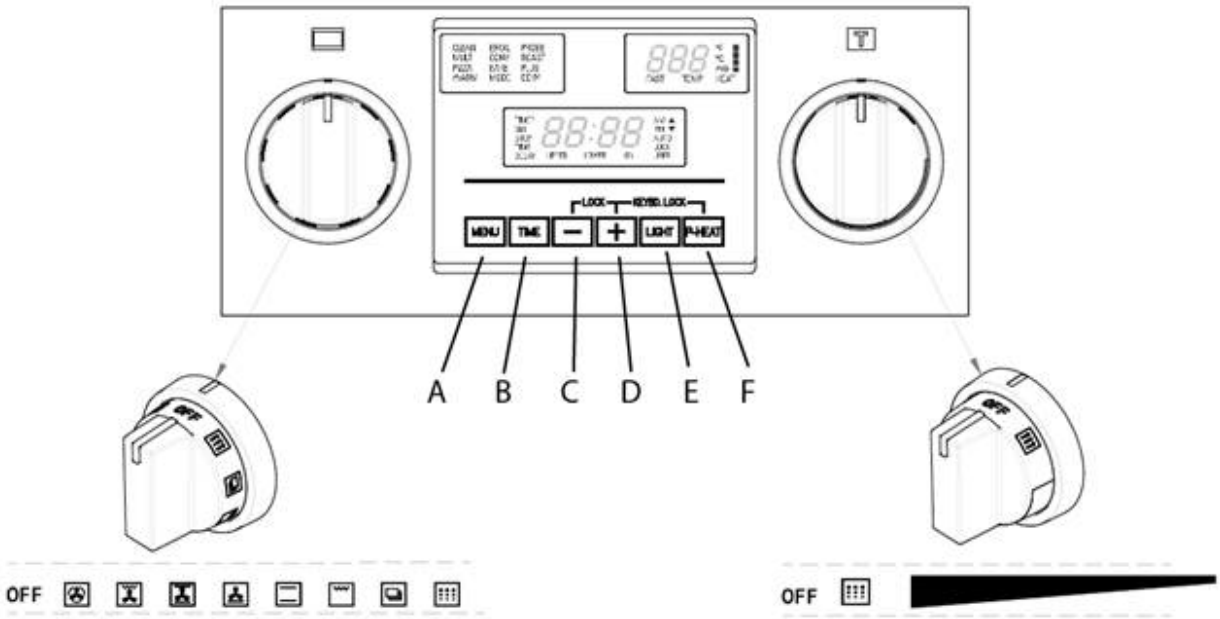


Refer to the above picture to identify the HAWK3 electronic control

IMPORTANT: The MANUAL TEST procedure can be activated only within 5 minutes after power on.

The MANUAL TEST must be completed until the writing TEST END appears otherwise the oven model configuration will be lost.

To enter in the MANUAL TEST, follow the same procedure as the ***Configuration section 2.5a***



2.6.1 How to verify the correct selection

At power-up, the control runs a latch auto-test; both lock symbols flash while the correspondent latches are moving. Wait for the auto-test end. When the control is powered for the first time the display shows:

• F11 Err

- Ignore this message and hold [A] and [F] for about three seconds to start the test.
- All the display elements and the buzzer turn on for about 5 seconds then the control displays

• tESt ---

- Always press [+] button to proceed to the following step.
- Verify the software versions of display (d05) and power (p18) boards.
- Verify that the oven model has been correctly detected by the control, otherwise check the configuration.

N°	SIZE	OVEN	MAIN CAVITY	
n 03	30” or 36”	SINGLE	CONVECT 2 FANS	**80C**
n 15	48”	DOUBLE	CONVECT 1 FAN + CONVECT 2 FANS	**80C**

• Prob Off

- The meat probe must be inserted when the message ***Prob OFF*** is displayed. If everything is fine, the probe temperature will be displayed instead of OFF. Important: if the temperature display remains “OFF” quitting the manual test, the meat probe option will not be enabled.

- Continue the test until **S00** step is displayed: the control now starts the steps to check all the oven outputs and inputs. The active triangle near the ***tESt*** writing indicates the cavity under test.

- Always press [+] button to proceed to the following steps.

2.6.2 How to check Large (double) and Single Oven hardware

- ***S01***: oven lights.
- ***S02***: cooling fan.
- ***S03***: convection fan. ***(ONLY FOR CONVECTION CAVITY)***
- ***S04***: check that no heating elements are energized. The double line break relay must be open.
- ***S05***: bottom element (3000W @240v 12,5) & (2253W @208v 10,8A)
- ***S06***: top element (3500W @240v 14,6) & (2629W @208v 12,6)
- ***S07***: ring element

  For single fan (2500W @240v 10,4) & (1877W @208v 9,0)

  For double fans (2x1300W=2600W @240v 10,9) & (1950W @208v 9,4)

  Convection fans are also running. ***(ONLY FOR CONVECTION CAVITY).***
- ***S08***: additional element (1030W @240v 4,3A) & (775W @208v 3,7A)
- ***S09***: cooking mode selector. The display automatically shows the off-position value:

- ***tESt C00***

- Turn the knob clockwise and check that the values correspond to the ones in the following table:

Code	ENGLISH	
	Multifunction	Thermal
C00	Off	Off
C01	Convection bake	
C02	Convection broil	
C03	Convection roast	
C04	Fast preheat	
C05	Bake	Bake
C06	Broil	Broil
C07	Dehydrate	
C08	Self-clean	Self-clean

- Once back in the off position, the control shows automatically the step number again.
- ***S10***: temperature selector. The display automatically shows:

- ***tESt dEF***

- (Default) in preset position.
- Turn the knob clockwise and verify that the temperature changes between 170°f and 550°f. Verify that in clean position the display shows:

- ***tESt cln***

- Once back in preset position, the control shows automatically the step number again.
- ***S11***: press [B] to verify the temperature value actually measured by the electronics. Press it again to come back to the step number.

(FOR SINGLE OVEN SKIP STEPS FROM S13 TO S23)

2.6.3 How to check small cavity (double)

- ***S13***: oven lights
- ***S14***: cooling fan
- ***S15***: convection fan. ***(ONLY FOR CONVECTION CAVITY)***
- ***S16***: check that no heating elements are energized. The double line break relay must be open.
- ***S17***: bottom element (1250W @240v 5,2A) & (939W @208v 4,5A)
- ***S18***: top element (2100W @240v 8,7) & (1577W @208v 7,6)
- ***S19***: ring element

  For single fan (2500W @240v 10,4) & (1877W @208v 9,0)

  Convection fans are also running. ***(ONLY FOR CONVECTION CAVITY).***
- ***S20***: additional element (700W @240v 2,9A) & (526W @208v 2,5A)
- ***S21***: cooking mode selector. The display automatically shows the off-position value:

  - ***tESt C00***

- Turn the knob clockwise and check that the values correspond to the ones in the following table:

Code	ENGLISH	
	Multifunction	Thermal
C00	Off	Off
C01	Convection bake	
C02	Convection broil	
C03	Convection roast	
C04	Fast preheat	
C05	Bake	Bake
C06	Broil	Broil
C07	Dehydrate	
C08	Self-clean	Self-clean

Once back in the off position, the control shows automatically the step number again.

- ***S22***: temperature selector. The display automatically shows:

  - ***tESt dEF***

- (Default) in preset position.
- Turn the knob clockwise and verify that the temperature changes between 170°F and 550°f. Verify that in clean position the display shows:

  - ***tESt cln***

- Once back in preset position, the control shows automatically the step number again.
- ***S23***: press [set clock] to verify the temperature value actually measured by the electronics. Press it again to come back to the step number.

- When the display shows the following message:

- ***tESt End***

Hold [A] and [F] to quit the manual test and come back to the standard working mode.

2.6.4 Power supply 208v voltage selection

Wait for the clock appears and display “12:00”, then remember to verify if the power supply in the house is 240v or 208v. 240v is selected by default, in case of 208v the control must be properly configured:

Within five minutes from power up, hold [A] and [B] keys for 3 seconds to enter the user option menu. The display shows as follows:

Sele deg

Hold then [B] and [E] keys until the display becomes dark.

Hold [A] and [E] further, until the time display shows “Volt” and temperature module shows “240” blinking, waiting for an input.

Volt 240

Using [+] or [-] keys, the control toggles between 240V and 208V options. Hold “A” to confirm.

Hold [A] and [E] keys in order to quit the selection.

Hold [A] key for 3 seconds to quit the user option menu.

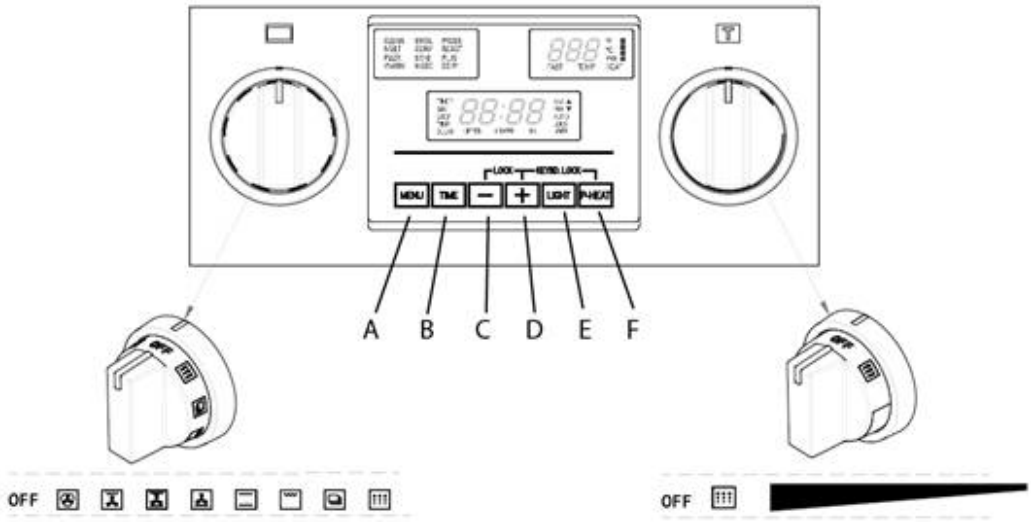
The voltage setting is stored and kept even after a long power-off.

Refer to the above picture to identify the MODULAR LED electronic control.

IMPORTANT: The MANUAL TEST procedure can be activated only within 5 minutes after power on.

The MANUAL TEST must be completed until the writing TEST END appears otherwise the oven model configuration will be lost.

To enter in the MANUAL TEST, follow the same procedure as the ***Configuration section 2.5b***



2.6.1 Manual TEST

After the Software versions have been showed press [+]

• Prob OFF

- The meat probe must be inserted when the message ***Prob OFF*** is displayed. If everything is fine, the probe temperature will be displayed instead of OFF.

- Continue the test until **S00** step is displayed: the control now starts the steps to check all the oven outputs and inputs. The active triangle near the ***tESt*** writing indicates the cavity under test.

- Always press [+] button to proceed to the following steps.

2.6.2 How to check Large (double) and Single Oven hardware

- ***S01***: oven lights.
- ***S02***: cooling fan.
- ***S03***: convection fan. ***(ONLY FOR CONVECTION CAVITY)***
- ***S04***: check that no heating elements are energized. The double line break relay must be open.
- ***S05***: bottom element (3000W @240v 12,5) & (2253W @208v 10,8A)
- ***S06***: top element (3500W @240v 14,6) & (2629W @208v 12,6)
- ***S07***: ring element

  For single fan (2500W @240v 10,4) & (1877W @208v 9,0)

  For double fans (2x1300W=2600W @240v 10,9) & (1950W @208v 9,4)

  Convection fans are also running. ***(ONLY FOR CONVECTION CAVITY).***
- ***S08***: additional element (1030W @240v 4,3A) & (775W @208v 3,7A)
- ***S09***: cooking mode selector. The display automatically shows the off-position value:

• tESt C00

- Turn the knob clockwise and check that the values correspond to the ones in the following table:

Code	ENGLISH	
	Multifunction	Thermal
C00	Off	Off
C01	Convection bake	
C02	Convection broil	
C03	Convection roast	
C04	Fast preheat	
C05	Bake	Bake
C06	Broil	Broil
C07	Dehydrate	
C08	Self-clean	Self-clean

- Once back in the off position, the control shows automatically the step number again.
- ***S10***: temperature selector. The display automatically shows:

• *tESt dEF*

- (Default) in pre-set position.
- Turn the knob to the minimum and press the "A" key, check the minimum value 170 ° F (75 ° C), then turn the knob clockwise and check that there is a continuous increasing up to the maximum value, press the " A ", check the maximum value 550 ° F (290 ° C).

• *tESt cln*

- Once back in pre-set position, the control shows automatically the step number again.
- ***S11***: press [B] to verify the temperature value actually measured by the electronics. Press it again to come back to the step number.

(FOR SINGLE OVEN SKIP STEPS FROM S13 TO S23)

2.6.3 How to check small cavity (double)

- ***S13***: oven lights
- ***S14***: cooling fan
- ***S15***: convection fan. ***(ONLY FOR CONVECTION CAVITY)***
- ***S16***: check that no heating elements are energized. The double line break relay must be open.
- ***S17***: bottom element (1250W @240v 5,2A) & (939W @208v 4,5A)
- ***S18***: top element (2100W @240v 8,7) & (1577W @208v 7,6)
- ***S19***: ring element

  For single fan (2500W @240v 10,4) & (1877W @208v 9,0)

  Convection fans are also running. ***(ONLY FOR CONVECTION CAVITY).***
- ***S20***: additional element (700W @240v 2,9A) & (526W @208v 2,5A)
- ***S21***: cooking mode selector. The display automatically shows the OFF-position value:

• *tESt C00*

- Turn the knob clockwise and check that the values correspond to the ones in the following table:

Code	ENGLISH	
	Multifunction	Thermal
C00	Off	Off
C01	Convection bake	
C02	Convection broil	
C03	Convection roast	
C04	Fast preheat	
C05	Bake	Bake
C06	Broil	Broil
C07	Dehydrate	
C08	Self-clean	Self-clean

Once back in the off position, the control shows automatically the step number again.

- ***S22***: temperature selector. The display automatically shows:

• *tESt dEF*

- (Default) in pre-set position.
- Tu Turn the knob to the minimum and press the "A" key, check the minimum value 170 ° F (75 ° C), then turn the knob clockwise and check that there is a continuous increasing up to the maximum value, press the " A ", check the maximum value 550 ° F (290 ° C).

• *tESt cln*

- Once back in preset position, the control shows automatically the step number again.
- ***S23***: press [set clock] to verify the temperature value actually measured by the electronics. Press it again to come back to the step number.

- When the display shows the following message:

• *tESt End*

Hold [A] and [F] to quit the manual test and come back to the standard working mode.

2.6.4 Power supply 208v voltage selection

Wait for the clock appears and display, then remember to verify if the power supply in the house is 240v or 208v. 240v is selected by default, in case of 208v the control must be properly configured:

Within five minutes from power up, hold [A] and [B] keys for 3 seconds to enter the user option menu. The display shows as follows:

Sele deg

Hold then [B] and [E] keys until the display becomes dark.

Hold [A] and [E] further, until the time display shows “Volt” and temperature module shows “240” blinking, waiting for an input.

Volt 240

Using [+] or [-] keys, the control toggles between 240V and 208V options. Hold “A” to confirm.

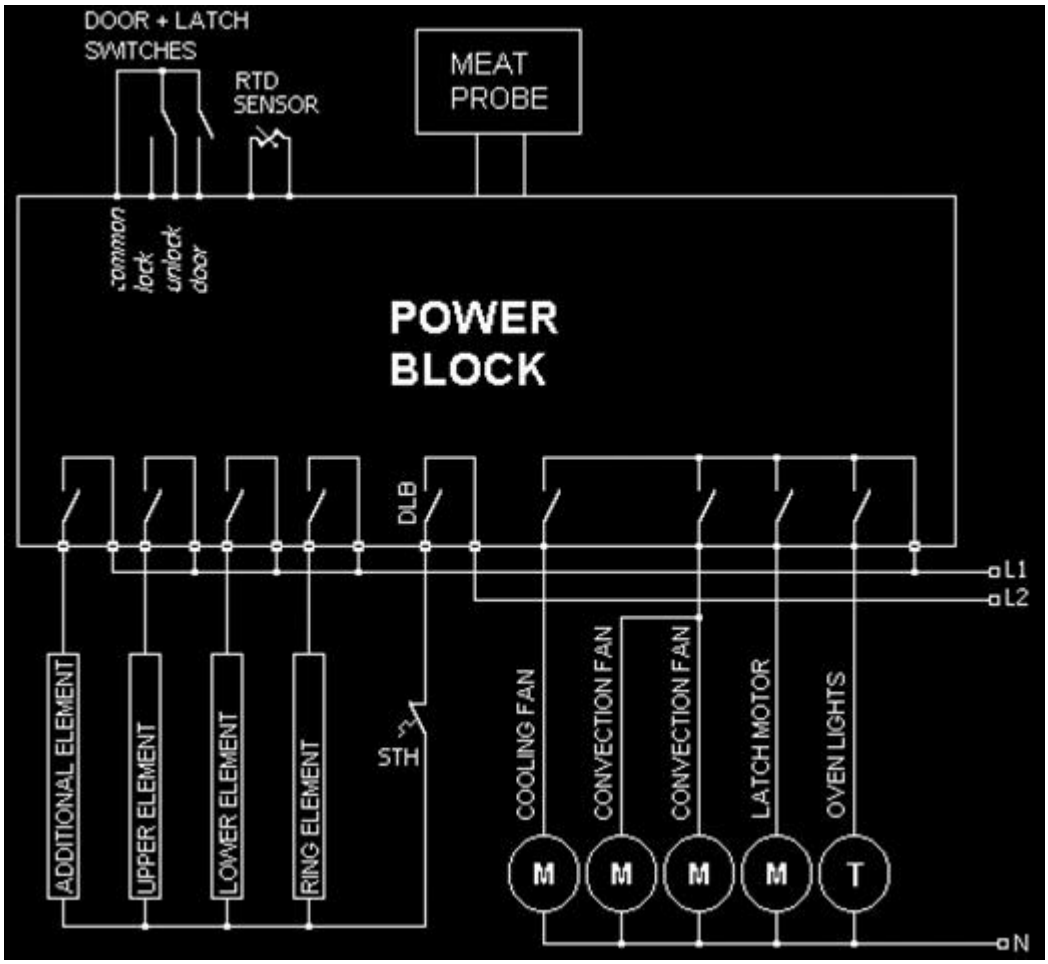
Hold [A] and [E] keys in order to quit the selection.

Hold [A] key for 3 seconds to quit the user option menu.

The voltage setting is stored and kept even after a long power-off.

A power module, described in the block diagram below, is able to manage one cavity. The main power board is also providing the lower one and the display board with the power supply.

- An external safety thermostat, named STH, is placed in the appliance: it must always be connected in series with the heaters.
- A NTC temperature sensor is on the main power board: if an over temperature anomaly is detected during ordinary cooking, a fault must occur and the display must show an error code.
- These two devices must prevent all the oven parts to overtake the maximum allowed temperature (for the electronics the 105°C threshold), also in case of a cooling fan fault.
- Optionally, one external board can be provided to control the meat probe in the upper cavity.



If the fault involves safety requirements or the correct oven functionality, any activity must be stopped until the fault is removed. Every alarm condition can be reset manually by turning the cooking mode knob in the OFF position and the temperature knob in the preset position or in some cases the power ON is required. Of course, the cause of the failure must be first removed.

Faults	HAWK3			MODULAR LED	
					
Upper or single oven RTD temperature sensor failure	F01	Err		F01	Err
Lower oven RTD temperature sensor failure	F02	Err		F02	Err
Upper or single oven motorized latch or switches failure	F03	Err		F03	Err
Lower oven motorized latch or switches failure	F04	Err		F04	Err
Upper or single oven runaway temperature condition 650°F	F05	Err		F05	Err
Lower oven runaway temperature condition 650°F	F06	Err		F06	Err
Upper or single oven runaway temperature condition 950°F	F07	Err		F07	Err
Lower oven runaway temperature condition 950°F	F08	Err		F08	Err
Short circuit on display board* or power board** microcontroller	F09	Err*		F09	Err**
Short circuit on display board	F10	Err			
EEPROM data access failure on display board* or power board**	F11	Err*		F11	Err**
Electronic control overheating	F12	Err		F12	Err
Meat probe error	F13	Err		F13	Err
Communication problem between the boards	F14	Err		F14	Err
Failure knobs (main cavity)				F15	Err
Failure knobs (secondary cavity)				F16	Err
ADC knobs				F17	Err
Knobs communication failure				F18	Err
Touch or Knob micro controller failure	F19	Err		F19	Err
RL4 Element issue - short condition or open detection (Broil HE)				F20	Err
RL2 Element issue - short condition or open detection (Upper HE)				F21	Err
RL3 Element issue - short condition or open detection (Ring HE)				F22	Err
RL5 Element issue - short condition or open detection (Lower HE)				F23	Err
RL1 Element issue - short condition or open detection (DBL braker)				F25	Err

Whenever the fault doesn't affect the whole oven functionality, allow the user to work:

- In a double oven, the opposite cavity can be available even if the first one is not working.
- If the latch doesn't work, ordinary cooking activities may run if the door is fully unlocked.

Every fault must have a time-out to be declared, to prevent false alarms. When a fault occurs, if the control can detect the failure, an error number must be displayed, as shown in the table above, with cavity indication for double oven only.

2.9.1 Child - safe locking system

All of our ovens are built-in child-safe locking systems. The future is automatically enabled any time the appliance is connected to the power, any time the switch is turned on and any time the oven is programmed to run a self-cleaning of the cavity.
The same future it can be is used on the manual mode in the household where a minor is present to prevent children from getting in touch with hot parts.

2.9.2 Over heating sensor

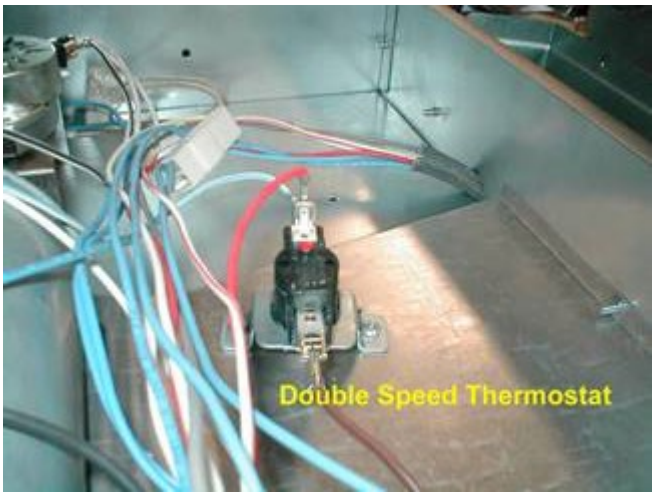
All of our ovens are built with a over heating sensor system:

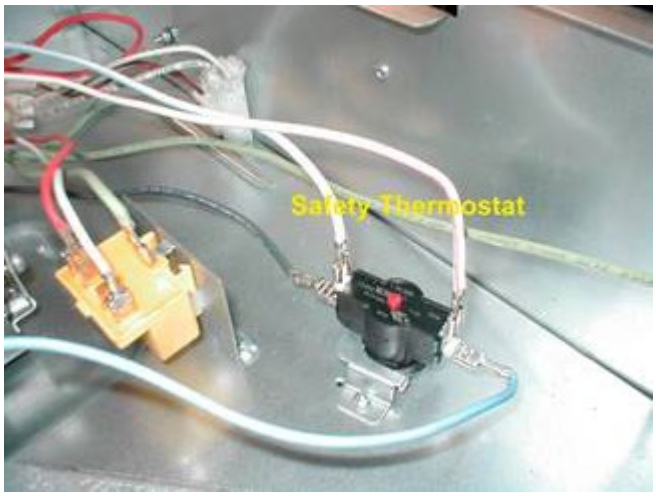
- we have two bi-metal mechanical thermostats for each cavity .
- an electronic sensor "***NTC***" or "negative temperature coefficients" mounted on the main power board (see chapter **2.7** for more information). The role of the "***NTC***" is to protect the electronic boards of an eventually over-heating. (the "***NTC***" varies with the values of voltage, only *DC*, values tabulated at **2.7**)

An electronic "***PTC***" or "positive temperature coefficients" probe mounted on the inside of the cavity who is responsible of the inside cavity reading of the temperature. (the "***PTC***" varies with the resistance – tabulated at chapter…)

2.9.3 Thermostat

All of our ovens are built with two bi-metal mechanical thermostats for each cavity. The thermostats are mounted in contact with the metal sheet on top of each cavity as shown in the above pictures.





2.9.4 Double Speed Thermostat

The double speed thermostat is acting in conjunction with the by-pass resistor and is connected in parallel with it.
In the regular cooking mode when the read temperature at the surface of the metal sheet in under *158 °F* (*70 °C*) the power is flowing trough the resistor and it feeding the cooling fan with a voltage *AC 93V* .
If the temperature of *158 °F* (*70 °C*) is depassed, the thermostat is closing the circuit and the resistor is by-passed and now we can read at the poles of the cooling fan motor the full voltage of installed *AC 120V* and the ***RPM*** of the cooling fan will almost double.
The reset is automatic when the temperature at the surface of the metal sheet decreases under the *158 °F* and the cooling fan is reducing the ***RPM*** at the manufacturer factory set-up.
RPM – rotation per minute

2.9.5 Oven Safety Thermostat

The function of the safety thermostat is to protect the of the oven from over heating in the event of a malfunction of the cooling fan.

Description: In the regular cooking mode when the read temperature at the surface of the metal sheet is under limit the power is energizing the electronics and the heating elements as well.
In the event that the temperature is rising over the limit, the thermostat will switch mechanically from off position to on position and all of the heating elements will be cut off from the power.
All of the electronics will be cut off.
The reset is manual when the cooling fan was replaced or the oven problem was solved and the temperature is in the right functioning parameters the red button on the top of case of thermostat must be pressed to reset it (see picture on the previous page).

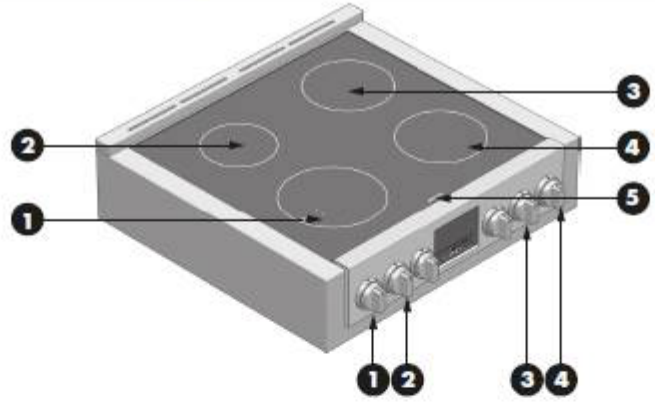
2.9.6 Cooktop cooling fan Thermostat

The induction range is provided with an additional cooling thermostat to maintain a low temperature in the induction module ambient in the event all zones are set at the maximum level for a long period.
Description: In the event that the temperature is rising over the limit, the thermostat will switch mechanically from open to close position and the oven cooling fan will be switch ON.

2.10.1 RANGE 30”

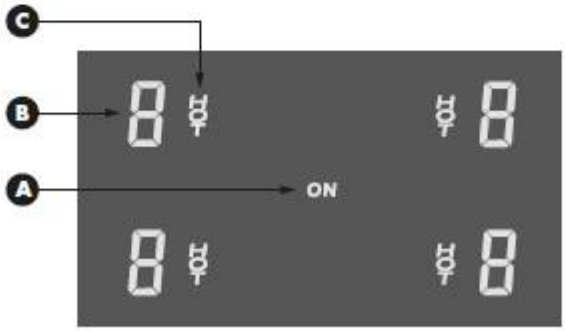
ZONES configuration:

FEATURES OF YOUR COOKTOP 30”



Position 1	2300W (Boost 3700W) 9”	(230mm)	induction element and control
Position 2	1400W (Boost 2200W) 6” ½	(165mm)	induction element and control
Position 3	1850W (Boost 3000W) 7” ¾	(200mm)	induction element and control
Position 4	1850W (Boost 3000W) 7” ¾	(200mm)	induction element and control
Position 5	Led Display		

DISPLAY UNIT INDICATIONS



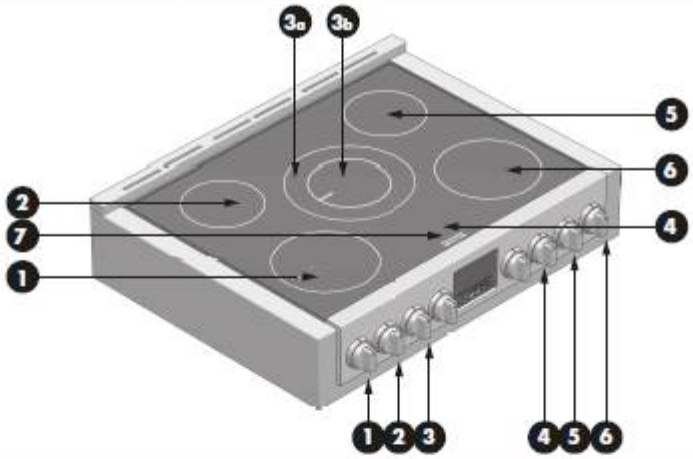
A - ON display
B - Power level display
C - Residual heat display

NOTE: power levels are indicative and can vary according to the pan used or the settings made.

2.10.2 RANGE 36”

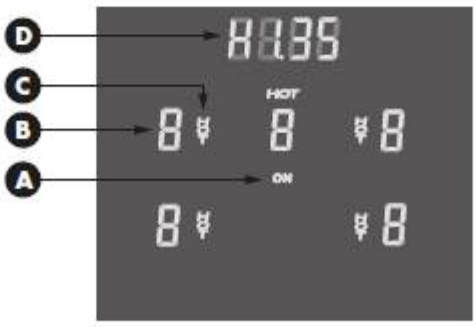
ZONES configuration:

FEATURES OF YOUR COOKTOP 36”



Position 1	2300W (Boost 3700W)	9”	(230mm)	induction element and control
Position 2	1850W (Boost 3000W)	7”	(180mm)	induction element and control
Position 3a	3000W (Boost 5500W)	11”	(280mm)	induction element and control
Position 3b	1850W (Boost 2600W)	7”	(180mm)	
Position 4	Timer Display			timer control
Position 5	1850W (Boost 3000W)	7”	(180mm)	induction element and control
Position 6	2300W (Boost 3700W)	9”	(230mm)	induction element and control
Position 7	Led Display			

DISPLAY UNIT INDICATIONS



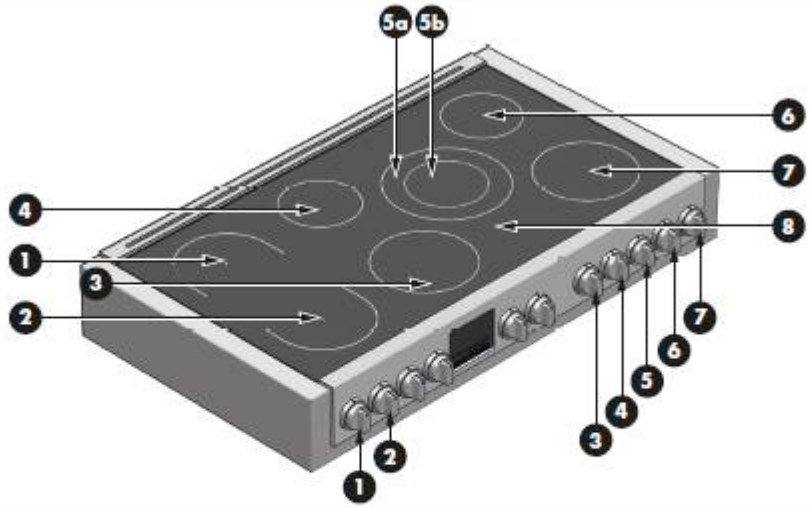
A - ON display
B - Power level display
C - Residual heat display
D - Timer

NOTE: power levels are indicative and can vary according to the pan used or the settings made.

2.10.3 RANGE 48” Full Glass

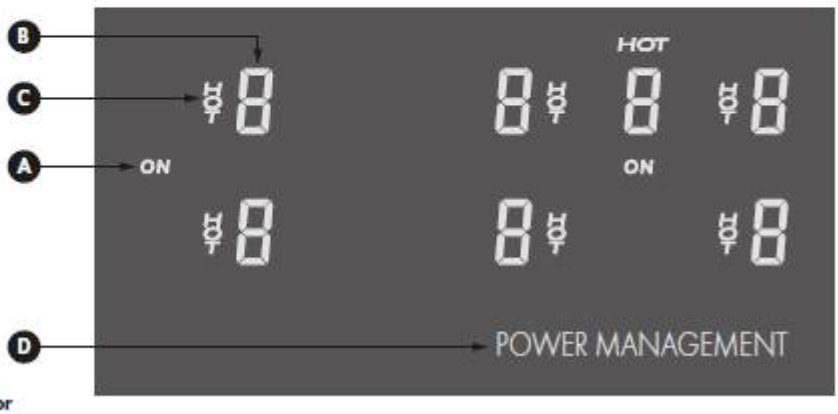
ZONES configuration:

FEATURES OF YOUR COOKTOP 48" BRIDGE



Position 1	1850W (Boost 3000W) 7"	(180mm)	induction bridge element and control
Position 2	1850W (Boost 3000W) 7"	(180mm)	induction bridge element and control
Position 3	2300W (Boost 3700W) 9"	(230mm)	induction element and control
Position 4	1850W (Boost 2600W) 7"	(180mm)	induction element and control
Position 5a	3000W (Boost 5500W) 11"	(280mm)	induction element and control
Position 5b	1850W (Boost 2600W) 7"	(180mm)	induction element and control
Position 6	1850W (Boost 2600W) 7"	(180mm)	induction element and control
Position 7	2300W (Boost 3700W) 9"	(230mm)	induction element and control
Position 8	Led Display		

DISPLAY UNIT INDICATIONS



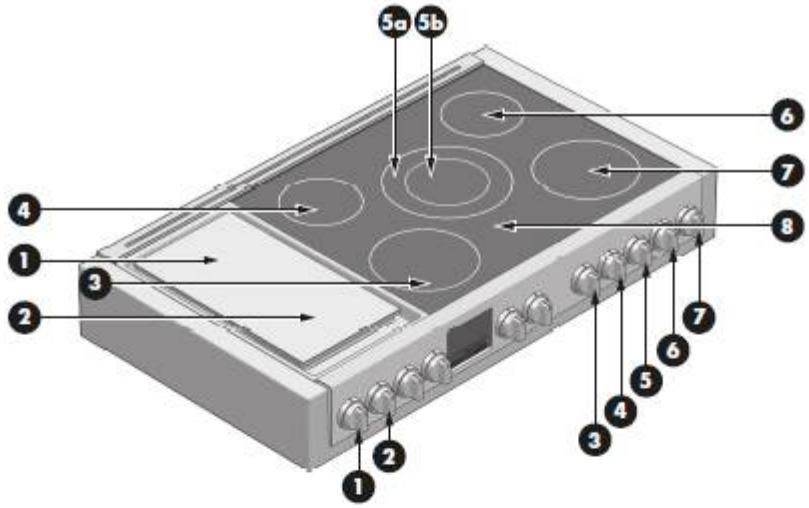
A - ON display
B - Power level display
C - Residual heat display
D - Power management indicator

NOTE: power levels are indicative and can vary according to the pan used or the settings made.

2.10.4 RANGE 48” Griddle

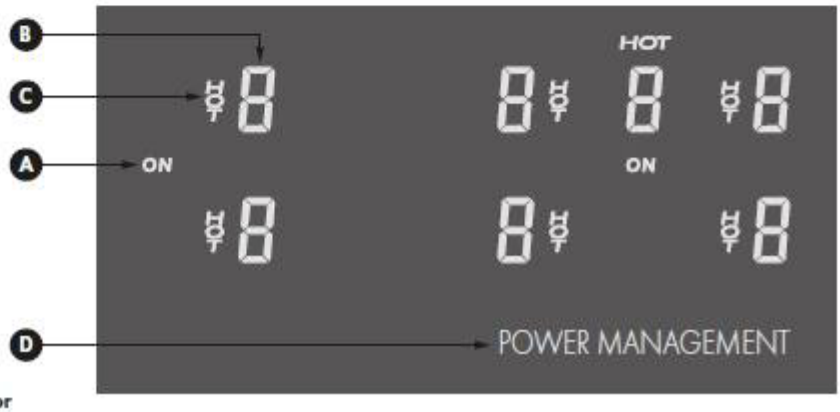
ZONES configuration:

FEATURES OF YOUR COOKTOP 48" GRIDDLE



Position 1	1850W (Boost 3000W)		induction griddle element and control
Position 2	1850W (Boost 3000W)		induction griddle element and control
Position 3	2300W (Boost 3700W) 9"	(230mm)	induction element and control
Position 4	1850W (Boost 2600W) 7"	(180mm)	induction element and control
Position 5a	3000W (Boost 5500W) 11"	(280mm)	induction element and control
Position 5b	1850W (Boost 2600W) 7"	(180mm)	induction element and control
Position 6	1850W (Boost 2600W) 7"	(180mm)	induction element and control
Position 7	2300W (Boost 3700W) 9"	(230mm)	induction element and control
Position 8	Led Display		

DISPLAY UNIT INDICATIONS



A - ON display
B - Power level display
C - Residual heat display
D - Power management indicator

NOTE: power levels are indicative and can vary according to the pan used or the settings made.

How INDUCTION heating works

There is an electronic circuit inside the induction hob which powers and commands a coil. This creates a magnetic field which activates when it comes into contact with suitable pots and pans **(magnetic material).**
The pan on the hob warms up instantly, while the hob remains cold.
There is no loss of heat. The heat generated in the pan lets you cook quickly, saving time and energy.

Pots and pans and how to use them.
Attention!

There is an electronic circuit inside the induction hob must be made of ferromagnetic material. They can be made of enameled steel, cast iron or special pans of stainless steel for induction.
To make sure a pan is suitable, try using a magnet to see if it sticks to the bottom of the pan. Never use normal thin steel nor anything containing even just an amount of glass, terracotta, copper or aluminum.
The display of the cooking area will show if the pan is suitable, if the power Indicator flashes the pan is not suitable or the diameter of the bottom is too small for the diameter of the cooking area.
The pots and pans must be placed precisely in the middle of the cooking area. In some cooking areas an internal diameter is indicated, with a lighter outline.

***Power Sharing*:**

One generator controls 2 elements, or two cooking zones within a heating section share the power of one generator. Power Sharing is activated when both elements in the same cooking zone are activated and one element is set for Boost (P). The element that is not set for Boost will change to a lower power level.
This is called Power Sharing: The latest set cooking level has priority.

***Cookware “noise”*:**

When using adjacent elements that are set at certain power level settings, magnetic fields may interact and produce a low whistle or intermitted “hum”. Pans that completely cover the element ring will produce less noise. A low “humming” noise is normal particularly on high settings. These noises can be reduced or eliminated by lowering or raising the power level settings of one or both of the elements.

Automatic Switch OFF

The induction hob has an automatic device which limits the duration of use.
Depending on the chosen cooking level a maximum operation time limitation is defined, the safety device will be activated only if no change of cooking level is done. If this maximum operating time is exceeded on a cooking zone this cooking zone is being switched off, a short beep sounds and if the zone is hot the “residual heat” symbol is showed.
In order to reactivate this cooking zone, the control knob has to be turned back into OFF position.

TO Reset assembly FAILURES, REMOVE THE CAUSE AND SWITCH THE SELECTORS IN "OFF" AND "Preset assembly" POSITIONS RESPECTIVELY. IN SOME CASES, THE POWER ON IS REQUIRED.

Code	Error	Description	Possible Cause	Corrective Action	section
F01 Main	Temperature sensor	The control reads out of range values.	Temperature sensor shorted or broken.	Replace the sensor	7.14
F02 Secondary			Bad connections	Check the connectors and the harness	--
			Bad power board	Replace the power board	7.17
F03 Main	Latch mechanism	The control can't perform any locking or unlocking cycle within the maximum allowed time.	Latch mechanism problem.		--
			Latch motor problem	Replace the motor	7.8
F04 Secondary					
			Door micro switch breaks during self-clean when the door is locked	Replace the door micro switch	7.10
			Bad connections	Check the motor connections and the micro switches connections	--
			Defective power board	Replace the power board	7.17
F05 Main	Over temperature detected while cooking (t>650°f)	Runaway temperature condition during cooking.	One or more relays are stuck, driving heating elements. Check the contact of relay	Replace the power board	7.17
F06 Secondary					
F07 Main	Over temperature detected in self-clean (t>950°f)	Runaway temperature condition during self-clean.	One or more relays are stuck, driving heating elements. Check the contact of relay	Replace the power board	7.17
F08 Secondary					
F09 Hawk3	Possible short circuit on display board micro pins	Hardware failure.	Humidity may have created condensation on the circuits.	Remove power and dry the board.	--
			Short circuit on display board.	Replace the display board.	7.19
	Possible short circuit on power	Hardware failure.	Humidity may have created	Remove power and dry the board.	--

F09 *Modular LED*	board micro pins		condensation on the circuits.		
			Short circuit on power board.	Replace the power board.	7.17
F10	Possible short circuit on display board circuits	Hardware failure.	Humidity may have created condensation on the circuits.	Remove power and dry the board.	--
			Short circuit on display board connectors.	Check connectors and eventually clean or replace the board to board cables.	--
			Short circuit on display board.	Replace the display board.	7.19
F11 *Hawk3*	Display board eeprom data	Memory empty	First power up or new board installed.	Configure the oven model. (resistor configuration + manual test)	2.5a 2.5b 2.6a 2.6b
		Memory cannot be accessed	Bad memory or circuit on board.	Replace power board	7.17
			Bad cable connection	Check and eventually replace cable.	--
			Defective circuit on display board.	Replace display board	7.19
F11 *Modular Led*	Power board eeprom data	Memory cannot be accessed	Bad memory or circuit on board.	Replace power board	7.17
F12	Electronic boards over temperature (t>95°c) in cooking modes.	Overheating of the internal parts.	Cooling fan broken	Replace the cooling fan	7.2
			Bad connections between cooling fan and electronics.	Check connections	--
			Air flow through the cooling channel is not sufficient.	Check proper installation. The slot between the control panel and the door must be free.	--
			Defective cooling fan relay on main power board	Replace the main power board.	7.17
			Faulty ntc sensor on main power board	Replace the main power board.	7.17
	Electronic boards over temperature in a double oven, (t>105°c) to stop only the lower one when the upper is running in self-clean.	Overheating of the internal parts.	The control has detected too much heat and prevents the user from using both cavities together.	Wait for the oven cools down	
	Meat probe error Note:The meat probe	The control can't perform any	Bad connections or short circuit	Check the harness near the probe	

F13	option is not available in standard series.	cooking through meat probe		connection	7.25
			Defective meat probe board	Replace the board	7.24
F14	Communication problem among the electronic boards	Problem on the i2c communication bus.	Bad connections	Check and eventually replace one of the board to board cables.	--
F15	Failure knobs (main cavity)	Encoder Selector Open circuit	knob position was left between OFF and SELF-CLEAN or between DEFAULT / PRESET and SELF-CLEAN	Rotate all the oven knobs in OFF position then remove power (either unplug or turn off breaker) and turn it back on again after a few seconds.	--
			Connection cable disconnected.	Check cable connection between the display board and knob encoder.	--
			Encoder Damaged	Replace the Encoder selector	7.18
F16	Failure knobs (secondary cavity)	Encoder Selector Open circuit	knob position was left between OFF and SELF-CLEAN or between DEFAULT / PRESET and SELF-CLEAN	Rotate all the oven knobs in OFF position then remove power (either unplug or turn off breaker) and turn it back on again after a few seconds.	--
			Connection cable disconnected.	Check cable connection between the display board and knob encoder.	--
			Encoder Damaged	Replace the Encoder selector	7.18
F17	ADC knobs sensor failure		Display board damaged	Replace the Display Board	7.19
F18	Knobs communication failure		Display board damaged	Check connection or replace the Display Board	7.19
F19	Knob micro controller failure		Display board damaged	Replace the Display Board	7.19
F20	RL4 Element issue	short condition or open circuit detection (Broil HE)	Power Board Relay damaged	Replace power board	7.17
			Heating Element	Replace The heating Element	7.6
			Safety thermostat damaged	Replace the safety thermostat	7.13
F21	RL2 Element	short condition or open circuit detection	Power Board Relay damaged	Replace power board	7.17
			Heating Element	Replace The heating	7.6

	issue	(Upper HE)		Element	
			Safety thermostat damaged	Replace the safety thermostat	7.13
F22	RL3 Element issue	short condition or open circuit detection (Ring HE)	Power Board Relay damaged	Replace power board	7.17
			Heating Element	Replace The heating Element	7.5
			Safety thermostat damaged	Replace the safety thermostat	7.13
F23	RL5 Element issue	short condition or open circuit detection (Lower HE)	Power Board Relay damaged	Replace power board	7.17
			Heating Element	Replace The heating Element	7.7
			Safety thermostat damaged	Replace the safety thermostat	7.13
F25	RL1 Element issue	short condition or open circuit detection (DBL braker)	Power Board Relay damaged	Replace power board	7.17
			Heating Element	Replace The heating Element	7.5 7.6 7.7
			Safety thermostat damaged	Replace the safety thermostat	7.13

WHEN A FAILURE OCCURS, THE DISPLAY SHOWS THE WRITING *FXX Err,* WHEREAS xx IS ONE OF THE ERROR CODES LISTED IN THE TABLE.
TO RESET THE FAILURE, FIRST THE CAUSE MUST BE REMOVED. THE COOKING MODE AND THE TEMPERATURE SELECTORS MUST BE TURNED INTO “OFF” AND “PRESET” POSITIONS RESPECTIVELY.
IN SOME CASES, THE POWER ON IS REQUIRED.

Anomaly	Possible Cause	Corrective Action	section
Oven does not run No power supply	Main breaker or main fuses	Replace the fuses	
	Short circuit	Find the short circuit and remove it	
Oven does not run Power supply ok.	Connections to Display or the Power board	Replace power board	7.17

Anomaly	Possible Cause	Corrective Action	section
Fan does not run No power supply	Power board relay not switching	Replace Power board	7.17
Fan does not run Power supply ok.	Blocked rotor	Replace fan	7.2
	Burned coil	Replace fan	7.2
Noisy fan	Lose attachment screws on cooling assembly	Check attachment screws on cooling assembly or replace fan	7.2
The cooling fan is always on	The control is measuring a high temperature inside the cavity	Turn the cooking mode selector in a cooking mode position,F01 (F02) should occur.	--
		Check all the connections between the sensor and the power board	--
		Check the temperature sensor	--
		Check the power board	--

Anomaly	Possible Cause	Corrective Action	section
Fan does not run No power supply	Power board relay not switching	Replace Power board	7.17
Fan does Not run Power supply ok.	Blocked rotor	Replace fan	7.4
	Burned coil	Replace fan	7.4
Noisy fan	Lose attachment screws on cooling assembly	Check attachment screws Check nut on working fan for tightness or replace it	--

Anomaly	Possible Cause	Corrective Action	section
Door lock control does not run No power supply.	Power board relay not switching.	Replace Power board.	7.17
	Door micro switch or door latch micro switch not switching.	Replace micro switch.	7.10
Door lock control does not run Power supply ok.	Locked rotor.	Replace motor.	7.8
	Burned coil.	Replace motor.	7.8
Noisy.	Defective mounting of door lever mechanics.	Check lever mechanism of door lock. Lubricate all working parts with silicon grease	--
The control doesn't unlock the door after self cleaning and the lock symbol on the display is steadily on.	The Oven temperature is still beyond the safety unlock value.	Wait for the temperature to drop below the threshold.	--
		Turn the cooking mode selector in a cooking mode position,F01 (F02) should occur.	--
		Check all the connections between the sensor and the power board.	--
		Check the temperature sensor. If is damaged, replace it.	7.14
		Check the power board. If is damaged, replace it.	7.17
	The Oven had been locked by means of the child lock procedure.	Use the same procedure to unlock the door.	--
The control doesn't unlock the door after self cleaning and the lock symbol on the display is always flashing.	The door micro switch is broken and the control thinks that the door is open.	Check and replace the new micro switch	7.10
	Door lever mechanism locked	Check lever mechanism of door latch. Lubricate all working parts with silicon grease	--

Anomaly	Possible Cause	Corrective Action	section
The Oven lights are always OFF. No power supply.	Check door micro switch.	Replace door micro switch.	7.10
	Power board relay not switching.	Replace Power board.	7.17
The Oven lights are always OFF. Power supply is ok.	Lamps are burned out.	Replace lamps.	--
The Oven lights are always ON.	Check the door micro switch.	Replace door micro switch or connection between the door switch and the power board.	7.10
	Power board relay has a shorted circuit.	Replace Power board.	7.17

Anomaly	Possible Cause	Corrective Action	section
Every cooking mode accepts only the preset temperature and clean will not start.	The control cannot read the temperature selector.	Check the connections between the selectors and the display board.	--
		Check and eventually replace the selector itself.	7.18
		Check and eventually replace the power board.	7.17
The control doesn't accept any cooking mode or clean selection.	The control cannot read the cooking mode selector.	Check the connections between the selectors and the display board.	--
		Check and eventually replace the selector itself.	7.18
		Check and eventually replace the power board.	7.17

Anomaly	Possible Cause	Corrective Action	section
The display is always dark, the latch at power up works correctly.	The power supply to the display board is missing.	Verify if the voltage (-5GND) is correct on the display board.	--
		Check the connections between the power and the display board.	--
		Verify if the voltage (-5GND) is correct on the main power board.	--
The display is always dark, the latch at power up doesn't work	The power supply is not working.	Verify if the voltage (-5GND) is correct on the main power board.	--
		Check and eventually replace the main power board.	7.17
During the manual test it's not possible to check the software version of one board: The displays shows "d" or "p" without any number.	The board has never been programmed.	If the display shows 2p" check the connections between the boards, then try to replace the bad power connection.	--
	The display cannot read the power board software due to a connection problem.	if the display shows "d" replace the display board.	7.19

Anomaly	Possible Cause	Corrective Action	section
The door does not close or there is not sealing between door and gasket	Hinges system is broken or damaged	Replace the units	7.15
	The hinges support in the box is broken or damaged	Replace the units	7.16

Anomaly	Possible Cause	Corrective Action	section
Bad performance	Heating elements not working	Check the connection of the heating elements	--
		If there in not power on the heating elements check relays on the power boards. If the power board relay not switching replace the units.	7.17
		Check the power on the heating elements and replace the elements if needed	7.5 7.6 7.7
	Convection fan not working properly	See the convection fan problem	4.4
	There is not sealing between door and gasket	The hinges system or the hinges support in the box are damaged. Replace the units	7.15 7.16

Anomaly	Possible Cause	Corrective Action	section
Meat seems to be not present or doesn't work	Bad connections or short circuit	Check the harness near the probe connection	7.25
	Meat probe internal wires are broken	Replace the meat probe	--

Display of errors and error handling.

The over voltage error is indicated by showing “U” on the rear left display and “4” on rear right display.
For TC-Errors the display rear left shows “E” and rear right shows “R” and the according Error number will be shown with either “0” or the required number on the front left and “0” or the required number on the front right display.
If one of the rear or front displays is not available the missing symbol will be shown alternating with the original on the remaining display. If a error is only related to one cooking zone the error message will be shown on the according display. In this case the according display also shows the error number alternating with the error letter.

Error message	Description	Possible failure reason	Troubleshooting
	Knob error	Knob permanent use of knob (> 30 s)	Release the knob
Er20	Flash error	µC- defective	Change display unit
Er31	Wrong configuration data	Induction needs to be configured with the correct configuration	execute new configuration using the service menu
Er47	LIN-communication error between display unit and induction	No or interrupted LIN communication	First check the supply connection below the induction module, the TERM.BLOCK JUMPERS must be in place. Check connecting cable between display unit and induction.
U 400	Continuous tone Power supply on inlet to high	Incorrect connection of the cooktop	Correct power supply connection
E / 2	Excess temperature of the induction element	Overload of cooktop or empty boiled cookware	Let system cool down.
E / A	Error on the power board	Component failure	Replace power board
E / 6	Error on power board or supply element	No power supply of the power element or error on power board	1. check wiring 2. check filter board 3. replace power board
E / 8	Incorrect fan speed	Error on fan left or right	Air exhaust blocked, e.g. by paper Replace Defective fan
E / 9	Defective temperature sensor on inductor		Replace inductor Replace power board

CAUSE	POSSIBLE REMEDY	section
• Cooktop is in lockout mode.	• Unlock the cooktop.	--
• Electronics failure	• Replace the generator with a new one	7.26

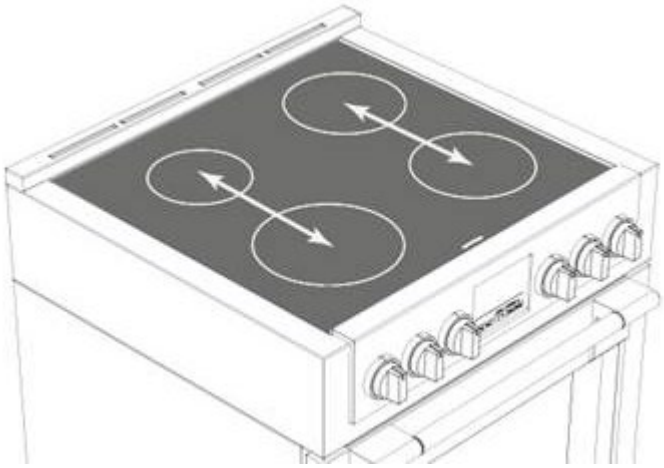
CAUSE	POSSIBLE REMEDY	section
• Improper cookware is being used.	• Select proper cookware as outlined in the Cooktop Use & Care manual.	--
• Overheating status of cooking zone.	• If the hob is used on full power for a long period, the electronics could have trouble cooling down if the room temperature is high. To avoid excessively high temperatures forming in the electronics, the power to the cooking zone is managed automatically to protect itself.	--

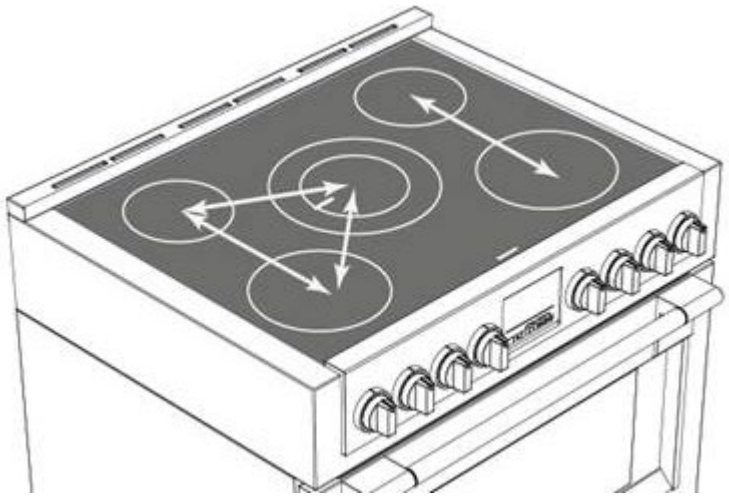
NOTE
Power Sharing

Four zones cooktops
are divided into two separate heating zones

Five burner cooktops
are divided into three separate heating zones

One generator controls 2 elements, or two/three cooking zones within a heating section share the power of one generator.
Power Sharing is activated when both elements in the same cooking zone are activated and one element is set for Boost (P). The element that is not set for Boost will change to a lower power level. This is called Power Sharing.





CAUSE	POSSIBLE REMEDY	section
When using adjacent elements that are set at certain power level settings, magnetic fields may interact and produce a low whistle or intermitted "hum". Pans that completely cover the element ring will produce less noise. A low “humming” noise is normal particularly on high settings. These noises can be reduced or eliminated by lowering or raising the power level settings of one or both of the elements.		--

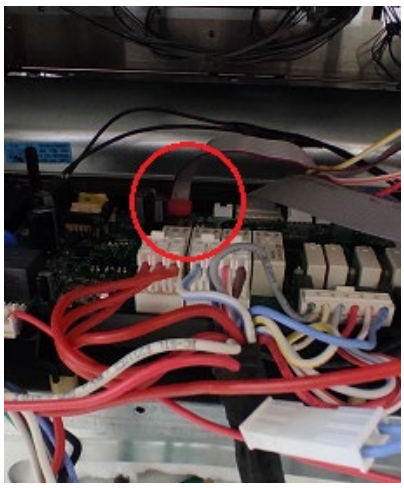
7.1
Removal of Induction top assembly

1. Disconnect the power supply cord than remove the Range from its location.
2. Remove the door following the User Manual instruction and also the lower profile.
3. Disconnect the power supply cord and remove the Back covers (Section 7.3).
4. Remove the side cover (see Section 7.23).

Remove the induction boards connector from power board.

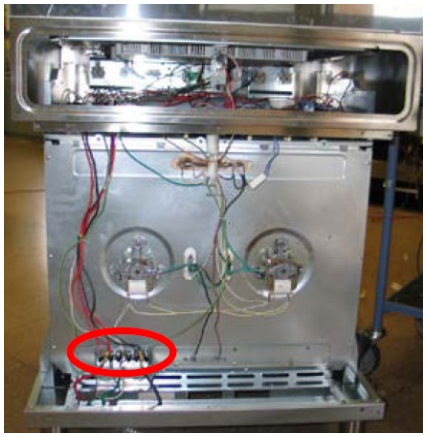
Hawk3

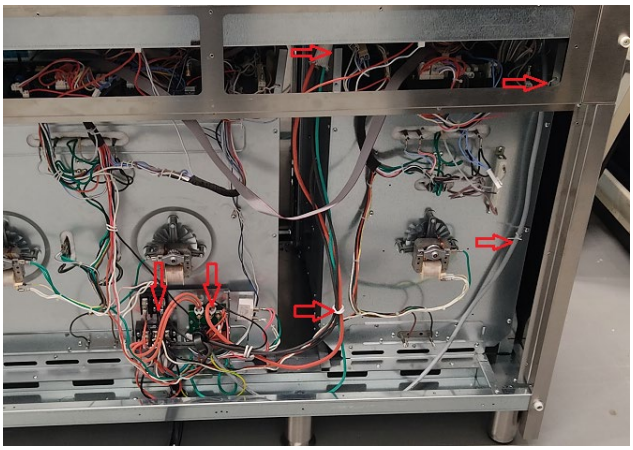
Modular Led

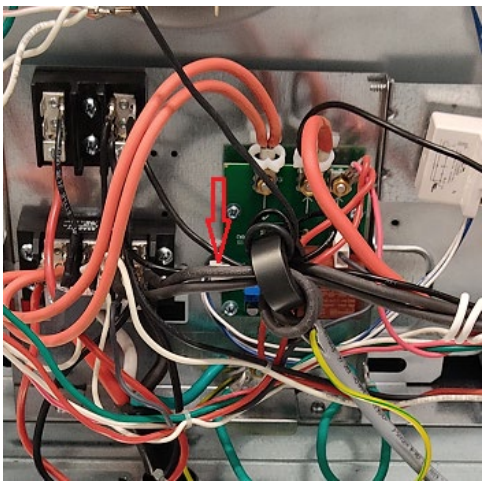


Remove the induction power supply connection from terminal block.

Disconnect the bus cable (white and blue) from the limitation board (on models with Power Management)





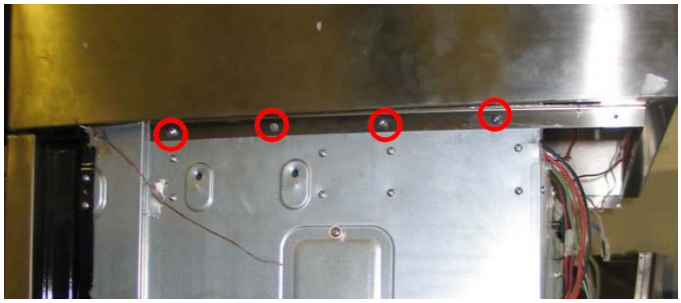


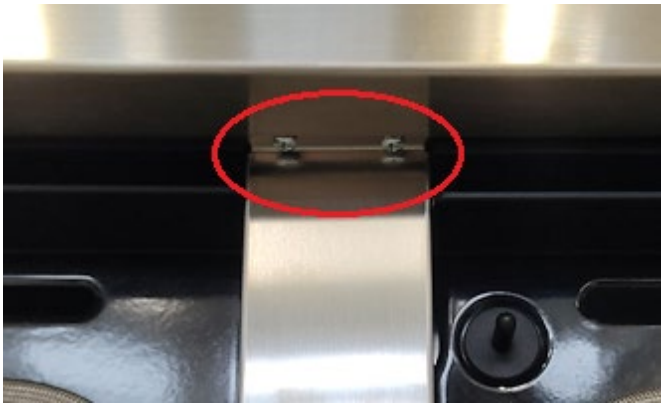
(Att.: during this step two people must hold the top section of range.)

Remove 4 screws from both sides.

Remove the three screws from middle profile (only on 48”)

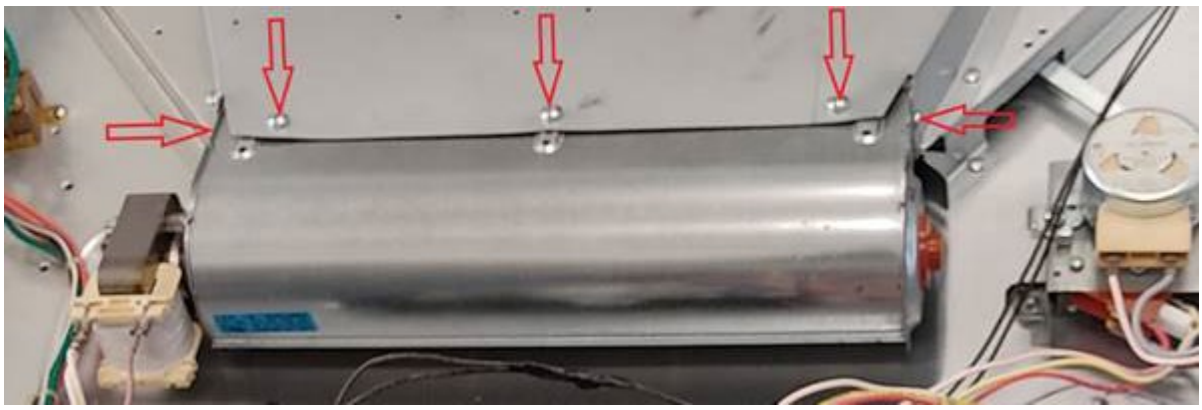
Lift Up the metal box





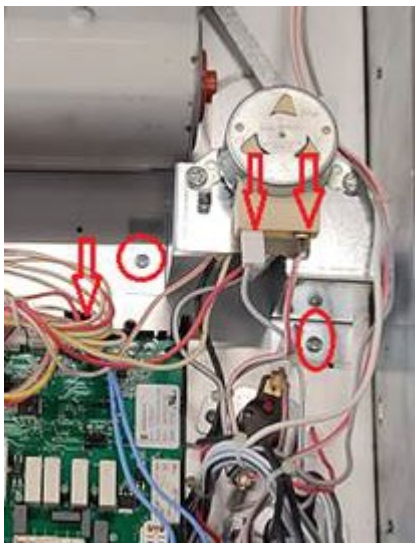
1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Remove the five screws **A** (two lateral & three on the top).
3. Disconnect the terminals on the fan and remove the fan damaged.
4. Replace the cooling fan motor.
5. Connect the terminals and fix the motor by its screws.
6. The connections must not be loose.
7. Reinstall the Back Upper panel.
8. Reconnect the power supply cord, run the Range and check all functions.

CAVITY 30” & 36”

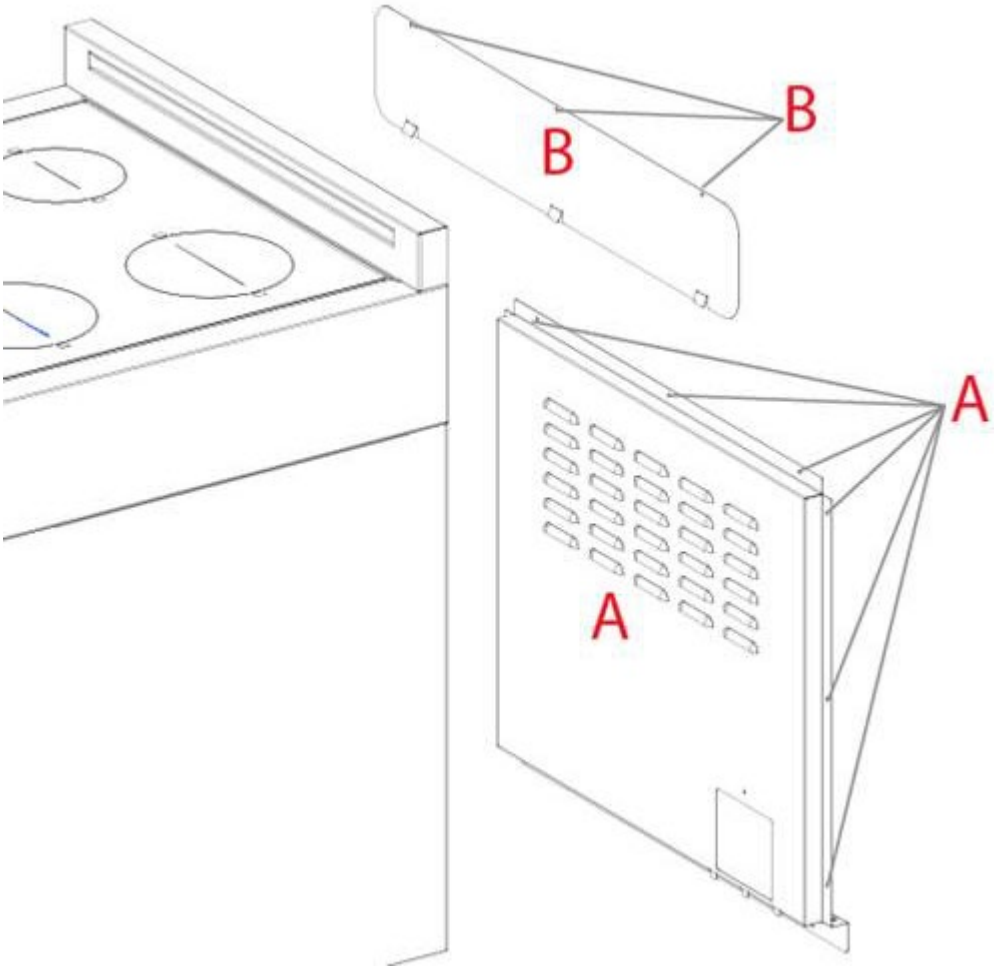


CAVITY 18”

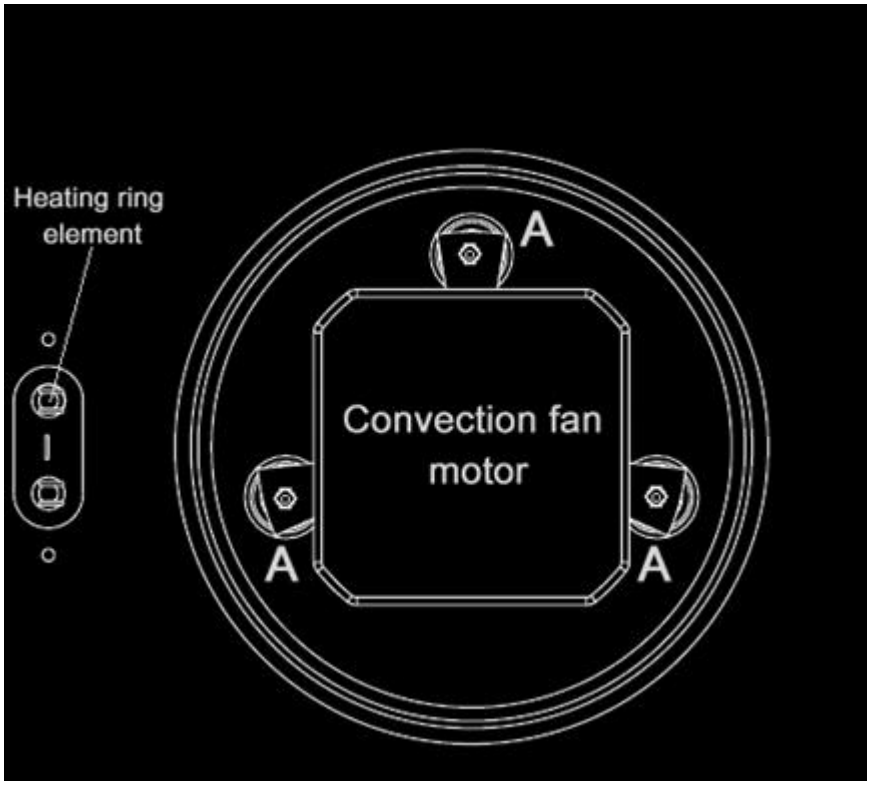
NOTE: To facilitate the replacement of the tangential motor, disconnect the electrical connections highlighted with the arrow, and the 2 screws to remove the door locking motor.



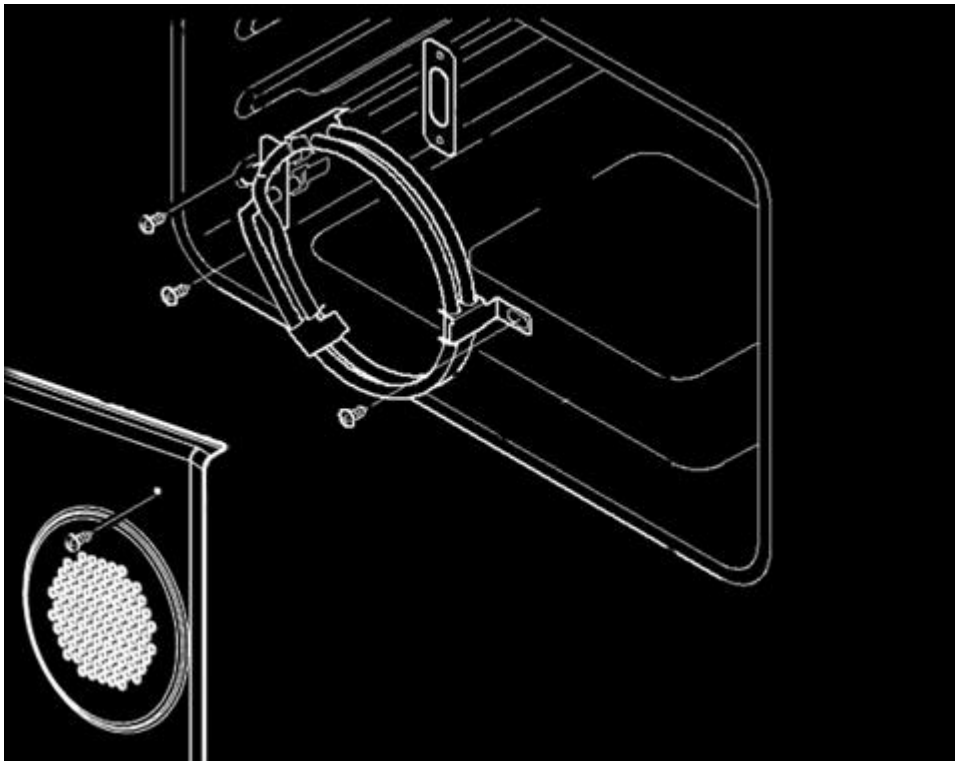
1. Disconnect the power supply cord connection than remove the Range from its location.
2. To Remove the rear lower cover A disassemble its twelve back screws **A**.
3. To Remove the rear upper cover B disassemble its three back screws **B**.



1. Disconnect the power supply cord and remove the Back Lower cover (Section 7.3).
2. Disassemble the baffle by removing the fixing screws from inside the cavity.
3. Remove the fan blade by using a 10mm socket.
4. Disconnect the terminals on the fan in the rear side.
5. Remove the three nuts **A** on the motor holder by using a 7mm socket and remove it.
6. Mount the new fan motor on the holder and attach it with the nuts.
7. Fix the fan blade.
8. Replace the baffle.
9. Connect the terminals (the connections must not be loose).
10. Reconnect the power supply cord and check all functions.

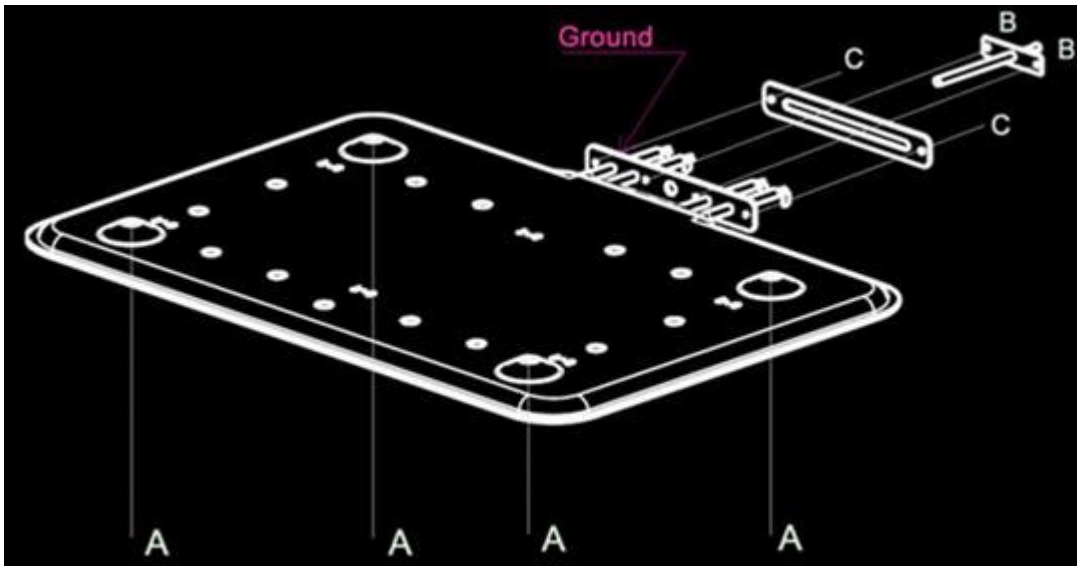


1. Disconnect the power supply cord and then remove the Range from its location.
2. Remove the rear lower cover (Section 7.3).
3. Disassemble the baffle by removing the fixing screws from inside the cavity.
4. Disconnect the terminals of heating element and remove the ring element by removing the three screws.
5. Mount the new ring element with the new fiber gasket between the base of the element and the back side of the Oven.
6. Replace the baffle.
7. Connect the terminals (the connections must not be loose).
8. Reconnect the power supply cord and check all functions.

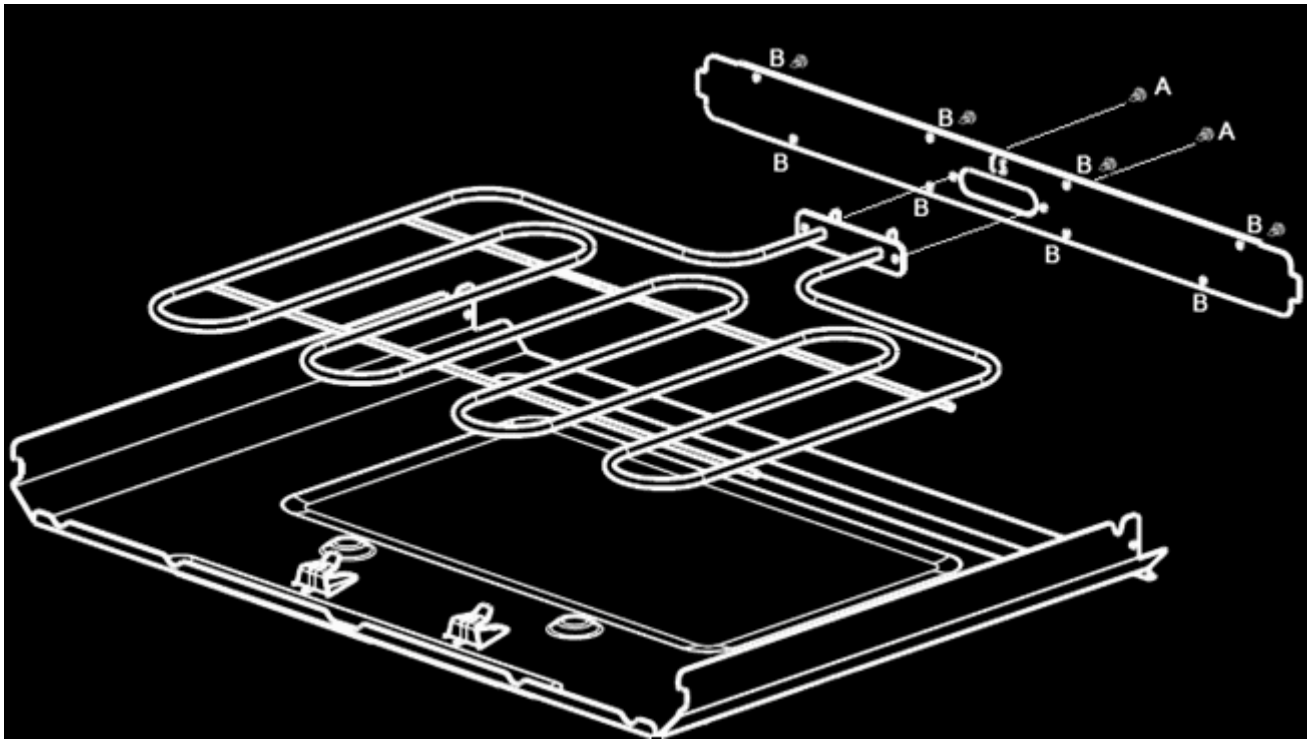


1. Disconnect the power supply cord than remove the Range from its location.
2. Remove the rear lower cover (Section 7.3).
3. Disconnect the terminals of heating element.
4. Remove the probe unscrewing its two screws **B**.
5. Remove the two screws **C** near the external terminals, **one of which is used for ground**.
6. Remove the upper element by removing four screws **A** on the brackets on top in the cavity.
7. Mount the new upper element with a new fiber gasket between the base of the element and the back side of the Oven.
8. Connect the terminals. Pay attention to the sequence of wiring on the element (the connections must not be loose).

Reconnect the power supply cord and check all functions.



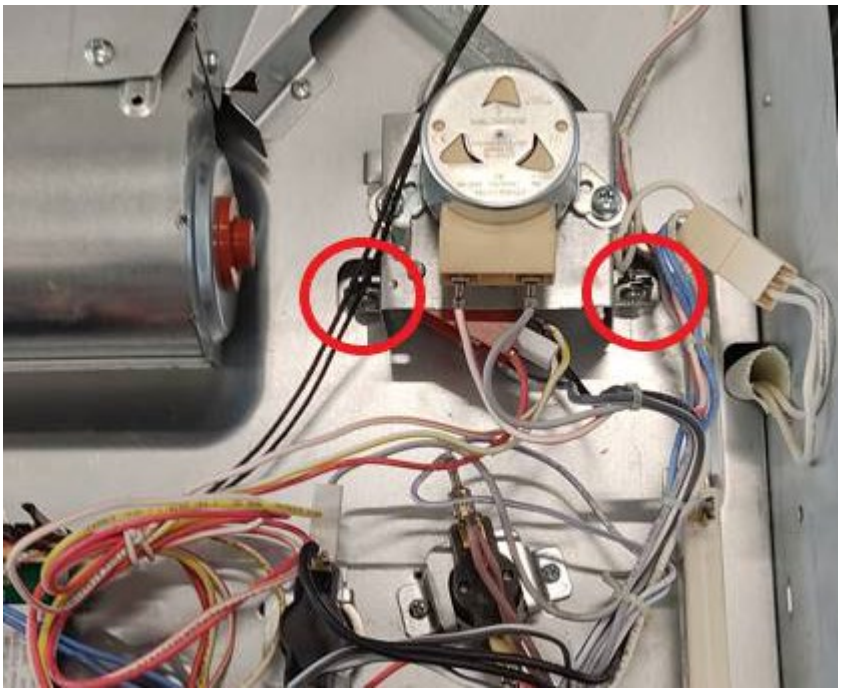
1. Disconnect the power supply cord than remove the Range from its location.
2. Remove the lower rear cover (Section 7.3).
3. Disconnect the terminals of heating element.
4. Remove the screws **B** on the brackets and the other two screws **A** near the external terminals.
5. Remove the brackets.
6. Pull out the lower element.
7. Replace the new element by reversing the previous steps.
8. Pay attention to the positioning of the element.
9. Connect the terminals (the connections must not be loose).
10. Reconnect the power supply cord and check all functions.



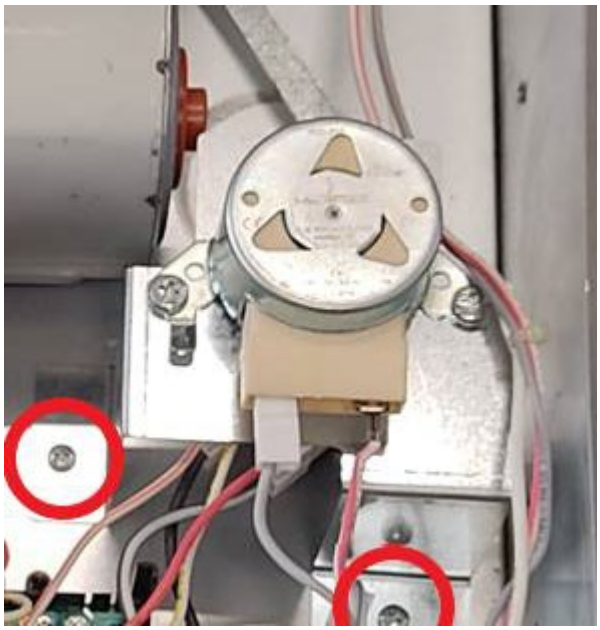
7.8
Lock door motor substitution

1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Disconnect the cables. Pay attention to the sequence of wiring of the motor (micro switch).
3. Remove the screws and lift back the motor to remove it.
4. Disassemble the motor by removing the three screws under its support and remove it.
5. Replace the new motor assembly by reversing the previous steps.
6. Pay attention to the positioning when inserting the door lever mechanism into the eccentric of the motor.
7. Connect the terminals (the connections must not be loose).
8. Reconnect the power supply cord and check all functions.

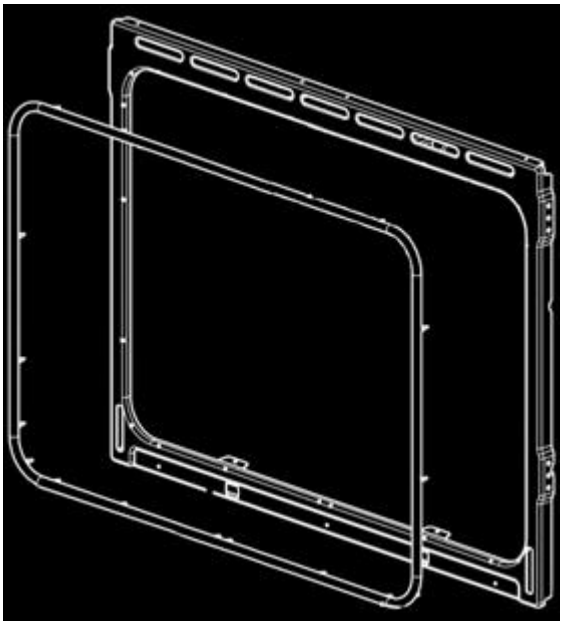
30” & 36”



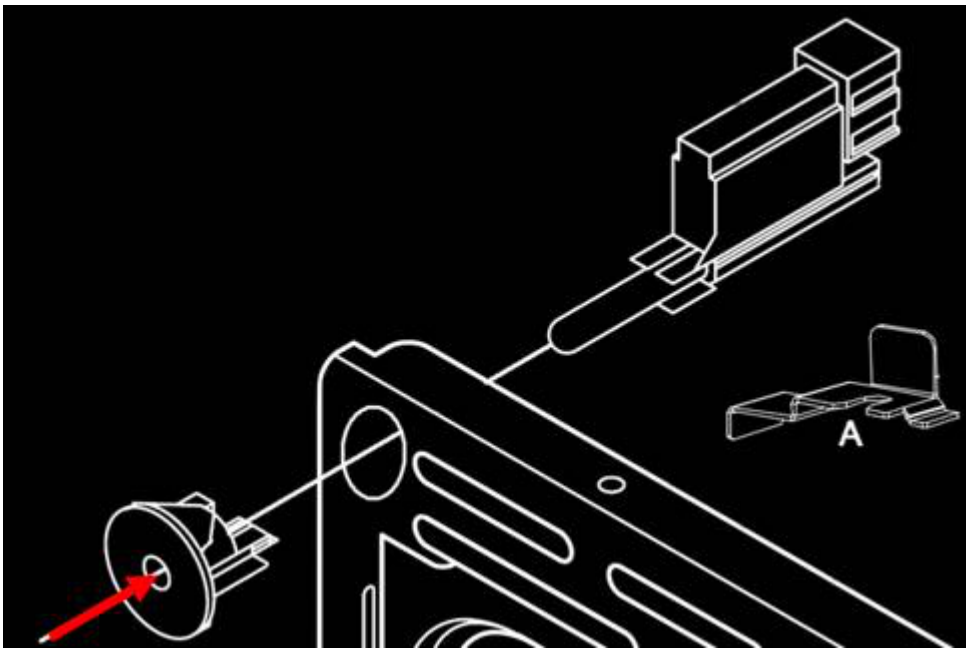
18”



1. Open door and pull out the gasket by hands.
2. Replace with a new one by reversing the previous steps.



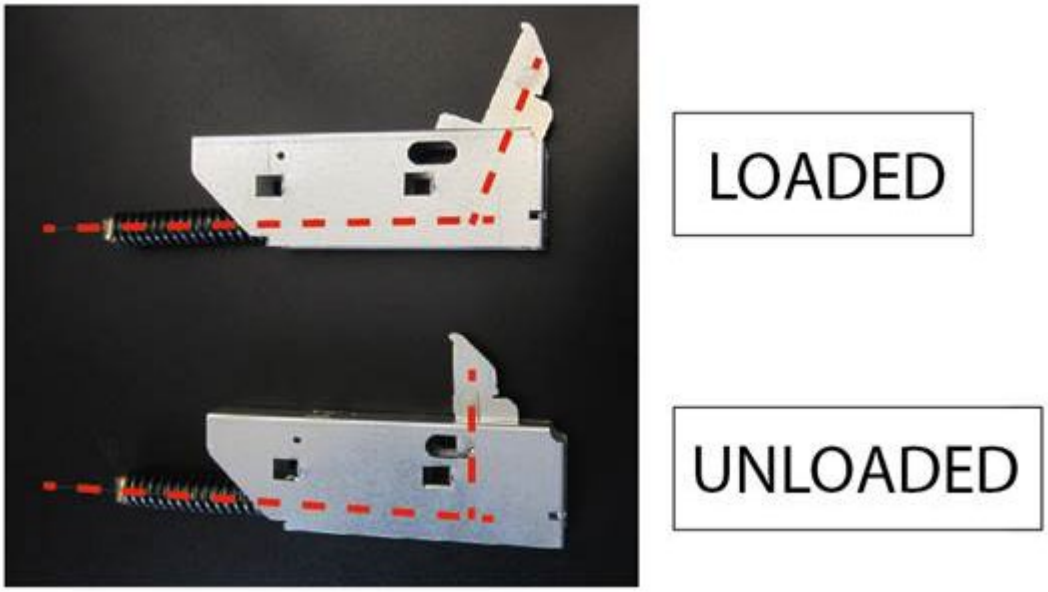
1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. To have accessibility to the door switch remove the Door lock motor (Section 7.8).
3. Disconnect the terminals from the switch.
4. Unscrew the bracket A.
5. Pull out the switch from the holder.
6. Replace with a new switch by reversing the previous steps.
7. **PAY ATTENTION TO THE WIRING SEQUENCE N°1 – N°4**
8. The connections must not be loose.
9. Reconnect the power supply cord and check all functions.



NOTE: To facilitate disassembly, push the microswitch inwards by a screw driver

1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Disconnect the terminals from filter.
3. Remove the filter damaged by unscrew two screws **A** and dismount it from its bracket.
4. Replace with a new one
5. Pay attention to the wiring sequence (the connections must not be loose).
6. Reconnect the power supply cord and check all functions.

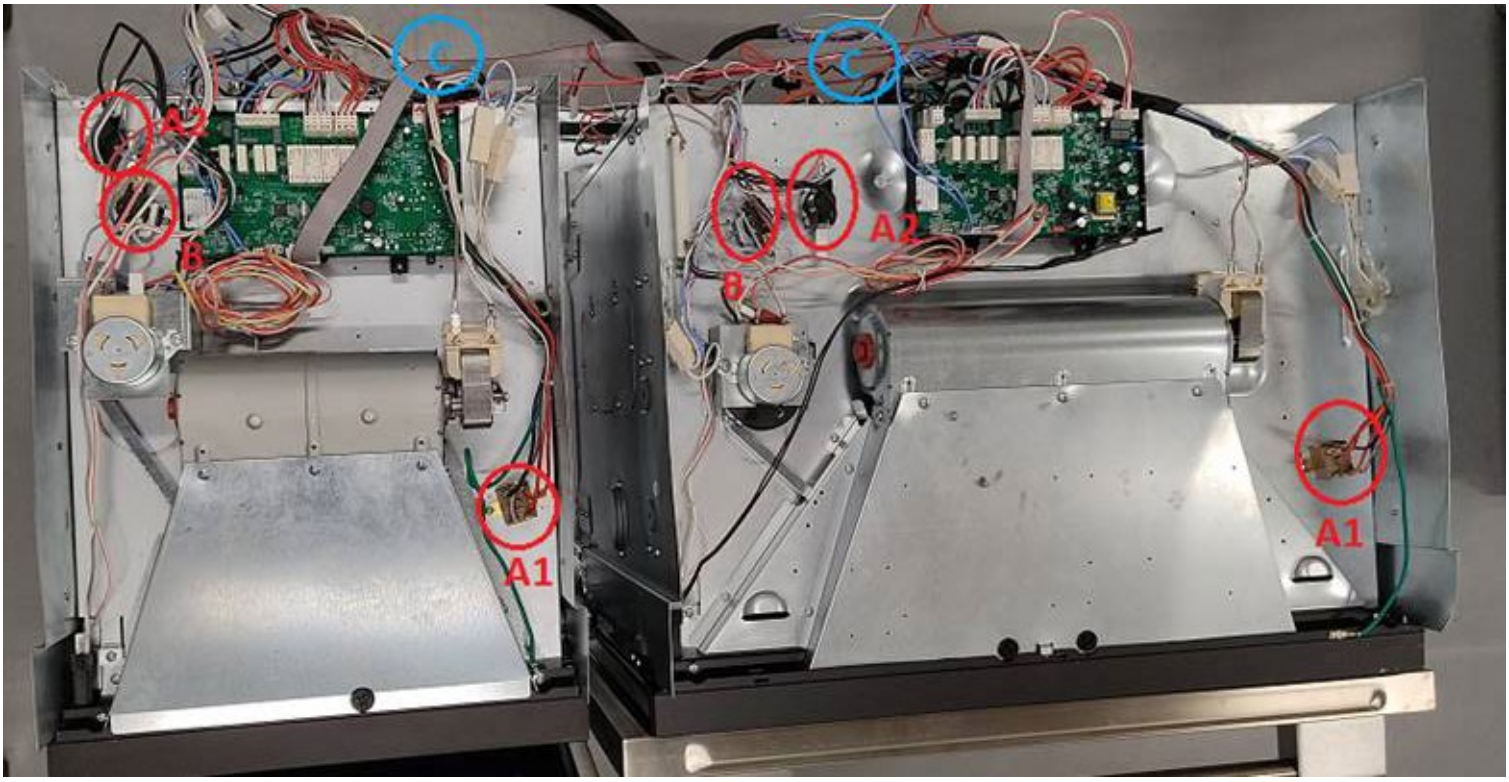
1. Before mounting the hinges ensure that the code is correct and then proceed with the loading of the hinge spring. There are two possible positions – LOADED and UNLOADED – as indicated above. The hinge must be assembled LOADED.



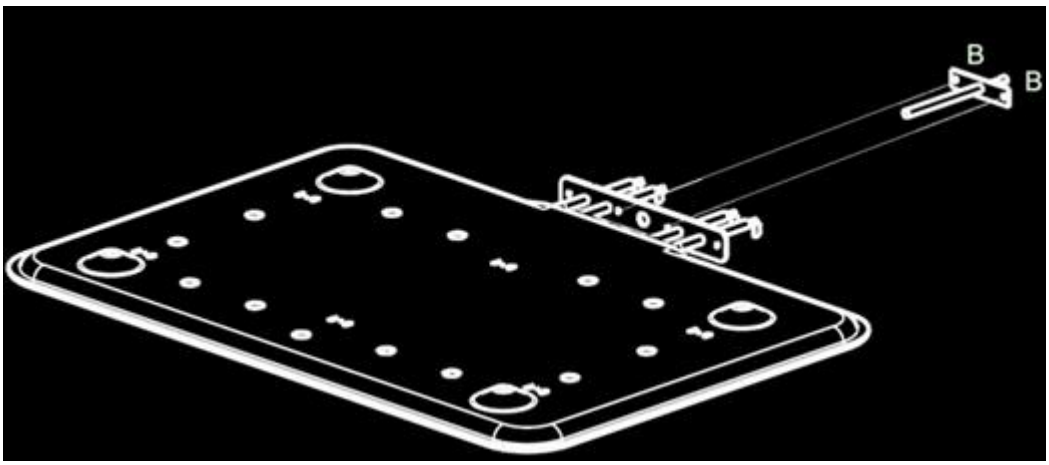
1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Unscrew the thermostat's holder:

   A. Safety thermostats (A_1 Piro – A_2 Cooking).
   B. Double speed cooling fan thermostat.
   C. Cooling fan thermostats ON induction Module.

3. Replace with a new thermostat by reversing the previous steps.
4. The connections must not be loose.
5. Reconnect the power supply cord after and check all functions.

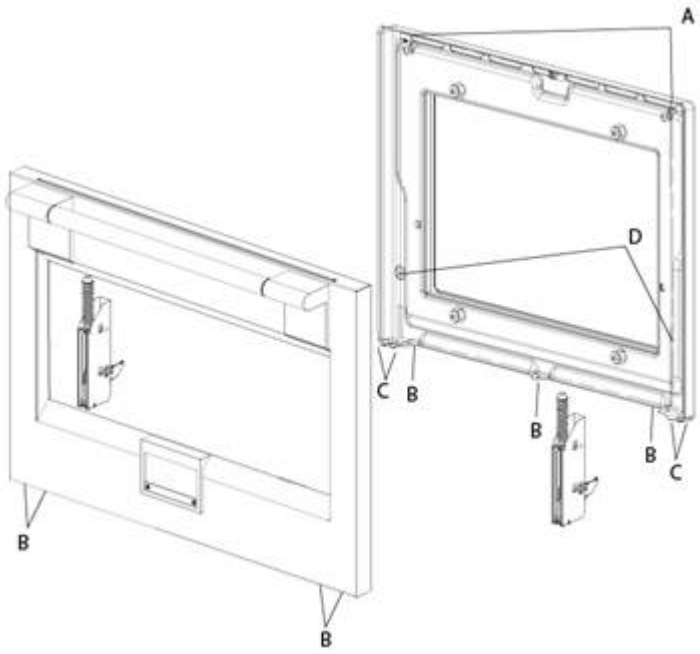


1. Disconnect the power supply cord and then remove the Range from its location.
2. Remove the lower rear cover (Section 7.3).
3. To replace the probe, disconnect it and remove the attachment screws **B**.
4. Reinstall the Oven into the cabinet.
5. Reconnect the power supply and check all functions.



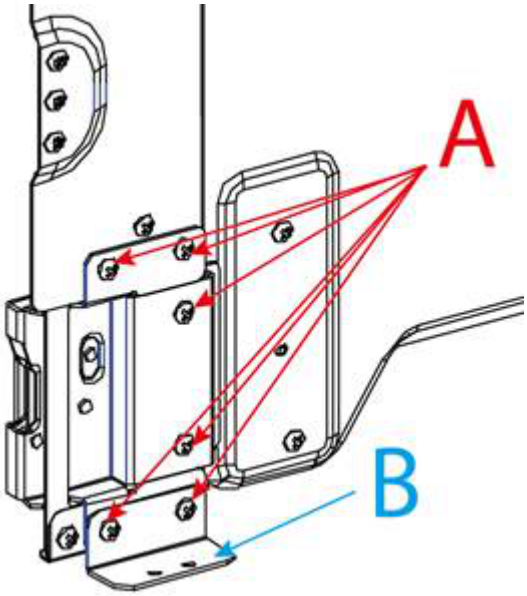
1. Remove the door following the (see user manual).
2. Put the door on a flat surface with a soft cloth to prevent scratching of the aesthetics.
3. Remove the door external glass by the screws **A** and **B**.
4. Remove the hinges unscrewing the screws **C** and **D**.
5. To replace the hinges, reverse the previous steps.
6. To replace the aesthetic glass be sure that the door is in the right position keeping the glass centered.
7. Replace the Oven door following the instructions (see user manual).

The new hinges must be preload before assemble (see section 7.12)



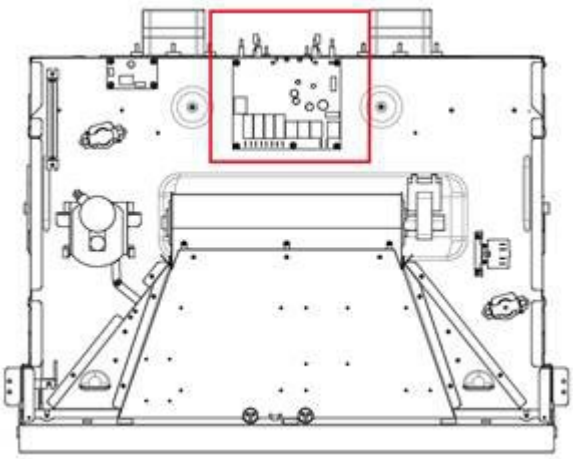
7.16
Door hinges box substitution

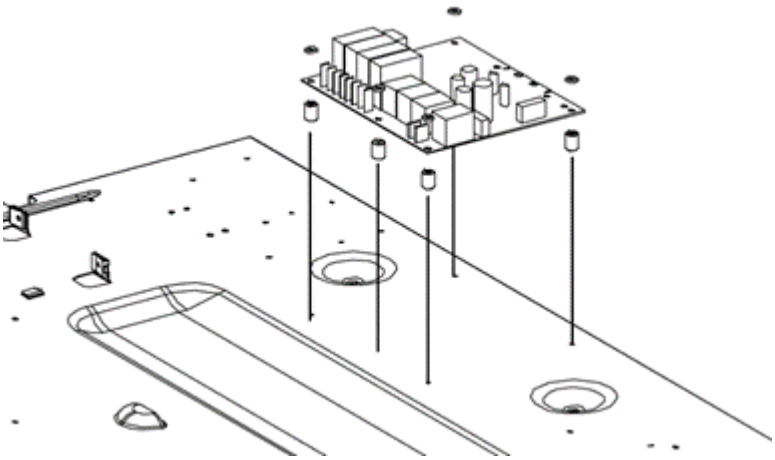
1. Disconnect the power supply cord and gas connection than remove the Range from its location.
2. Remove the door following the User Manual instruction and also the base board.
3. Remove the side cover (see Section 7.23)
4. Unscrew the screws **A** and remove also the bracket **B** to change support.
5. Disassembling the hinges box from lateral panel.
6. To replace the new hinge box, reverse the previous steps.
7. Replace the Oven door.
8. Reinstall the Oven into the cabinet.
9. Reconnect the power supply cord and check all functions.



1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Remove the screws connecting the power board before disconnecting the cables.
3. Replace the new power board using the spacers.
4. Connect the cable following the electric diagram.
5. **PAY ATTENTION TO CONNECT THE CABLES IN THE RIGHT POSITION.**
6. The connections must not be loose.
7. Reconnect the power supply cord and check all functions.
8. **Check the Oven by MANUAL TEST following the procedure shown on section 2.5a and 2.6a or 2.5b and 2.6b.**

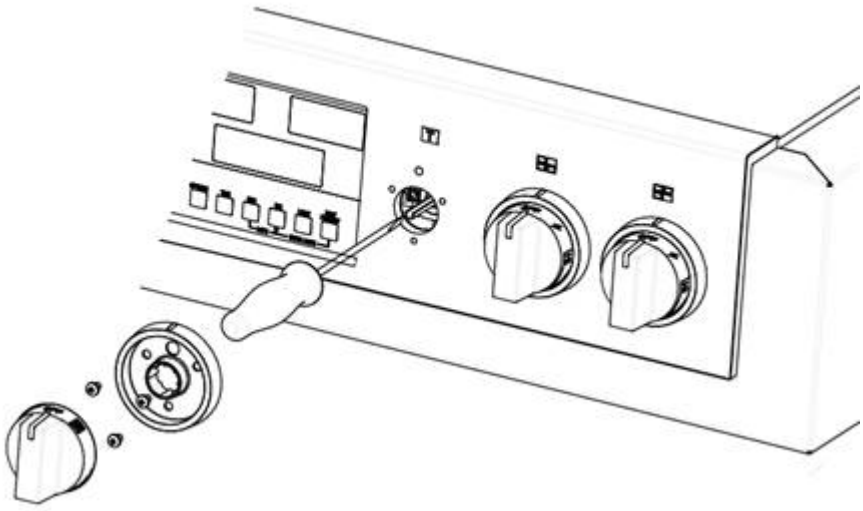
Note:
The power board could be different, the below figure shows Hawk3 model as example.





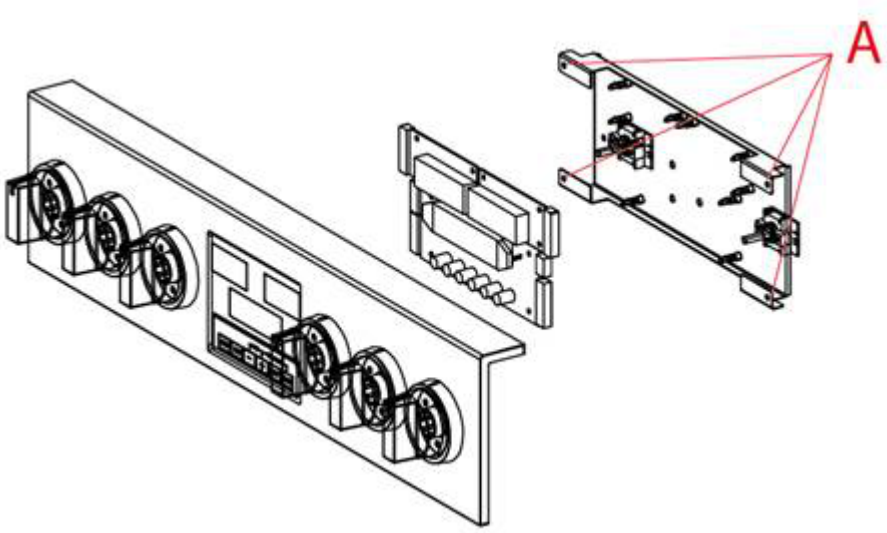
1. Disconnect the power supply cord.
2. Remove the back top panel (Section 7.3).
3. Remove the knobs.
4. Disconnect the bad selector and remove it by the screws.
5. Replace the new selector by reversing the previous steps.
6. Reconnect the power supply cord and check all functions.

NOTE: check that the knobs are well centered with the ring.
The interference of the knob with the ring could cause malfunctions.

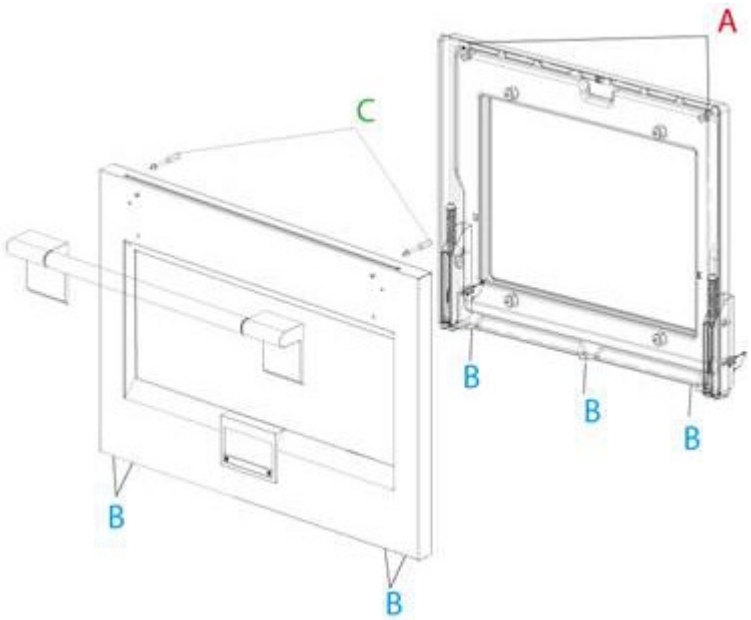


7.19
Display Board substitution

1. Disconnect the power supply cord than remove the Range from its location.
2. Remove the top induction cooktop assembly (Section 7.1)..
3. Remove the displays support by its 4 screws **A**.
4. Disconnect the bad display board and remove it by the nylon spacers.
5. Replace the new display board by reversing the previous steps.
6. Reinstall the RANGE.
7. Reconnect the power supply cord.
8. **Check the Oven by MANUAL TEST following the procedure shown on section 2.5 and 2.6.**

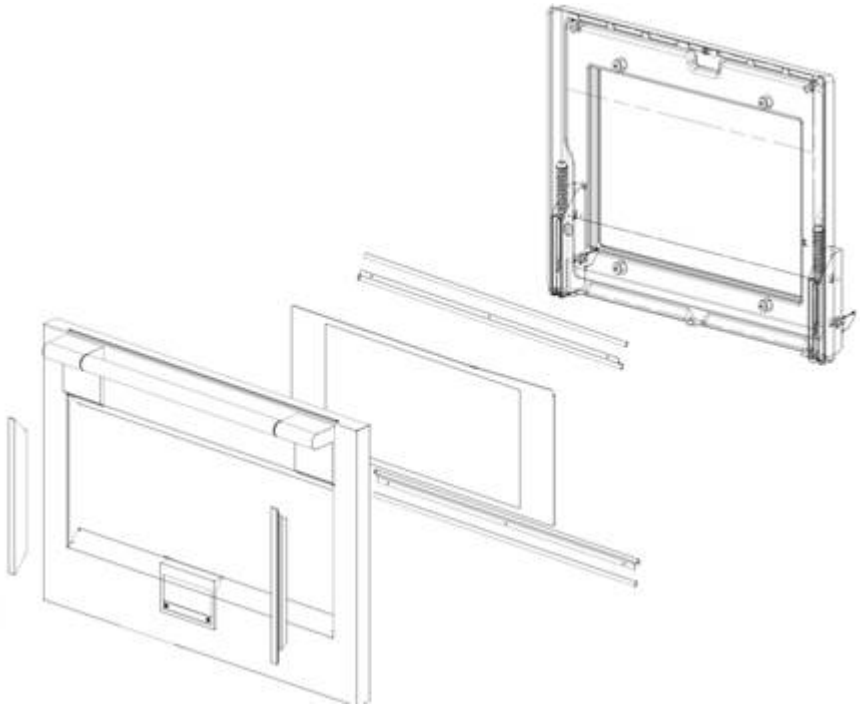


1. Remove the door from the oven (see User manual).
2. Put the door on a flat surface with a soft cloth to prevent scratching of the aesthetics.
3. Remove the external glass from the door unscrewing two screws on the corner **A** and three screws on the bottom **B**.
4. Remove also the handle by its two screws **C**.
5. Replace the handle on the new aesthetic glass with its support and spacers..
6. Assemble the glass and door keeping door in the middle of the glass and making attention at correct position of rubber bumpers.
7. Replace the Oven door following the (see User manual).



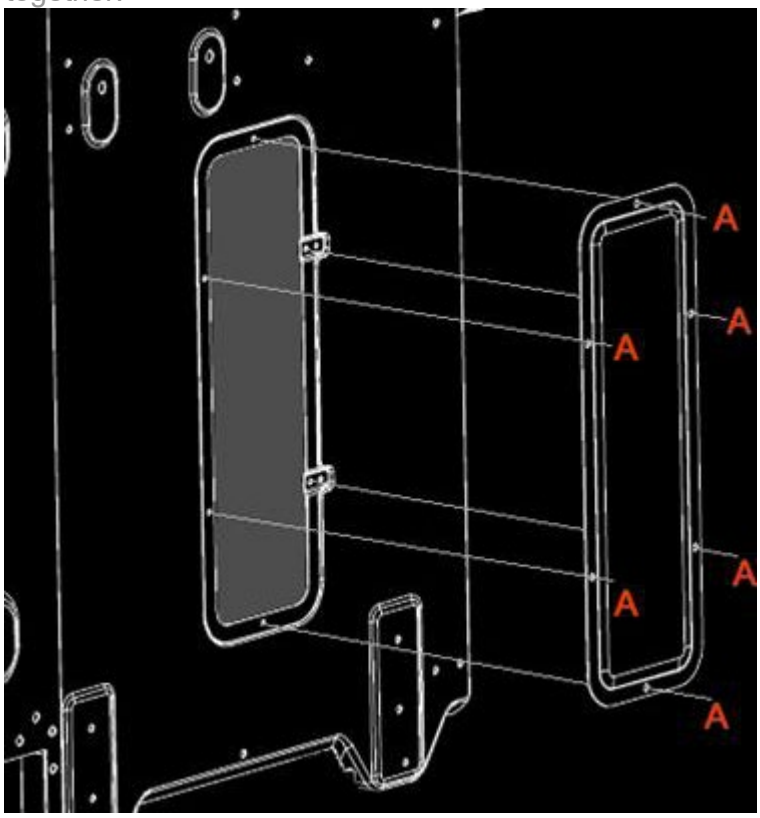
1. Remove the door from the oven (see user manual).
2. Put the door on a flat surface with a soft cloth to prevent scratching of the aesthetics.
3. Remove the external aesthetic from the door (see Section 7.20) .
4. Refer to Exploded View to see the spare parts available.
5. All components are fixed by few screws.
6. **When it is changed an internal glass you must be sure that the face whit CA (CAVITY) printed it is towards the cavity.**

Replace the Oven door following the (see User manual).



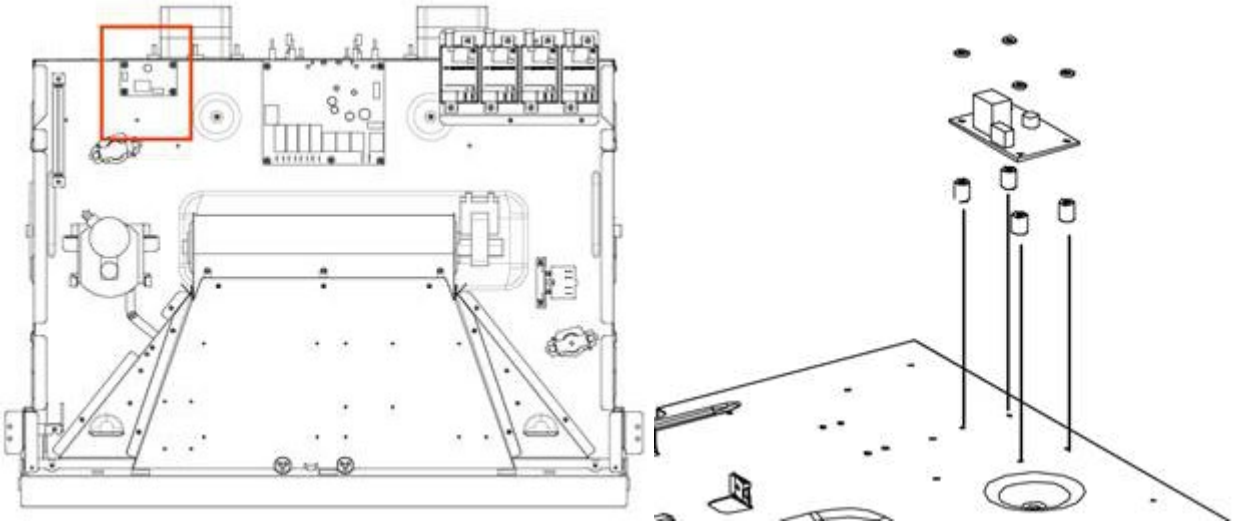
1. Disconnect the power supply cord connection than remove the Range from its location.
2. Remove the door following the User Manual instruction and also the base board.
1. Remove the top panel (Section 7.3).
2. Remove the side cover (see Section 7.23) and middle profile on 48” (see Section 7.1).
3. Remove the lampholder cover panels situated on the side of the oven and unscrew the relative ground wire **A**
4. Remove the lampholder removing its screw and extract the defective lampholder from the oven cavity. Cut the defective lampholder wires just above the lampholder body. Mount the new lampholder in the oven cavity and fix with the relative fixing screw .
5. Twist together the new lampholder wires to the old defective lamp holder wires then 'run' them through the relative protective sleeve. Once the new lampholder wires come through the other end of the protective sleeve untwist the wires and dispose of the old wiring as follows.
6. Using a sharp tipped screwdriver carefully unlock the old wiring 'faston' type connector spade terminal. Once the old wires are released you can through them away. Retain the old lampholder connector for the new lampholder as this will be recovered for further use (see next point).

Take the new lampholder and insert the wires into the recovered connector. This is done by pushing each 'faston' wiring spade terminal into the connector until it 'clicks' in place. Ensure that both new lampholder wires are firmly in place before reassembling the lamp connector. Ensure that the male and female parts of the connector are firmly locked together.



1. Disconnect the power supply cord and gas connection than remove the Range from its location.
2. Remove the door following the User Manual instruction and also the base board.
3. Remove the rear lower cover (Section 7.3)
4. Remove the screws showed, three in the back and one in the front.
5. Slide laterally the side cover.

1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Remove the screws connecting the meat probe board before disconnecting the cables.
3. Replace the new power board using the spacers.
4. Connect the cable following the electric diagram.
5. **PAY ATTENTION TO CONNECT THE CABLES IN THE RIGHT POSITION.**
6. The connections must not be loose.
7. Reconnect the power supply cord and check all functions.



1. Disconnect the power supply cord and gas connection then remove the Range from its location.
2. Remove the door following the User Manual instruction and also the base board.
3. Remove the side cover for 30” and 36” (see Section 7.23) and middle profile on 48” (see Section 7.1).
4. Remove the MEAT PROBE cover by its three screws (fig1).
5. Check the connection cable.
6. **IT IS VERY IMPORTANT THAT ALL THE WIRES OR TERMINALS MUST NOT BE IN CONTACT WITH THE ALUMINUM INSULATION FOIL. (Fig2)**
7. **THE PROBE JACK INSERTED MUST BE IN CONTACT WITH BOTH METAL BLADES OF FEMALE PLUG. (Fig3)**
8. The connections must not be loose.
9. Reconnect the power supply cord and check all functions.

fig. 1

fig 2

fig 3

7.26
Module generator substitution

1. Disconnect the power supply cord than remove the Range from its location.
2. Remove the top induction cooktop assembly (Section 7.1).
3. Remove the screws from the induction brackets, and remove them.

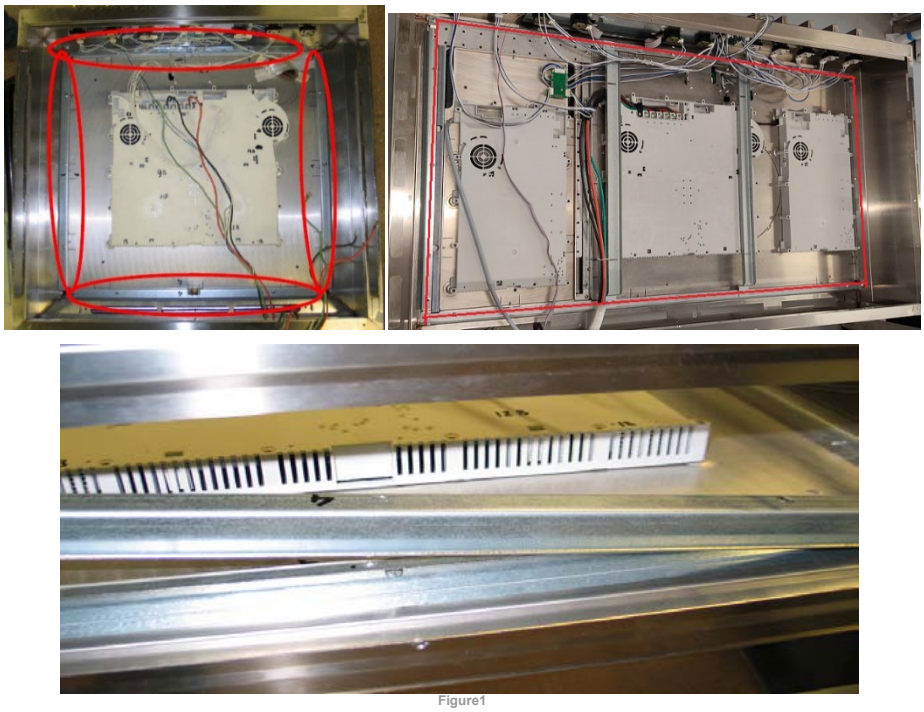
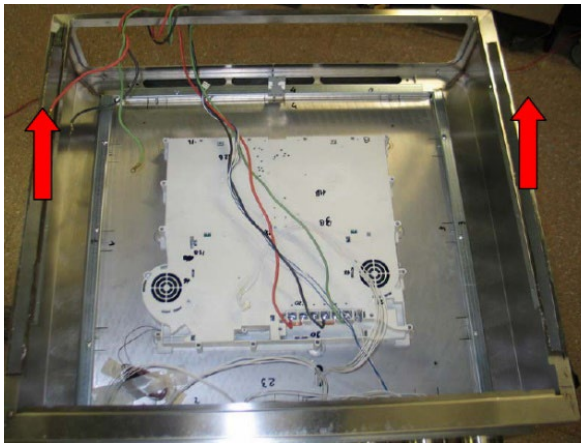


Figure1

4. Lift Up the metal box (fig.2).
5. To remove the module from the ceramic glass, unscrew the screws of frame glued on ceramic glass. (3 or more screws for each side.)

ALL



30”

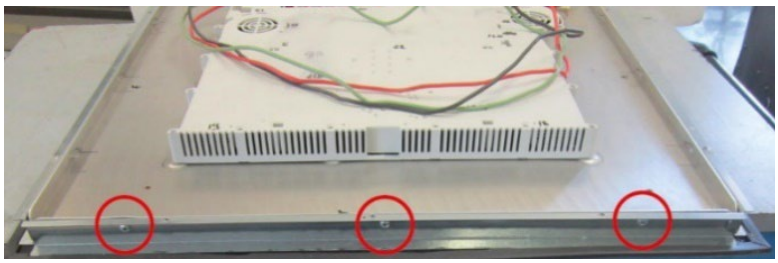
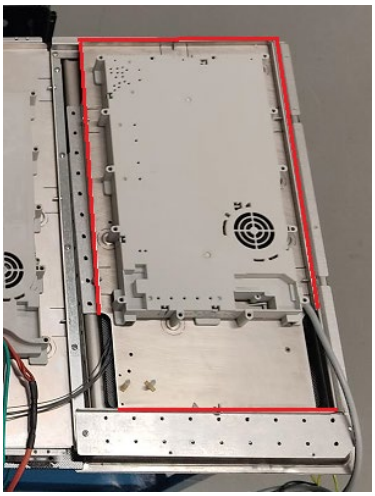


Figure2

36”

18”



6. **Move the boards marked in red from the induction generator to be replaced to the new one in the same position** (see figure 3 and 4) https://youtu.be/D1C8XWEiOkU
7. Replace the new generator by reversing the previous steps.
8. Connect all the terminals and connectors (the connections of power supply on the terminal block must not be loose).
   IMPORTANT: when servicing / replacing the induction module is necessary to transfer the brass jumpers from the original group to the new / replacement module.
   NOTE: Some models do not have jumpers.
9. Reconnect the power supply cord and check all functions.

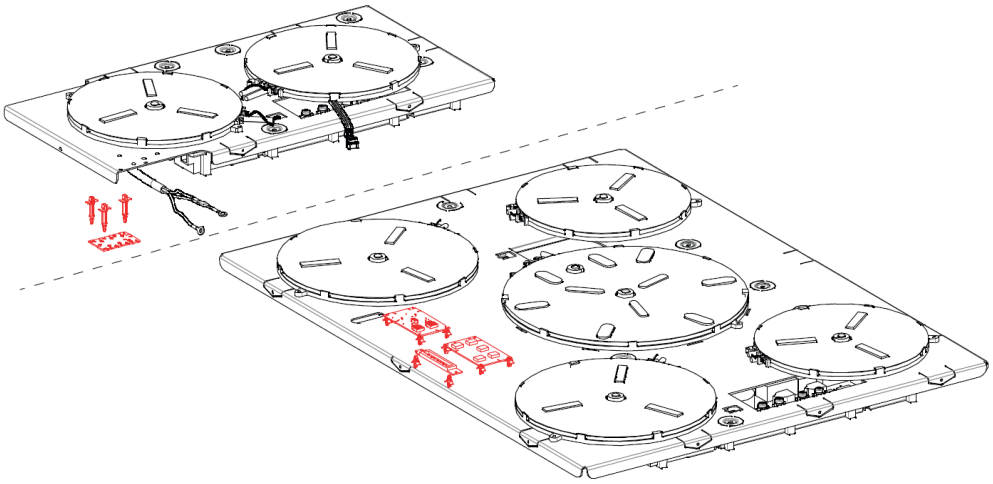


Figure3

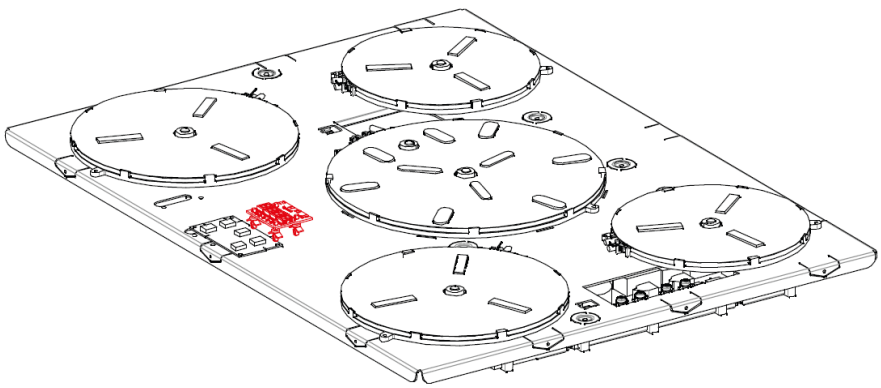
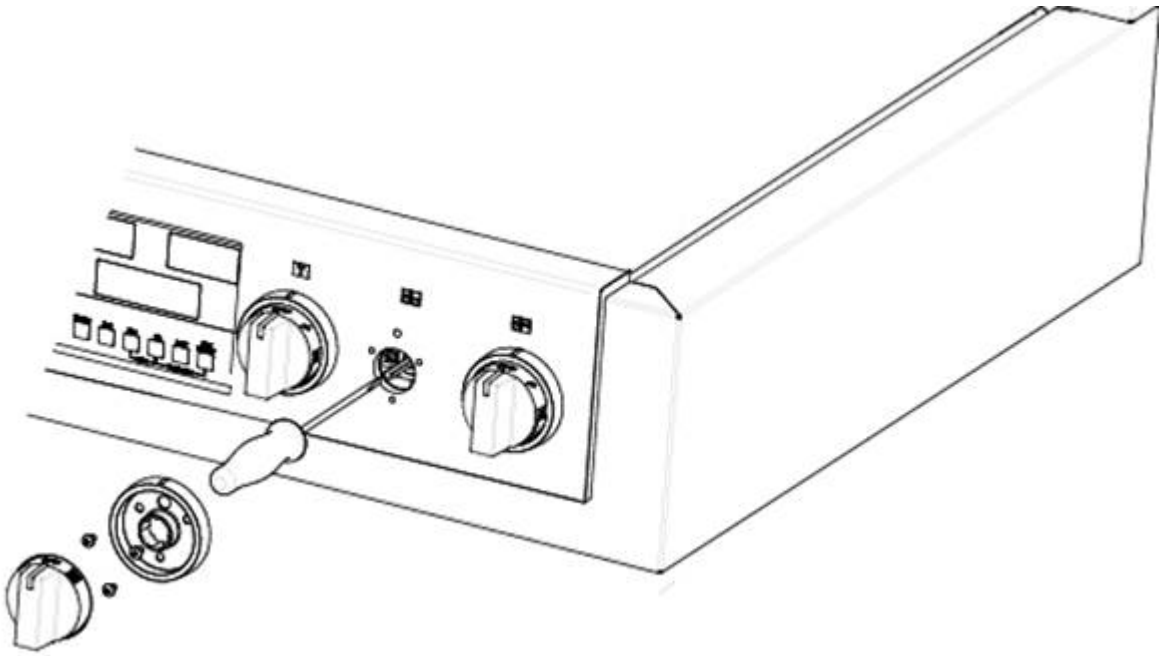


Figure4

1. Disconnect the power supply cord.
2. Remove the back top panel (Section 7.3).
3. Remove the knobs.
4. Disconnect the bad encoder and remove it by the screws.
5. Replace the new one by reversing the previous steps
6. Reconnect the power supply cord and check all functions

NOTE: check that the knobs are well centered with the ring.
The interference of the knob with the ring could cause malfunctions.

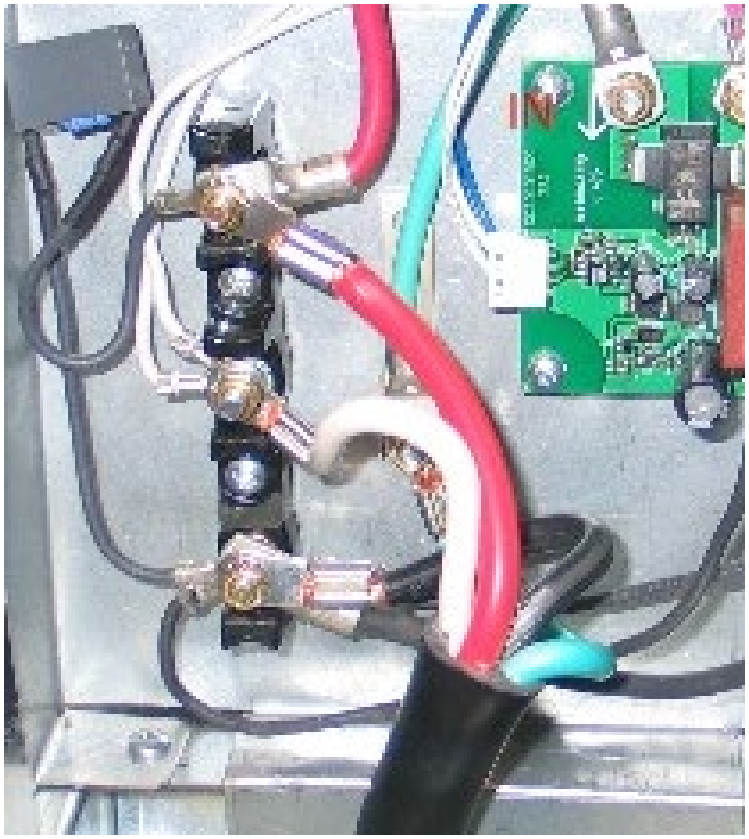


Timer selector

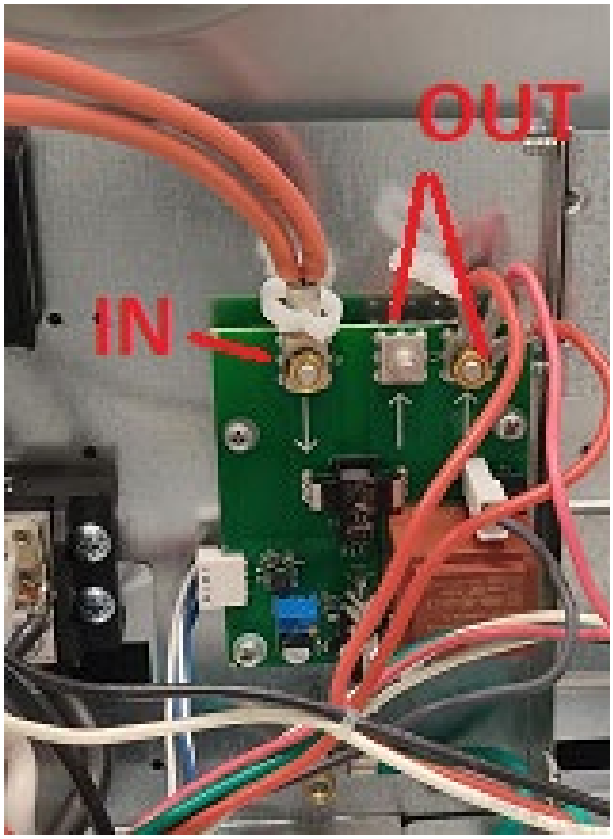
7.28
Power limiter substitution

1. Disconnect the power supply cord and remove the Back cover (Section 7.3).
2. Disconnect the bad board and remove it by the screws.
3. Replace the new one by reversing the previous steps
4. Reconnect the power supply cord and check all functions

Old Board

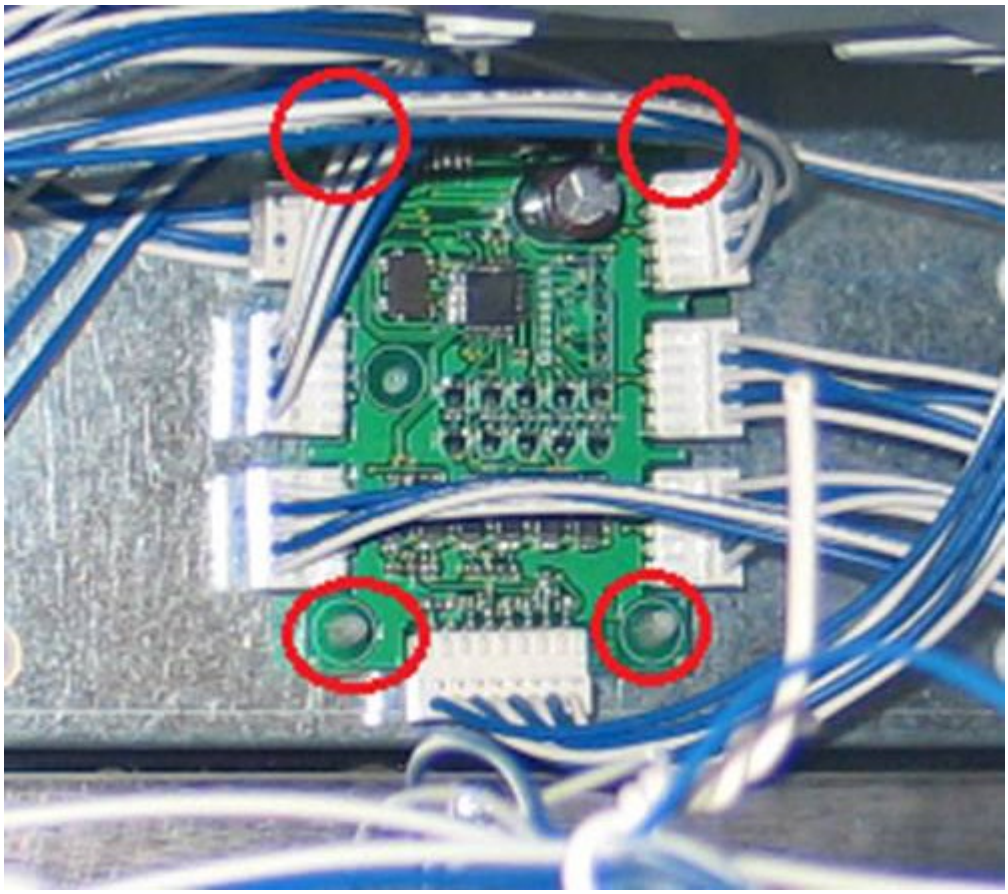


New Board



CPU Control Board of Induction Cooktop substitution (only for power management system)

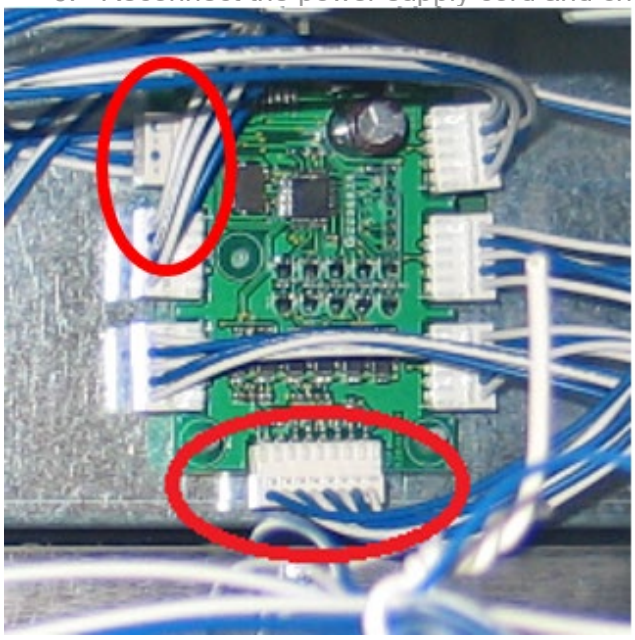
1. Disconnect the power supply cord and remove the Back Upper cover (Section 7.3).
2. Disconnect the bad CPU and remove it by its four plastic support (fig.1).
3. Replace the new one by reversing the previous steps (pay attention to the connection sequence)
4. Reconnect the power supply cord and check all functions



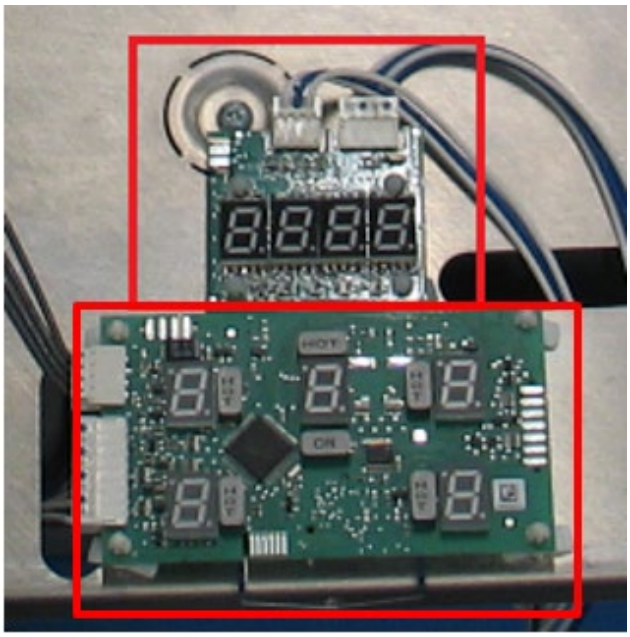
(Fig.1)

7.30
Timer (36” only) & Displays of Induction Cooktop Substitution

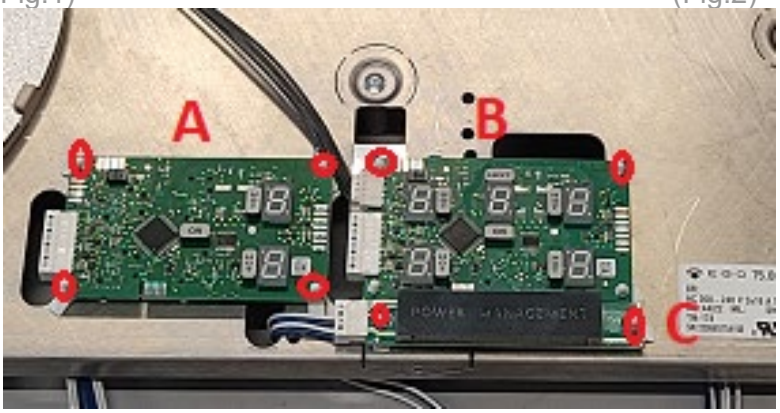
1. Disconnect the power supply.
2. Remove the Induction cooktop assembly (Section 7.1)
3. Remove the Induction module from the ceramic glass (Section 7.26)
4. Disconnect the timer or display connection (fig.1).
5. Remove the timer or display (fig.2 for 30” & 36”); (fig.3 for 48”) and replace the new one by reversing the previous steps.
6. Reconnect the power supply cord and check all functions.



(Fig.1)



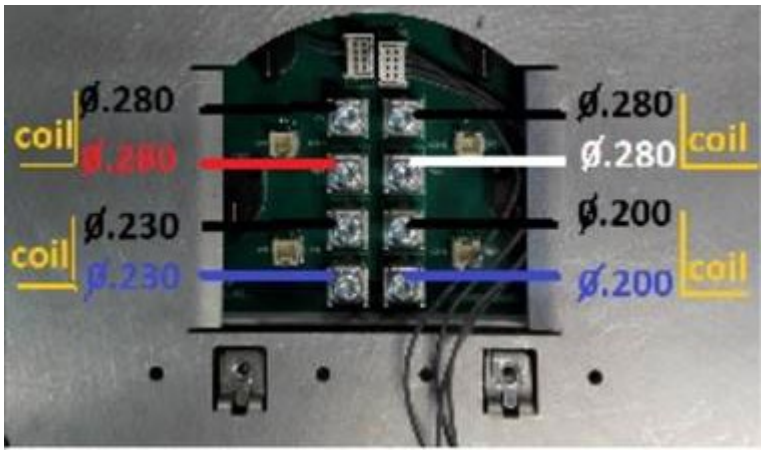
(Fig.2)

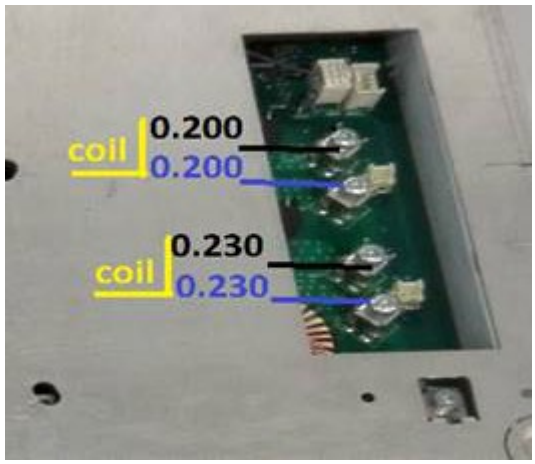


(Fig.3)

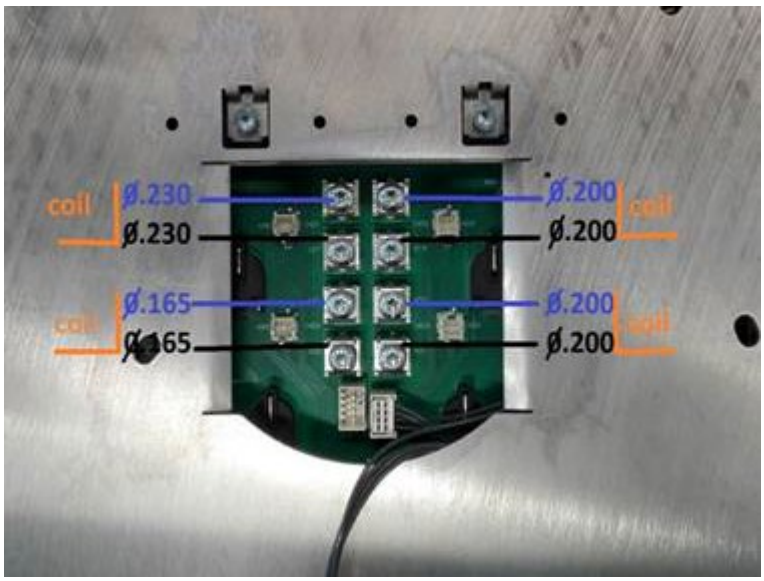
1. Remove the Induction cooktop assembly (Section 7.1)
2. Remove the Induction module from the ceramic glass (Section 7.26)
3. Remove the damaged coil unscrewing the related cable.
4. Disconnect also the sensor connector.
5. Replace the new one by reversing the previous steps.
6. NOTE: Be sure to tighten each screw of the properly.
7. Reassemble all the parts
8. Reconnect the power supply cord and check all functions.

36”



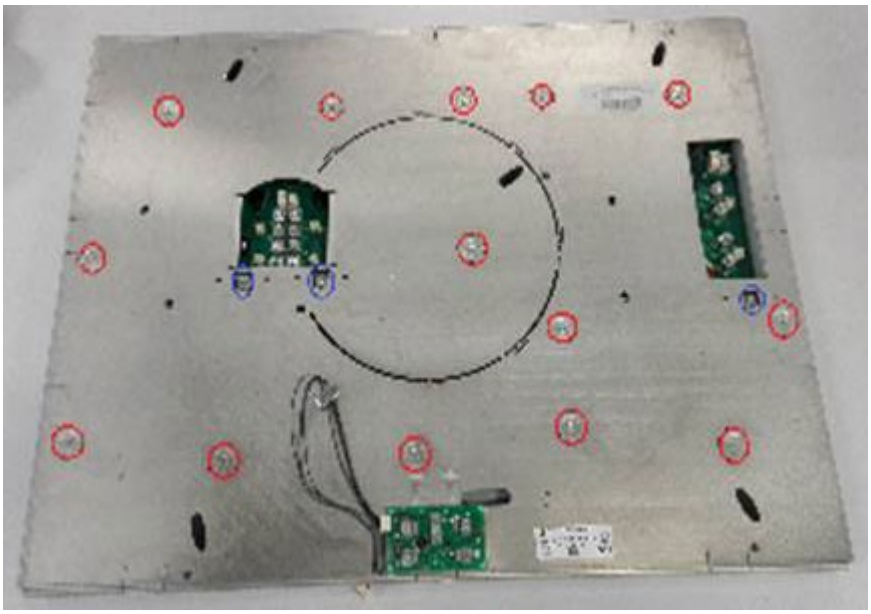


30”

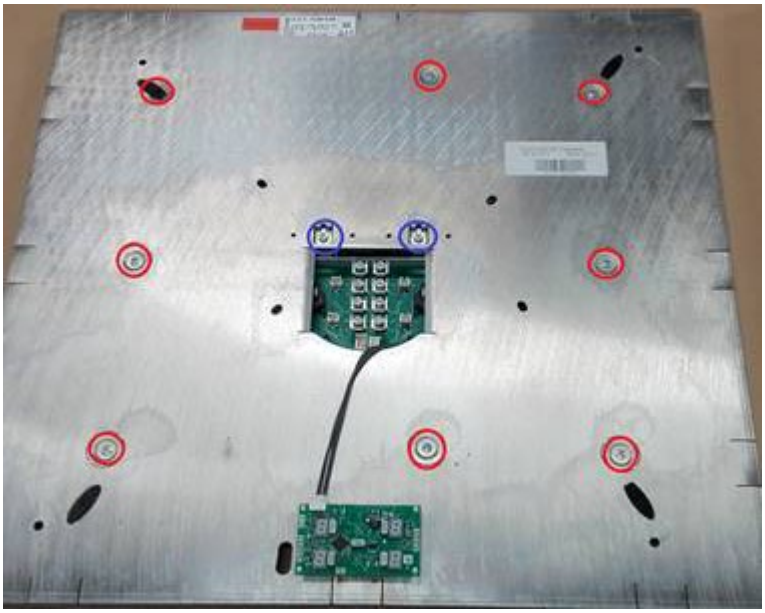


1. Remove the Induction cooktop assembly (Section 7.1)
2. Remove the Induction module from the ceramic glass (Section 7.26)
3. Remove the coils unscrewing the related cable (Section 7.31)
4. Unscrew all the top screws to have access to the Electronic Boards.

36”

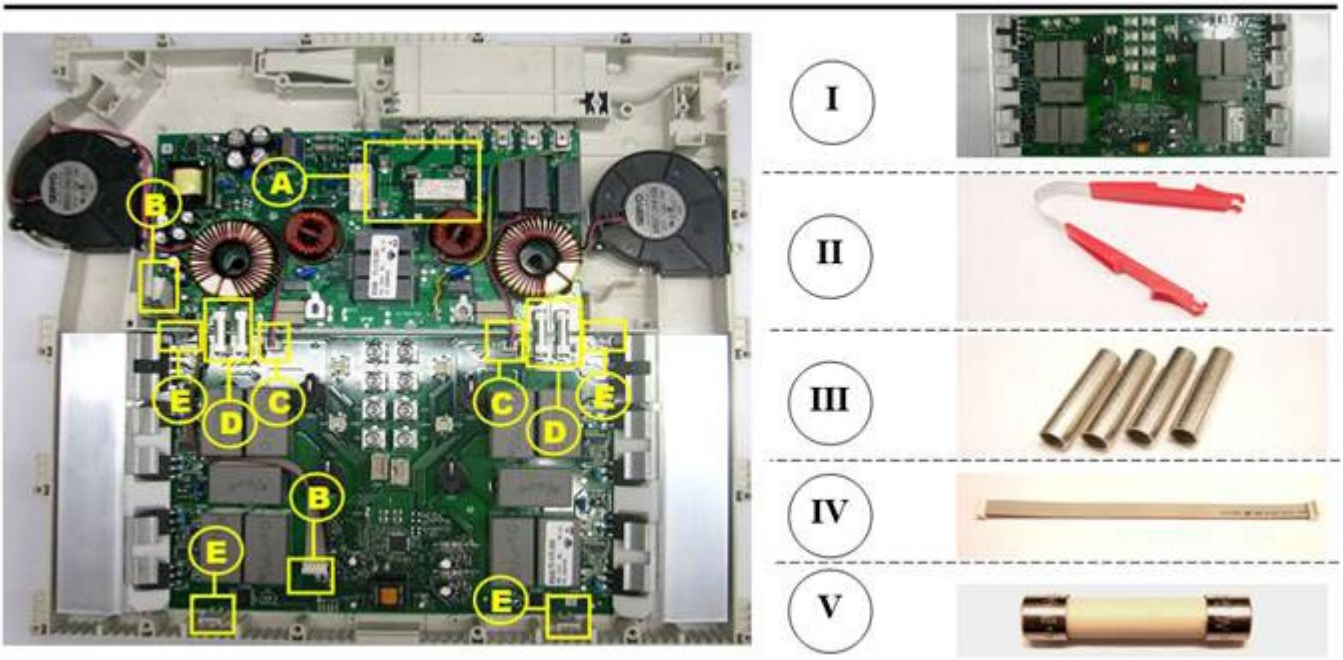


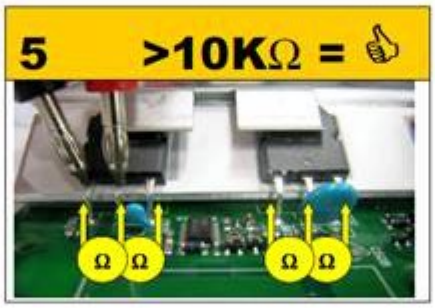
30”

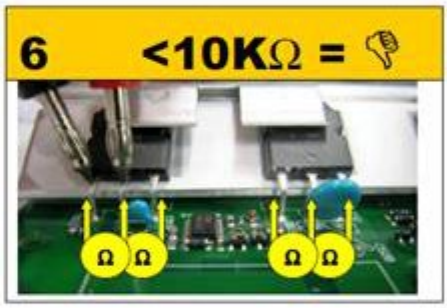


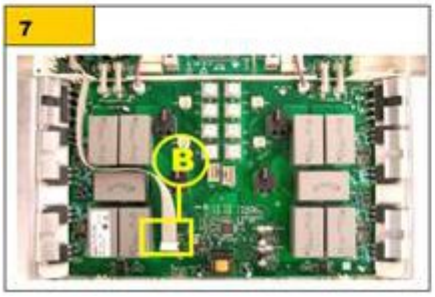
5. Replace the new one by the following instruction

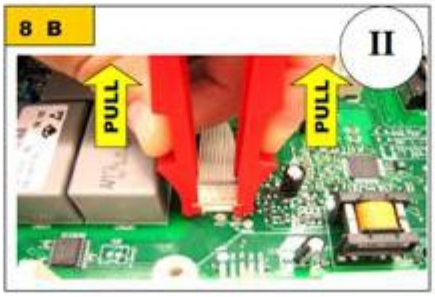
POWER BOARD SUBSTITUTION PROCEDURE

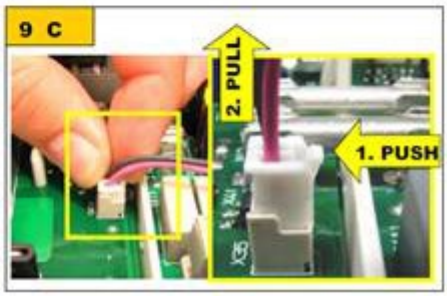


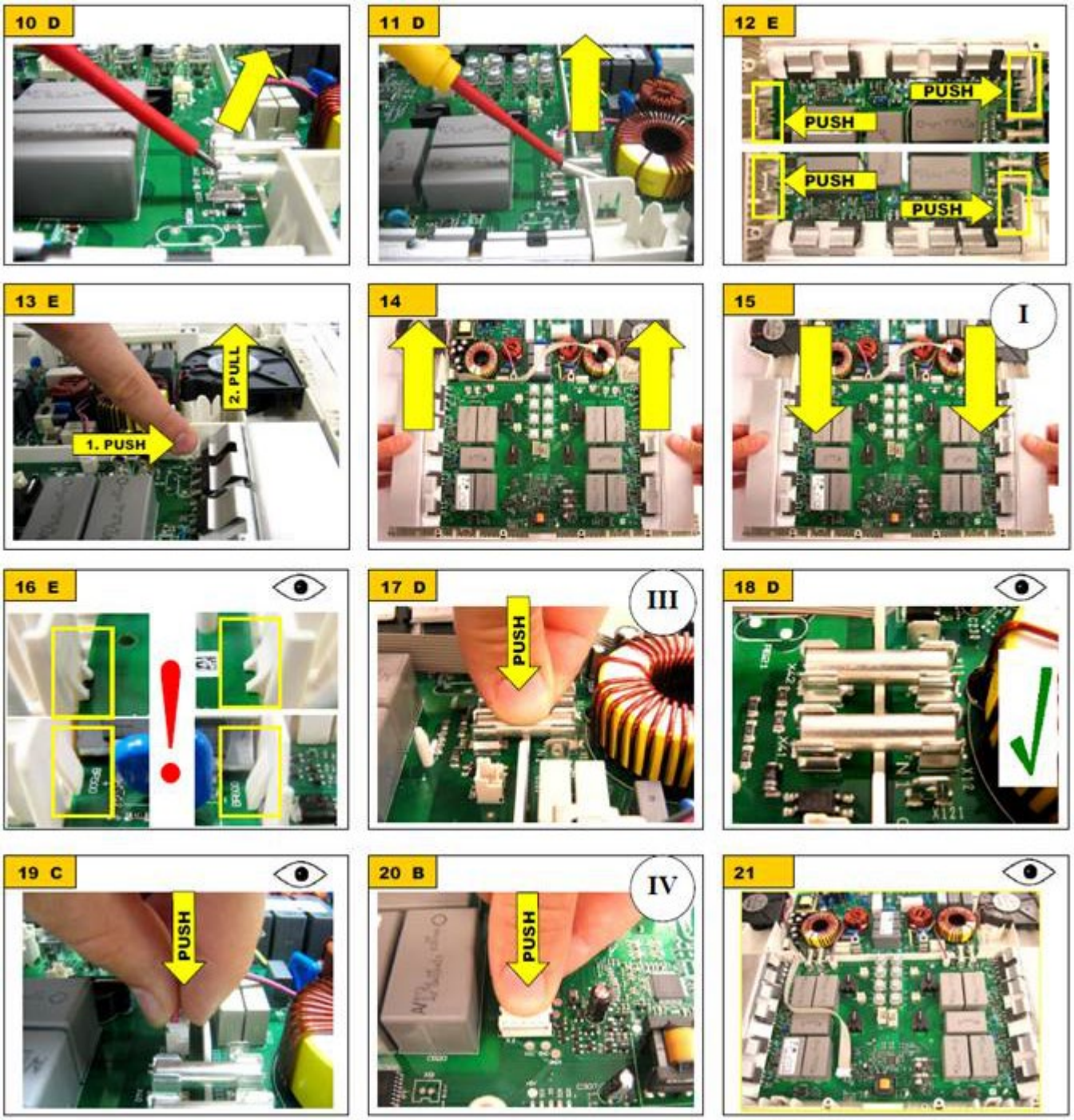








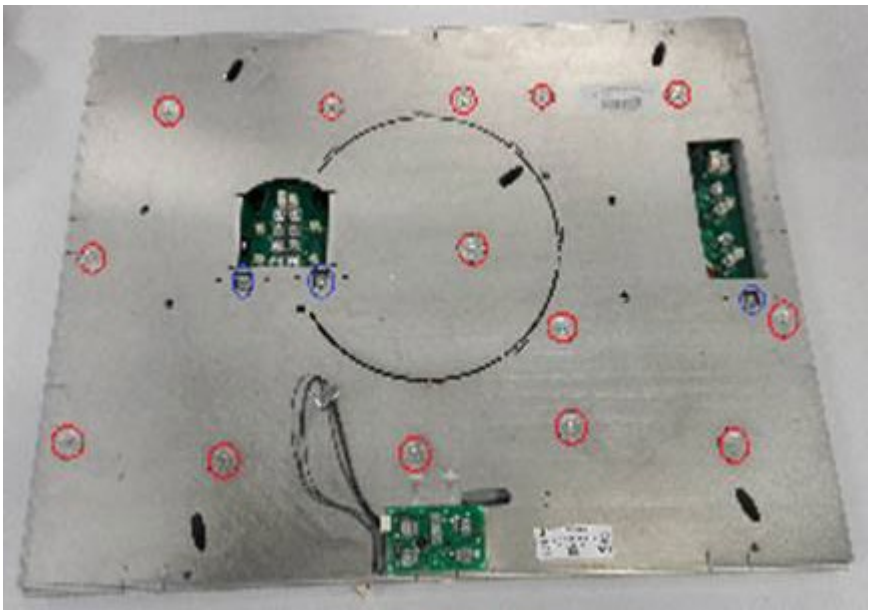




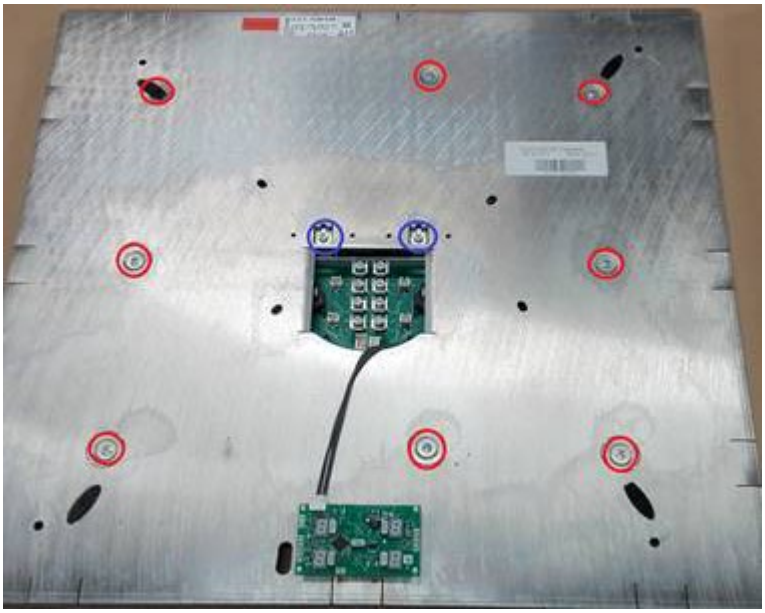
6. NOTE: Be sure to tighten each screw of the properly.
7. Reassemble all the parts
8. Reconnect the power supply cord and check all functions.

1. Remove the Induction cooktop assembly (Section 7.1)
2. Remove the Induction module from the ceramic glass (Section 7.26)
3. Remove the coils unscrewing the related cable (Section 7.31)
4. Unscrew all the top screws to have access to the Electronic Boards.

36”

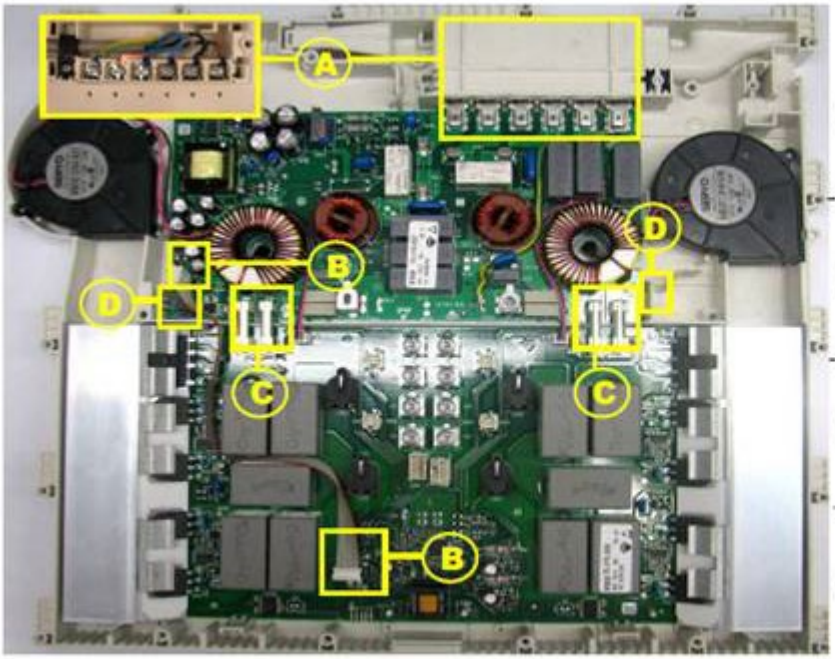


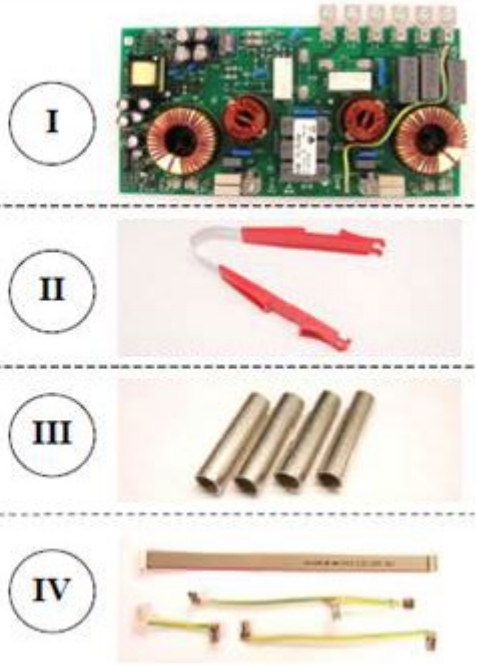
30”

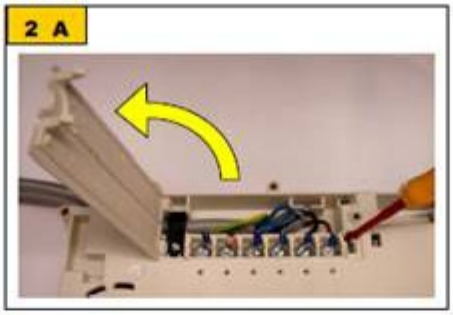


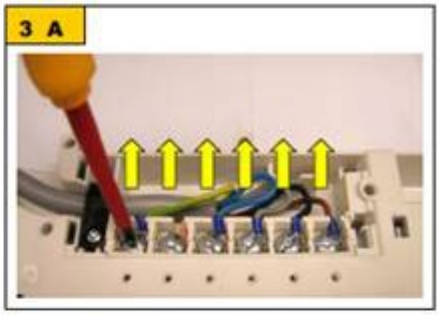
5. Replace the new one by the following instruction

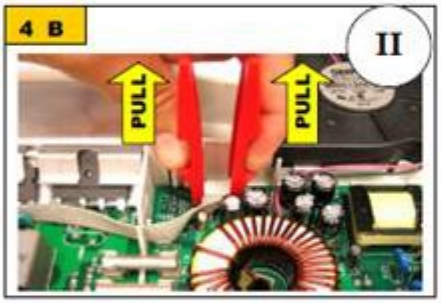
FILTER BOARD SUBSTITUTION PROCEDURE

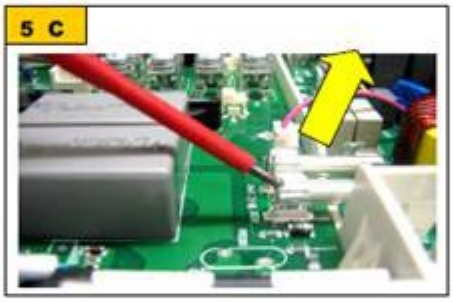


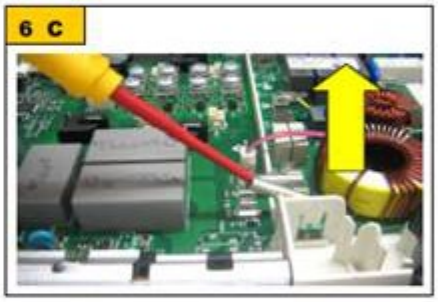


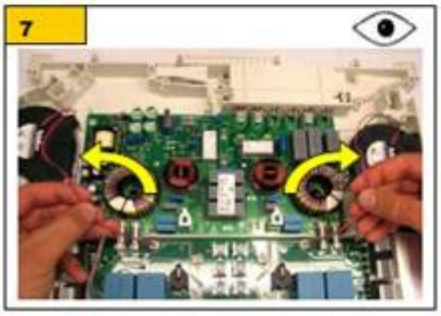


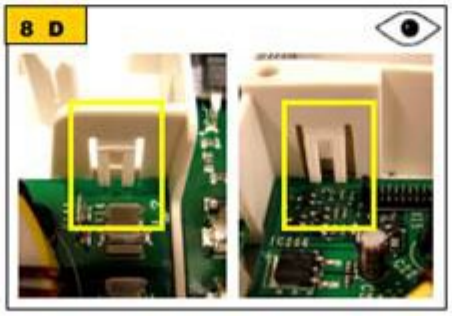


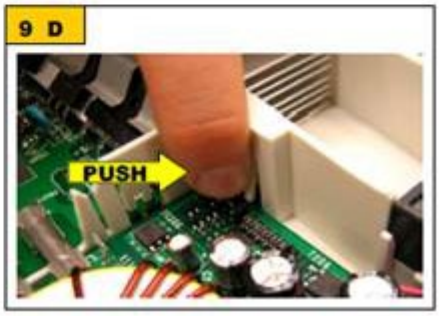


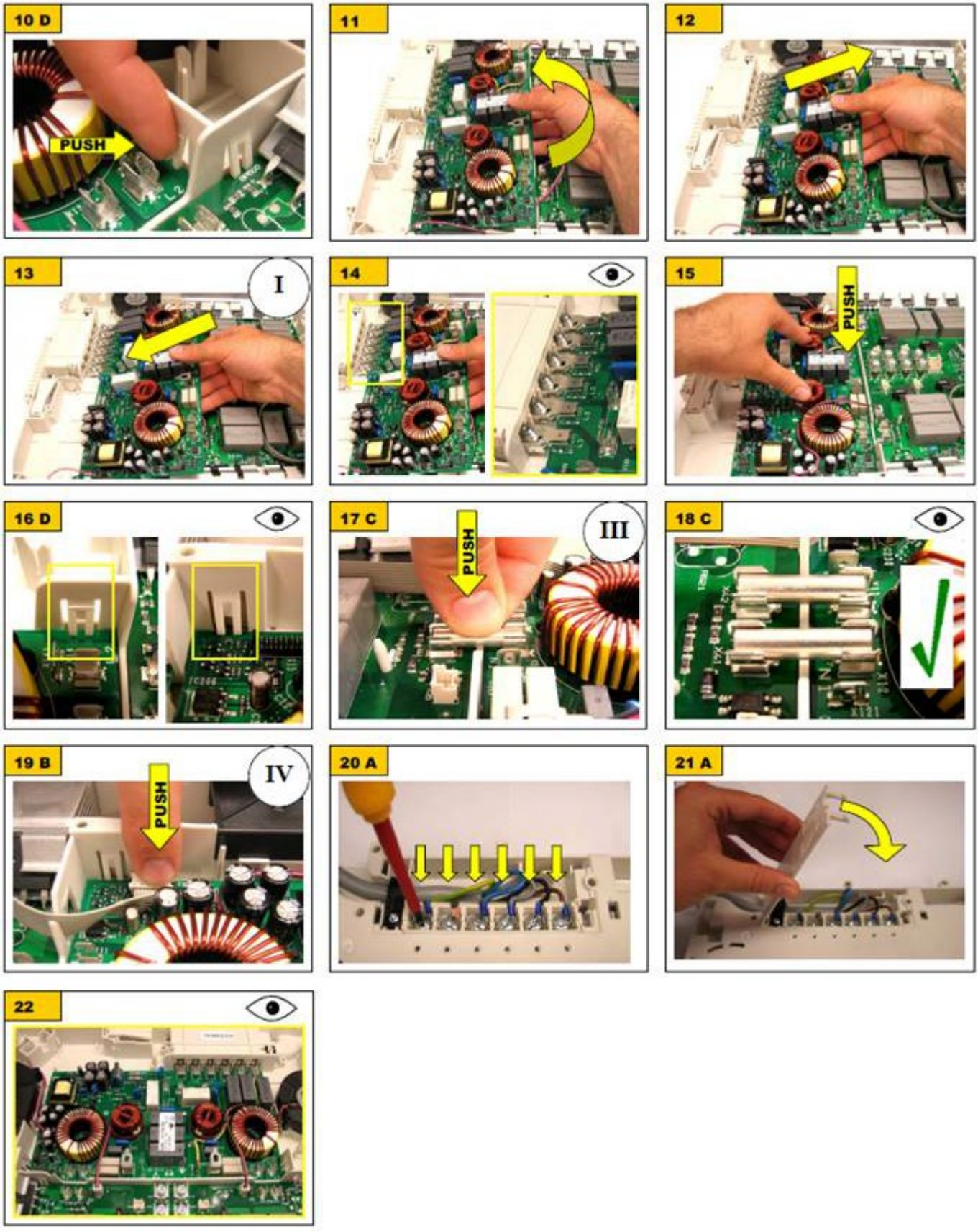








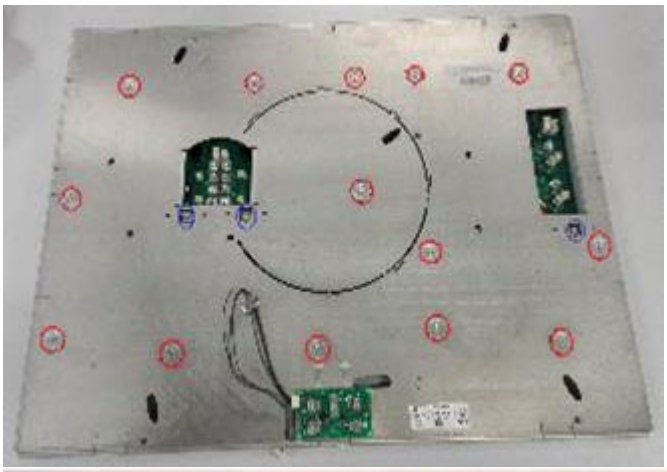




6. NOTE: Be sure to tighten each screw of the properly.
7. Reassemble all the parts
8. Reconnect the power supply cord and check all functions.

1. Remove the Induction cooktop assembly (Section 7.1)
2. Remove the Induction module from the ceramic glass (Section 7.26)
3. Remove the coils unscrewing the related cable (Section 7.31)
4. Unscrew all the top screws to have access to the Electronic Boards.
5. Replace the new one by the following instruction.
6. NOTE: Be sure to tighten each screw of the properly.
7. Reassemble all the parts
8. Reconnect the power supply cord and check all functions.

36”



30”