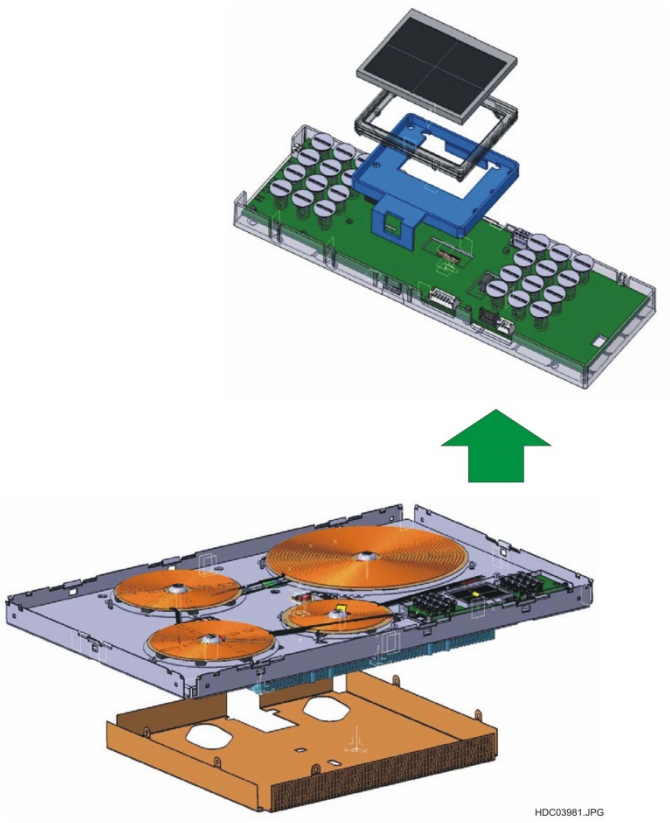
Electrolux

SERVICE MANUAL

COOKING



Built-in hobs

MAGNETIC INDUCTION HOBS WITH TFT DISPLAY AND FRY ASSIST

© ELECTROLUX HOME PRODUCTS
Customer Care - EMEA
Training and Operations Support
Technical Support

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1 - GENERAL INFORMATION

1.1 - PURPOSE OF THIS MANUAL

The purpose of this Manual is to provide information to perform a repair of Built-in magnetic induction hobs with TFT P.C. display.

2 - GENERAL INFORMATION

2.1 - EXAMPLE OF RANGE

2.1.1 - AEG 3-ZONE MAXIMA LEFT

Fig. 1

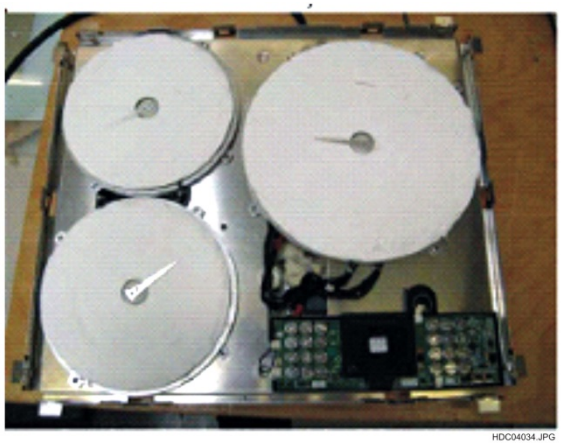


Fig. 2

2.1.2 - FRY ASSIST 3 ZONE MAXIMA LEFT

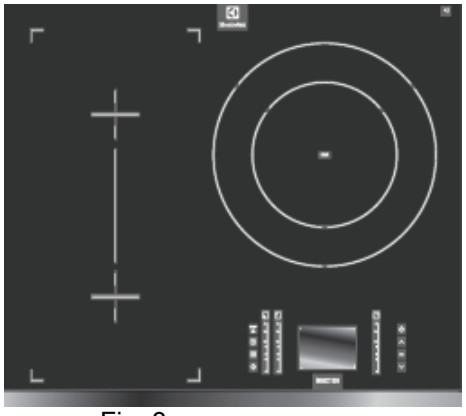


Fig. 3

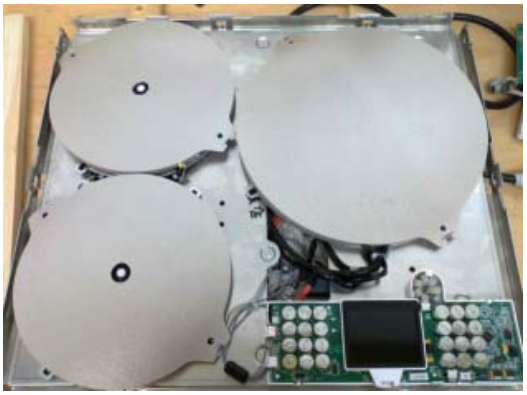


Fig. 4

2.1.3 - AEG 4-ZONE MAXIMA

Fig. 5

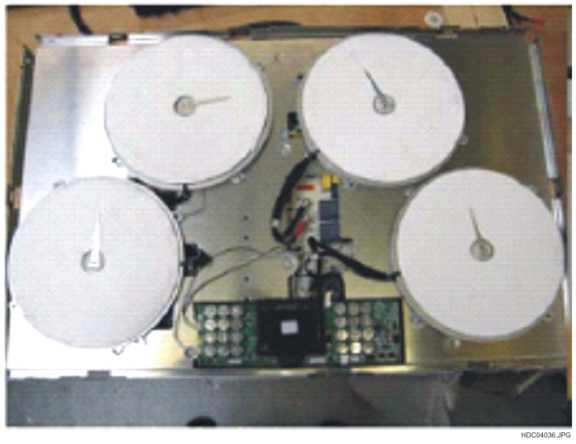


Fig. 6

2.1.4 - FRY ASSIST 4 ZONE MAXIMA LEFT

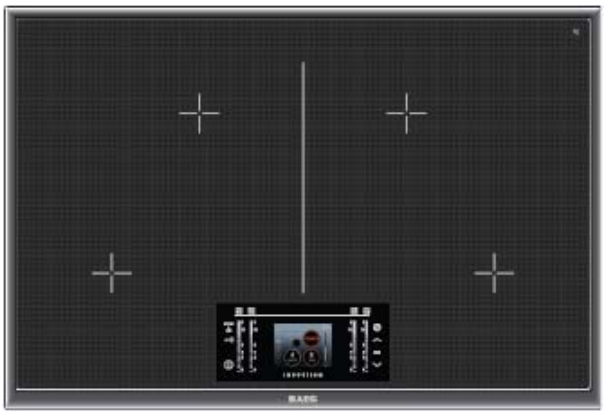


Fig. 7

Fig. 8

3 - DESCRIPTION OF PRODUCT

The main features of this induction hob are:

- User Interface with colour TFT display 3.5 " with sensor system " Colibri ".

- Induction power boards "Cheetah".

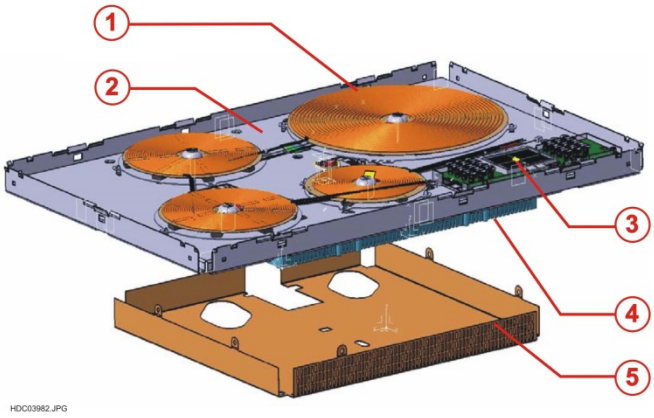
- Structure of the hob "Promise" without screws.

- Glass-ceramic upper the interface the area transparent (about 650 ° C) and printed in the back in grey or silver to lower the temperature (about 350 ° C) and insulating layer black on the sides act as insulation and protection (about 180 ° C) .

Induction hob with Colour- LCD-Display

Fig. 9

1 - INDUCTION COIL
2 - COIL CARRIER
3 - USER INTERFACE WITH COLOUR-LCD
4 - INDUCTION MODULE
5 - EMC PROTECTION BOX



3.1 - USER INTERFACE

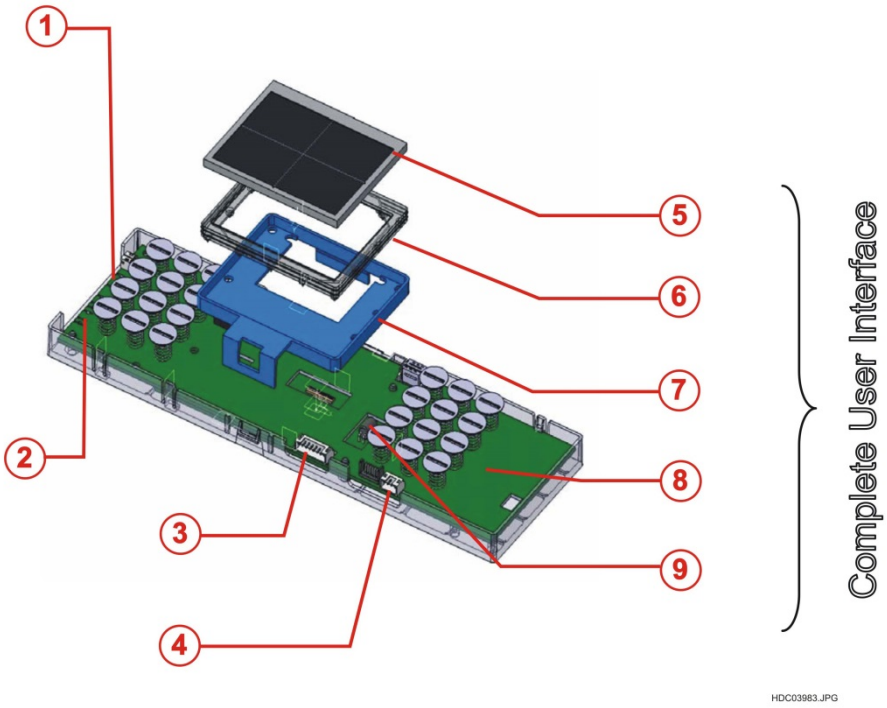


Fig. 10

1 - CONNECTOR VOLTAGE SUPPLY 14V
2 - BUS CONNECTOR
3 - PROGRAMMING CONNECTOR DISPLAY BOARD
4 - PROGRAMMING CONNECTOR FOR CONFIGURATION
5 - COLOUR-LCD-DISPLAY
6 - SILICONE SEALING
7 - DISPLAY FRAME
8 - TOUC ELECTRONIC
9 - DISPLAY BOARD CONNECTOR

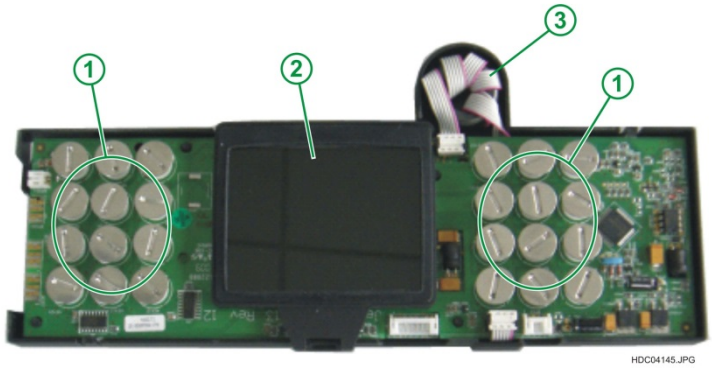


Fig. 11

1 - TOUCH CONTROL ZONES
2 - TFT COLOR SCREEN
3 - WIRING BETWEEN TOUCH BOARD AND DISPLAY BOARD

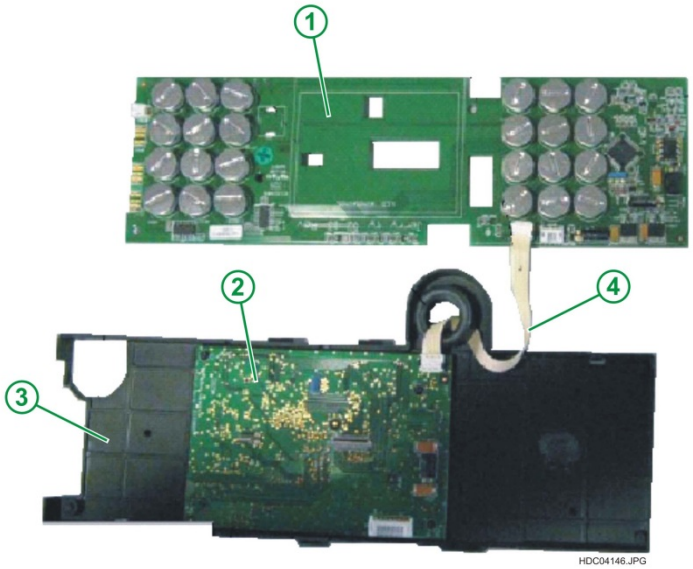


Fig. 12

1 - TOUCH ELECTRONIC BOARD
2 - DISPLAY BOARD
3 - INTERFACE SUPPORT
4 - WIRING BETWEEN TOUCH BOARD AND DISPLAY BOARD

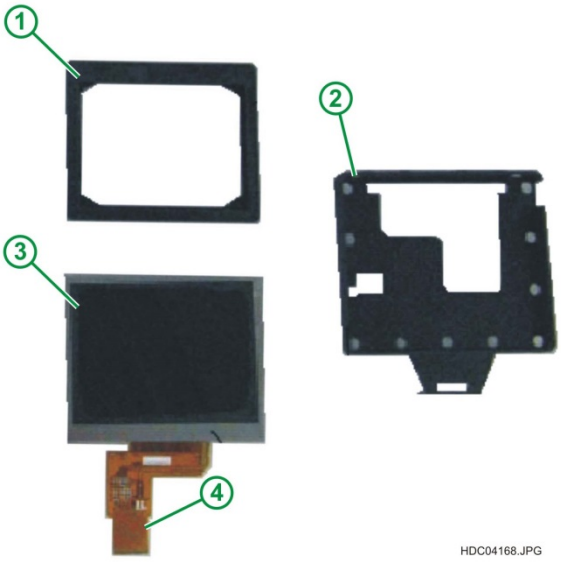


Fig. 13

1 - SILICONE FRAME
2 - TFT DISPLAY SUPPORT
3 - TFT DISPLAY
4 - FLAT CABLE

Transparent glass (approx. 650°C) and printed back side in grey or argent colour (approx. 350°C)

FRONT SIDE VIEW

Fig. 14

BACK SIDE VIEW

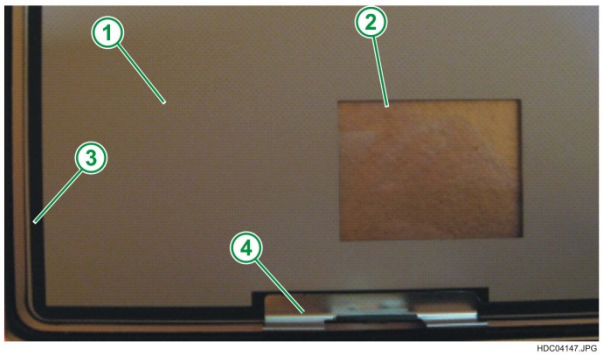


Fig. 15

1 - PRINTED BACK SIDE IN GRAY OR ARGENT COLOUR
2 - AREA OF DISPLAY
3 -BLACK LAYER INSOLATION AND PROCTECTION FUNCTION
4 - METALIC BRACKET

3.1.1 - SLIDER TECHNOLOGY

The power control is done through touch cursors.
For each cursor are interconnected four buttons (see Fig. 16).

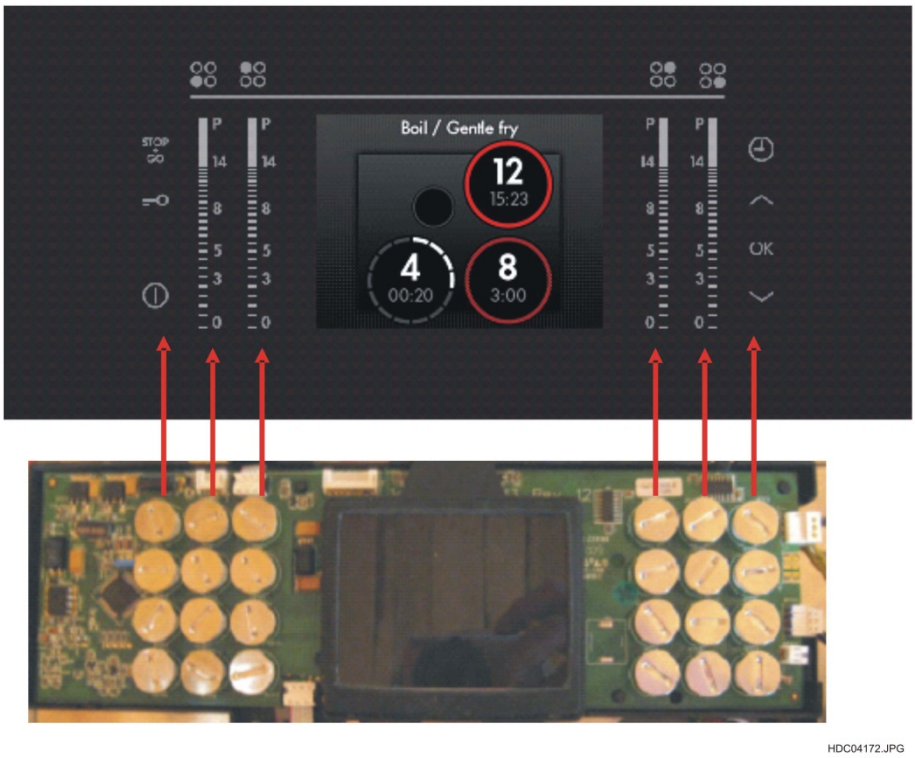


Fig. 16

3.2 - INDUCTION MODULE “CHEETAH”

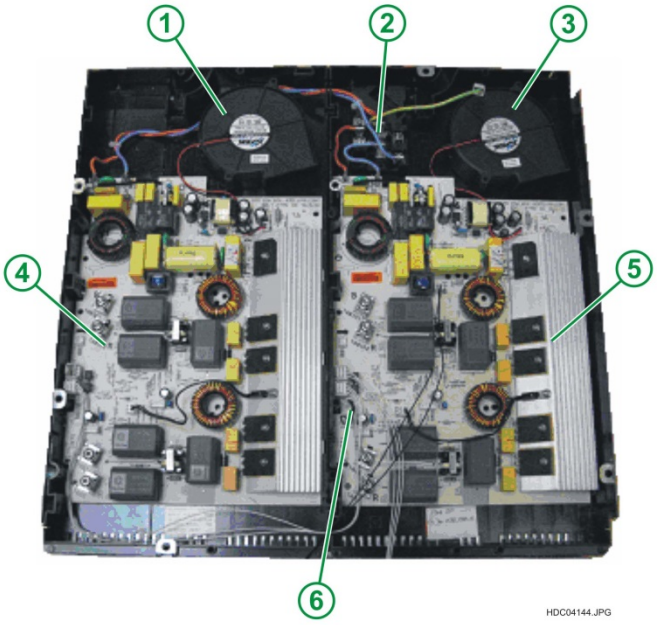


Fig. 17

1 - LEFT INDUCTION MODULE COOLING FAN
2 - TERMINAL ELECTRICAL CONNECTIONS
3 - RIGHT INDUCTION MODULE COOLING FAN
4 - LEFT INDUCTION MODULE
5 - RIGHT INDUCTION MODULE
6 - BRIDGE CONFIGURATION POWER FOR INTERFACE MODULE ON RIGHT

3.3 - ELECTRONIC WIRED

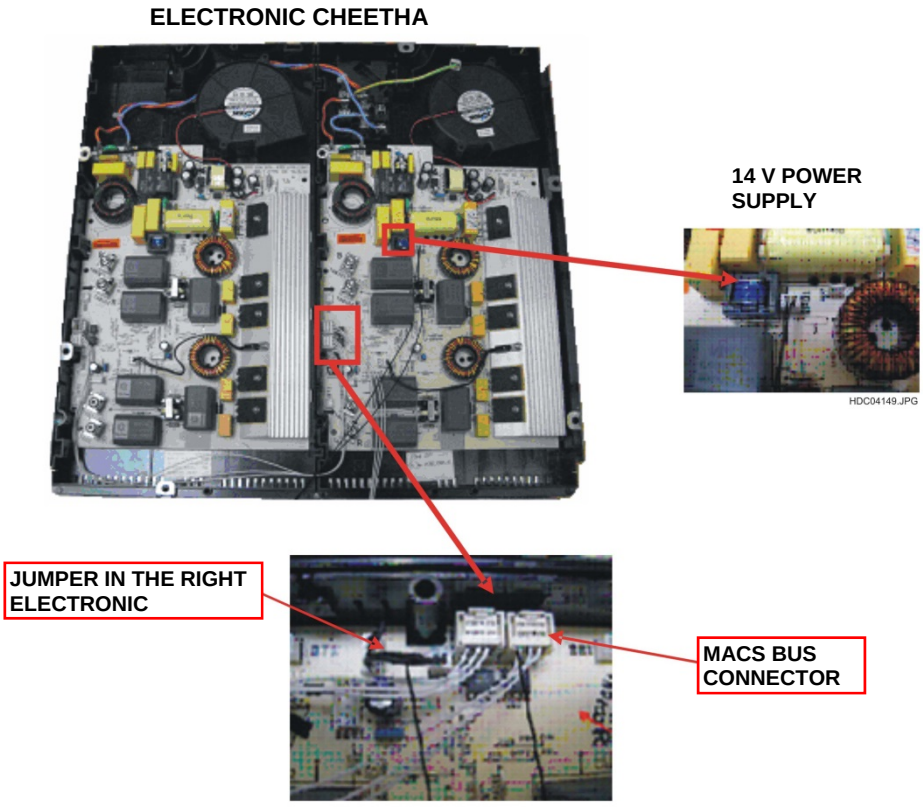


Fig. 18

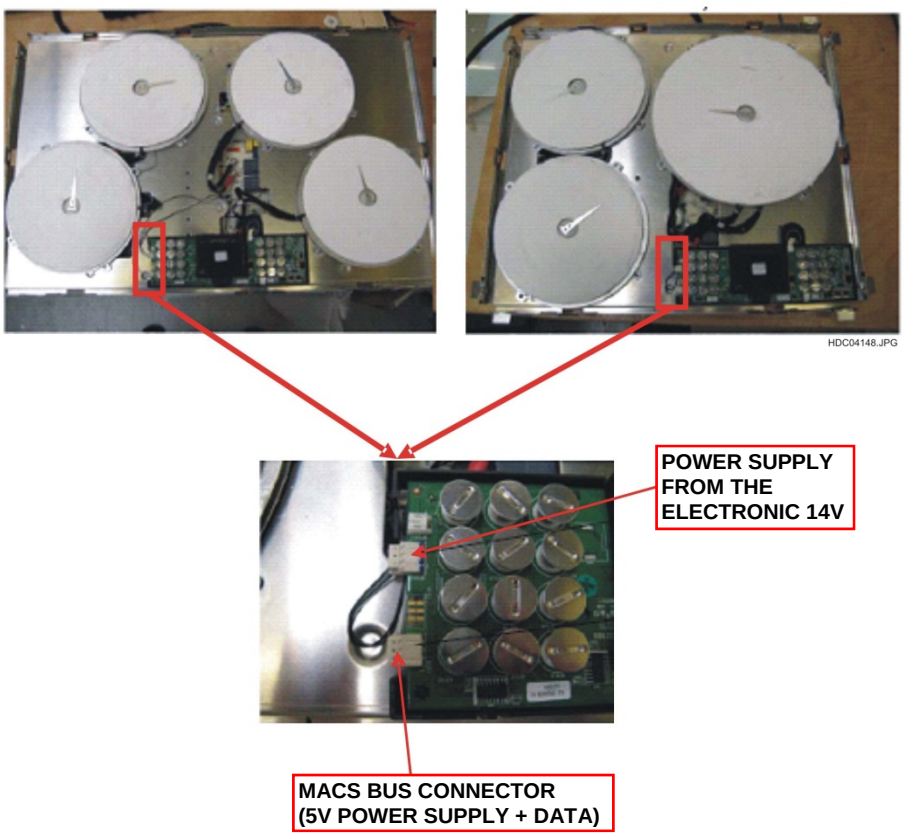

HDC04148.JPG
POWER SUPPLY
FROM THE
ELECTRONIC 14V
MACS BUS CONNECTOR
(5V POWER SUPPLY + DATA)

Fig. 19

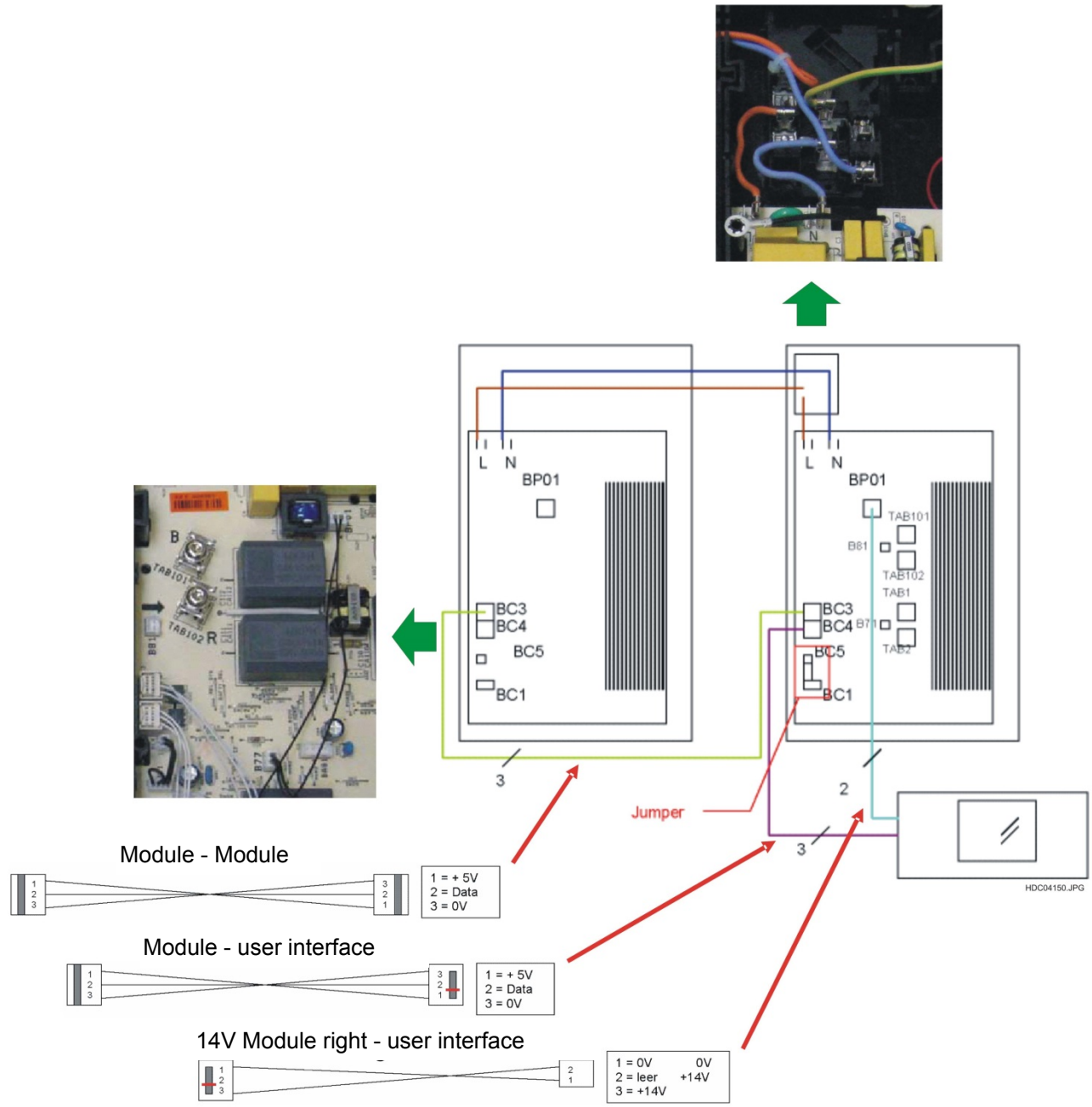

L N
BP01
BC3
BC4
BC5
BC1
TAB101
B61
TAB102
TAB1
B71
TAB2
3
2
Jumper
Module - Module
1 = + 5V
2 = Data
3 = 0V
Module - user interface
1 = + 5V
2 = Data
3 = 0V
14V Module right - user interface
1 = 0V 0V
2 = leer +14V
3 = +14V
HDC04150.JPG

Fig. 20

4 - CONTROL PANEL

Following are examples of a control panel for models with 4 zones and one for models with 3 zones. For details specific to the different patterns refer to related instruction manuals.

4.1 - 4 ZONE CONTROL PANEL

ELECTROLUX MODELS

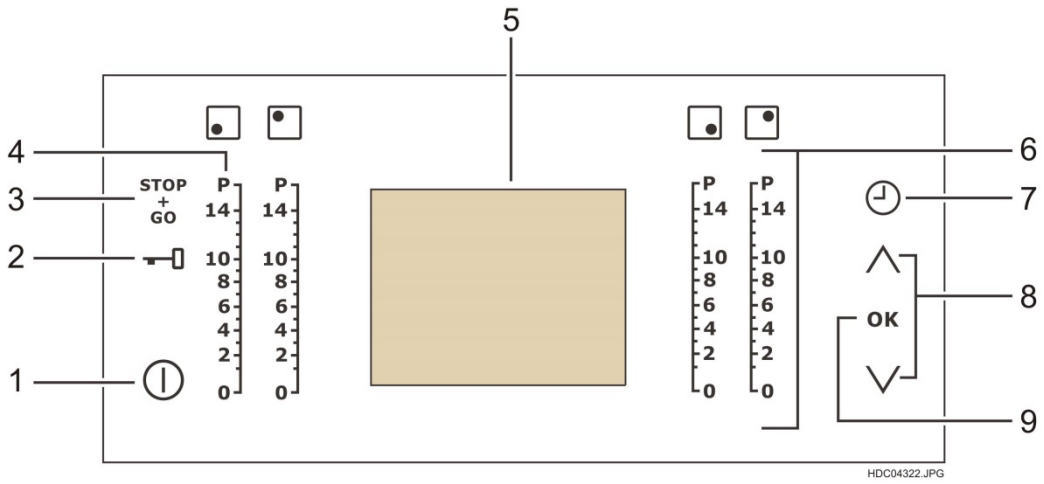


Fig. 21

	SENSOR FIELD	FUNCTION
1	⏻	It activates and deactivates the appliance.
2	🔑	It locks / unlocks the control panel.
3	STOP + GO	It activates and deactivates the STOP+GO function.
4	P	It activates the Power function
5	The display	It shows the active functions.
6	A control bar	To set the heat setting.
7	🕒	It sets the Timer function.
8	∧ / ∨	Select the setting.
9	OK	Confirms the setting.

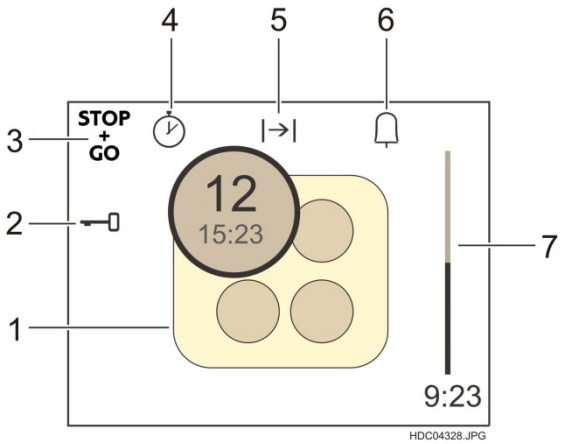


Fig. 22

1 - The cooking zones
2 - The key lock is on
3 - STOP + GO functions is on
4 - Automatic Counter
5 - Power-off timer
6 - Minute Minder
7 - Minute Minder indicator

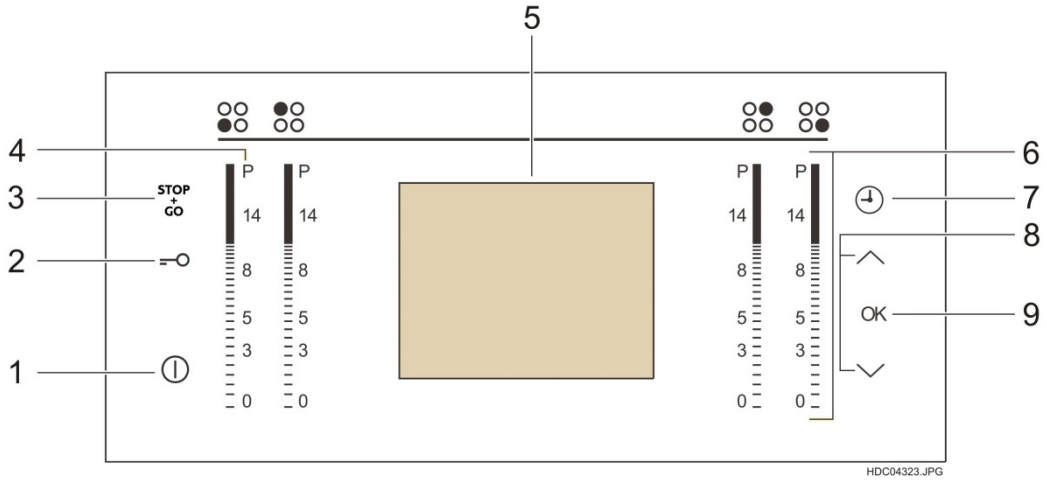


Fig. 23

	SENSOR FIELD	FUNCTION
1	⏻	It activates and deactivates the appliance.
2	🔑	It locks / unlocks the control panel.
3	STOP + GO	It activates and deactivates the STOP+GO function.
4	P	It activates the Power function
5	The display	It shows the active functions.
6	A control bar	To set the heat setting.
7	🕒	It sets the Timer function.
8	∧ / ∨	Select the setting.
9	OK	Confirms the setting.

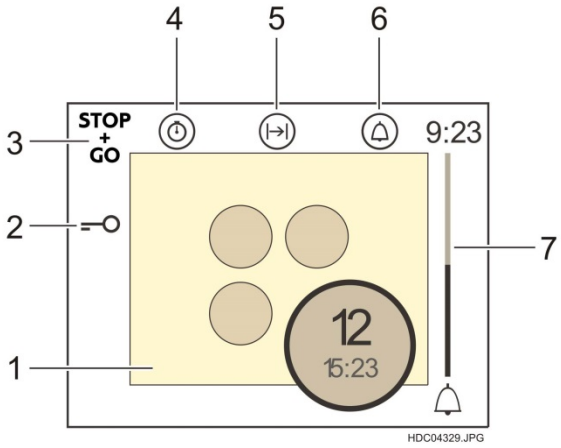


Fig. 24

1 - The cooking zones
2 - The key lock is on
3 - STOP + GO functions is on
4 - Automatic Counter
5 - Power-off timer
6 - Minute Minder
7 - Minute Minder indicator

4.2 - 4 ZONE CONTROL PANEL with FRY ASSIST

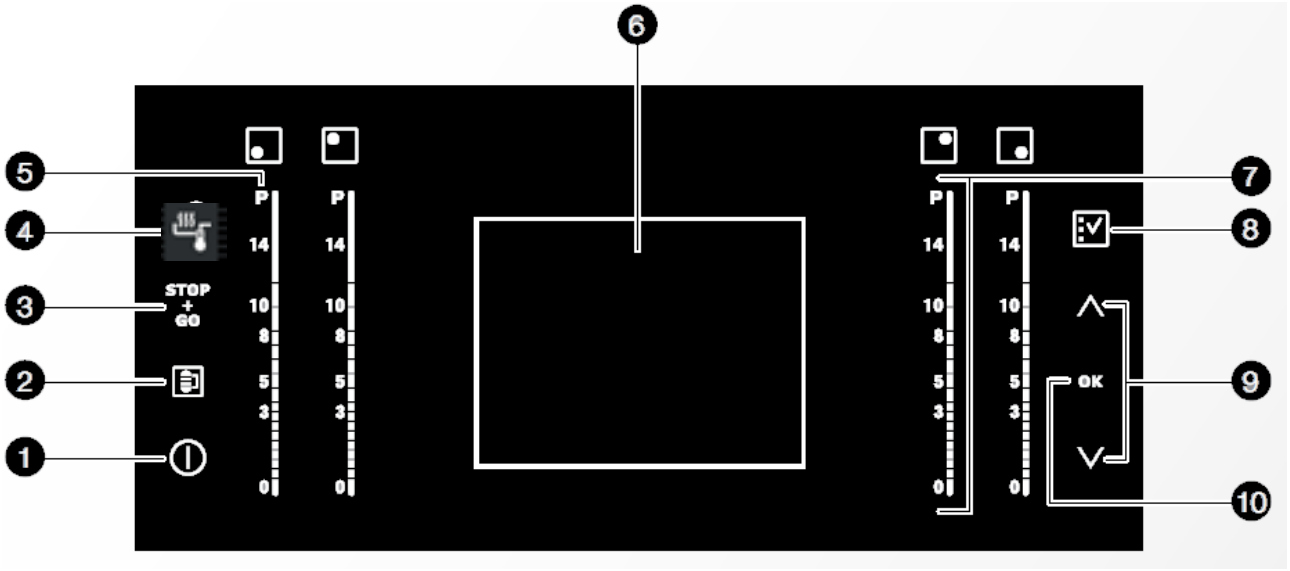


Fig. 25

	SENSOR FIELD	FUNCTION
1	⏻	It activates and deactivates the appliance.
2		It locks / unlocks the control panel.
3	STOP + GO	It activates and deactivates the STOP+GO function.
4		It activates the Fry Assist Menu
5	P	It activates the Power function
6	The display	It shows the active functions.
7	A control bar	To set the heat setting.
8		It opens the menu for timer settings
9	^ / v	Select the setting.
10	OK	Confirms the setting.

4.3 - 3 ZONE CONTROL PANEL

ELECTROLUX MODELS

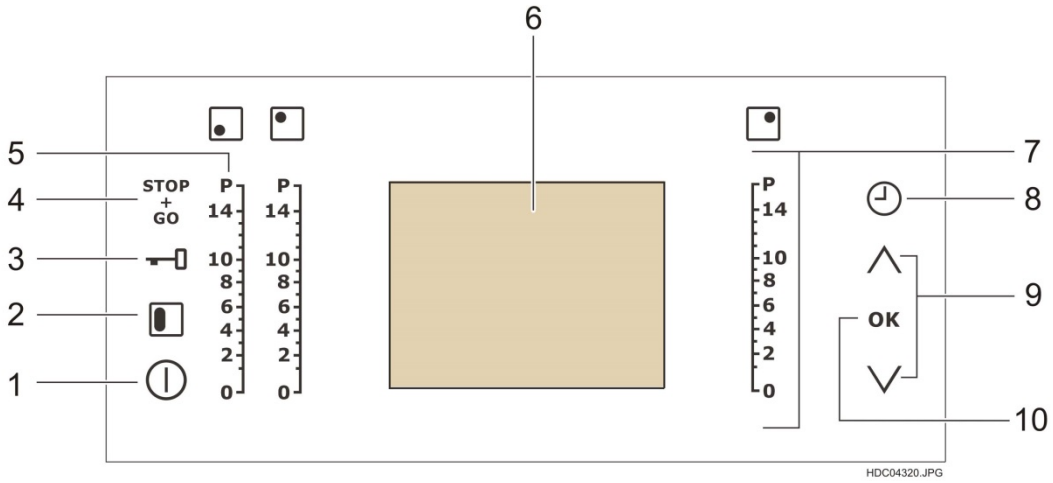


Fig. 26

	SENSOR FIELD	FUNCTION
1		It activates and deactivates the appliance.
2		It starts and stops the Bridge function
3		It locks / unlocks the control panel.
4	STOP + GO	It activates and deactivates the STOP+GO function.
5	P	It activates the Power function
6	The display	It shows the active functions.
7	A control bar	To set the heat setting.
8		It sets the Timer function.
9	/	Select the setting.
10	OK	Confirms the setting.

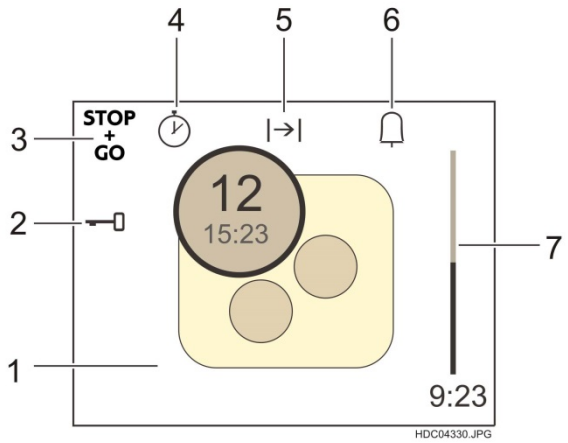


Fig. 27

1 - The cooking zones
2 - The key lock is on
3 - STOP + GO functions is on
4 - Automatic Counter
5 - Power-off timer
6 - Minute Minder
7 - Minute Minder indicator

AEG MODELS

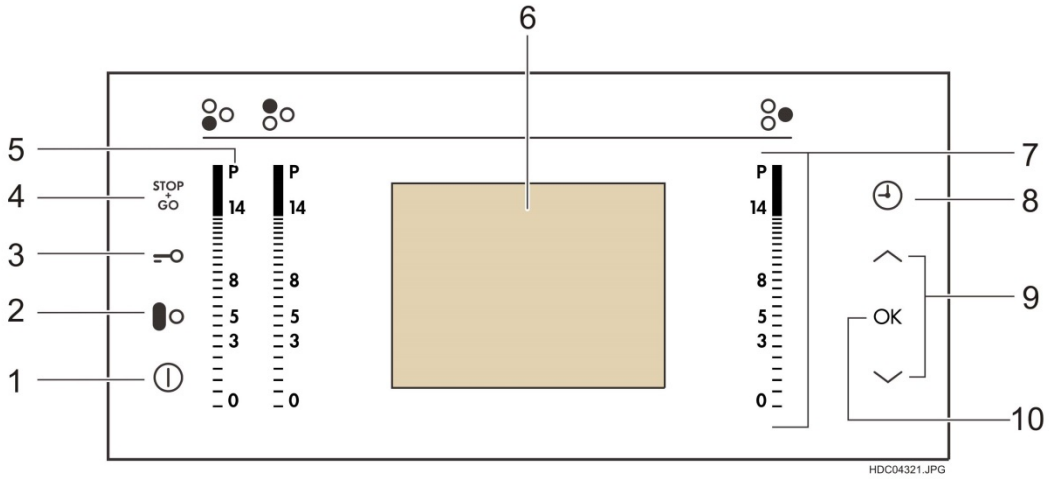


Fig. 28

	SENSOR FIELD	FUNCTION
1		It activates and deactivates the appliance.
2		It starts and stops the Bridge function
3		It locks / unlocks the control panel.
4	STOP + GO	It activates and deactivates the STOP+GO function.
5	P	It activates the Power function
6	The display	It shows the active functions.
7	A control bar	To set the heat setting.
8		It sets the Timer function.
9	/	Select the setting.
10	OK	Confirms the setting.

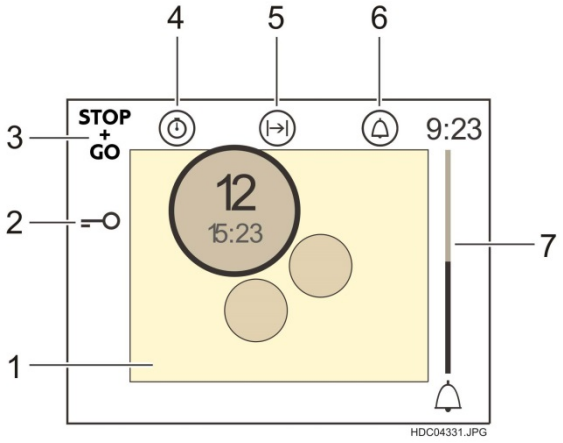


Fig. 29

1 - The cooking zones
2 - The key lock is on
3 - STOP + GO functions is on
4 - Automatic Counter
5 - Power-off timer
6 - Minute Minder
7 - Minute Minder indicator

4.4 - 3 ZONE CONTROL PANEL with FRY ASSIST

ELECTROLUX MODELS

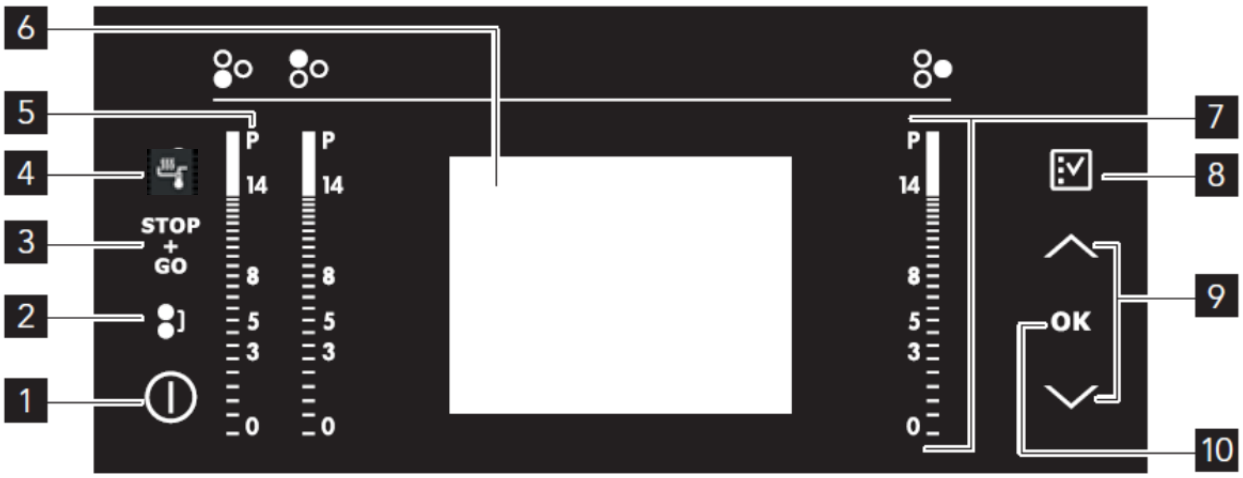


Fig. 30

	SENSOR FIELD	FUNCTION
1		It activates and deactivates the appliance.
2		Connects front and rear zone.
3	STOP + GO	It activates and deactivates the STOP+GO function.
4		It activates Fry Assist function
6	The display	It shows the active functions.
5	A control bar	To set the heat setting.
7		It sets the Timer function.
8		It opens the menu for timer settings
9	/	Select the setting.
10	OK	Confirms the setting.

5 - FUNCTIONS

5.1 - STOP+GO FUNCTION

At Stop + Go function, the power level reduced underneath level 1 to 2.50%. (see the yellow zone in the table)

14 LEVELS	7 LEVELS	POWER LEVEL %	BOST TIME MIN.	Ø 145 mm 1,4 kW	Ø 180 mm 1,8 kW	Ø 210 mm 2,3 kW	Ø 210 mm HP	Ø 280 mm 3,7 kW	Ø 280 mm 5,2 kW	Ø 280 mm INNER
U	1*	2,50%	0,20	30W	40W	60W	60W	88W	88W	40W
1	1	3,00%	0,20	40W	50W	70W	70W	105W	105W	50W
2	2	5,50%	0,20	80W	100W	130W	130W	193W	193W	100W
3		8,00%	1,35	110W	140W	180W	180W	280W	280W	140W
4	3	10,50%	3,12	150W	190W	240W	240W	368W	368W	190W
5		13,00%	4,40	180W	240W	300W	300W	455W	455W	240W
6	4	15,50%	5,85	220W	280W	360W	360W	543W	543W	280W
7		18,00%	8,20	250W	320W	410W	410W	630W	630W	320W
8	5	21,00%	10,20	290W	380W	480W	480W	735W	735W	380W
9		25,00%	10,60	350W	450W	580W	580W	875W	875W	450W
10	6	31,00%	2,02	430W	550W	710W	710W	1085W	1085W	550W
11		38,00%	2,02	530W	650W	870W	870W	1330W	1330W	650W
12	7	45,00%	2,46	630W	810W	1040W	1040W	1575W	1575W	810W
13	8	64,00%	2,87	900W	1150W	1470W	1470W	2240W	2240W	1150W
14	9	100,00%	-	**1400W**	**1800W**	**2300W**	**2300W**	**3500W**	**3500W**	**1800W**
P	P		-	2500W	2800W	3200W	3700W	3700W	3700W	2800W
POWER TIME				2 min.	8 min.	10 min.	10 min.	10 min.	5 min.	8 min.

Fig. 31

5.2 - KEY LOCK FUNCTION

The key lock function locks all keys except key lock and On/Off

Activation:

Touch the key for one second.

Deactivation:

A) Touch the key for at least one second.

B) Touch the key for at least two seconds.

5.3 - CHILD LOCK FUNCTION

Activation:

The appliance is turned on but the no zone is active.

Touch the key for four seconds. Afterwards the display shows a big lock symbol.

To switch off the appliance, touch the key and the child lock is still active.

Exclusion of child safety operation for cooking :

You can temporarily switch off the protection of children to make a operation for cooking.
If the hob is turned on a big lock symbol is displayed.

Touch the key the child lock can interrupted by touching the keys and together.
Set the heat setting in less than 10 seconds.
With turning the appliance off, the child lock is active again.

Deactivation:

Switch on the Hob by pressing the key .

Touch the key and afterwards the key , the lock symbol on the display will turn off.

5.4 - BRIDGE FUNCTION

The Bridge function connects two left side cooking zone and they operate as a single larger area.

Activation:

First set the heat setting for one of the left cooking zone.

To start the Bridge function touch the key .
To set or change the heat setting touch one of the left control bars.

Deactivation:

Switch appliance off.
Turn one of the linked zones off.
Count-down timer is run off.

To stop the Bridge function touch the key (both zones showing the same power level). Then the cooking zones operate independently.

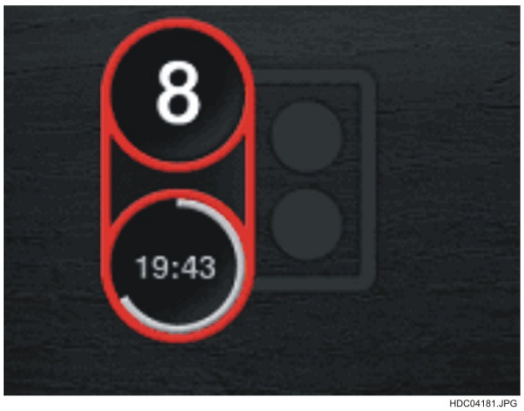


Fig. 32

14 Levels	9 Levels	Power front Zone (W)	Power front Zone (W)	Total power (W)
1	1	60	60	120
…	…	…	…	…
13	8	1470	1470	2940
14	9	**2300**	**2300**	**4600 / 4600**
P	P	not possible	not possible	

5.5 - TIMER FUNCTION

Submenu: Minute Minder, Count-up timer, Count-down timer.

The Minute Minder is directly active, when no zone are turned on.

If no key is touched within 10 seconds the timer menu is left.

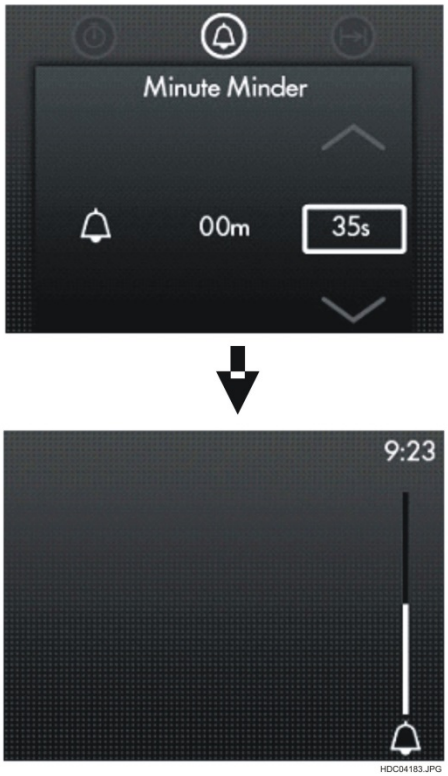


Fig. 33

Fig. 34

Fig. 35

There are 3 timer functions: Automatic Counter , Power-off timer and Minute Minder . To select the timer function touch again and again until the indicator of a necessary function comes on.

Automatic Counter
Use this function to monitor how long the cooking zone operates. It starts automatically and comes on below heat setting in the cooking zone on the display.
• **To reset** the Automatic Counter , touch to get the Automatic Counter . Then select the cooking zone from the list with arrows and touch **OK** to confirm.

Power-off timer
Use the Power-off timer to set how long the cooking zone operates for one cooking session. Touch twice to get the Power-off timer. Then select the cooking zone from the list with arrows and touch **OK** to confirm. Set the time with arrows. When the time elapses, the zone switches itself off.
• **Stopping the sound:** touch

Minute Minder
Touch three times to get the Minute Minder. Set the time with arrows. The Minute Minder indicator comes on. When the time elapses, the sound operates.

5.6 - POWER LEVEL COUNT-UP TIMER FUNCTION

ELECTROLUX MODELS

Fig. 36

Rear right	Residual heat level 3 red; Power level 9; count-up timer.
Front right	Residual heat level 2 orange; Power level 8; count-up timer.
Front left	Power level in adjustment, isn't active; White circle.

AEG MODELS

Fig. 37

Rear right	Residual heat level 3 red; Power level 12; count-up timer.
Front right	Residual heat level 2 light red; (2/3 red, 1/3 grey); Power level 8; count-up timer.
Front left	Power level in adjustment, isn't active; Dashed white circle.

5.7 - POWER LEVEL COUNT-DOWN TIMER FUNCTION

ELECTROLUX MODELS

Fig. 38

Residual heat level 3 red;
Power level 9;
Count-down timer, 25% run off.

AEG MODELS

Fig. 39

Residual heat level 3 red;
Power level 12;
Count-down timer, 0% run off.

5.8 - POT DETECTION FUNCTION

The missing or not accepted pot is shown in the display by a questions mark.
A signal sounds after 3 seconds.
Simultaneously displayed „No suitable cookware“ at the top for AEG models and at the bottom for Electrolux models.
The zone stays active for 2 minutes.

Fig. 40

The table gives examples of relationship between zone diameter and minimum diameter of the pot use (*).

Nominal zone diameter	Minimum pot bottom diameter in user manual with a reasonable power
210 Maxima	125mm
210mm	145mm
180mm	120mm
145mm	100mm
290mm	160mm
280mm	230mm

(*) NOTE: Different values in different models depending on the software installed.

5.9 - POWER FUNCTION AND MANUAL BOOST FUNCTION

Each cooking zone possesses a boost function. This set for a defined time the cooking zone on power level 14 and reduces afterwards to the set power level between 1 to 13 (see Fig. 35 and 36).

Note! The time for the cooking zones are defined for standard uses which are not covering differences of weight, amount or cooking equipment. It is just a help to do the cooking process partly automatically.

Activation of boost:
Touch the power level P and pull the finger downwards to the intended cooking level. If the boost is activated the display shows “A” in the screen.

Deactivation of boost:
Touch a cooking level of the active zone when the „A“ is in the display.

POWER FUNCTION

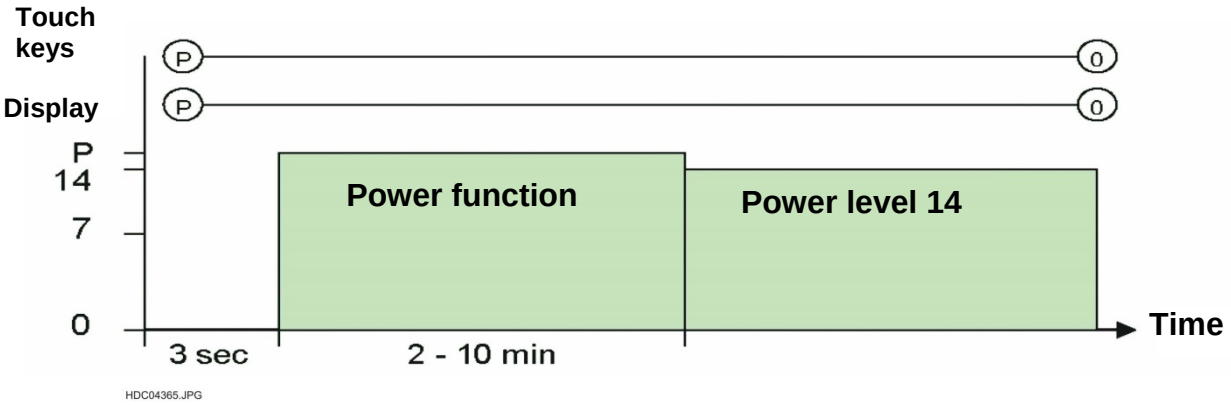


Fig. 41

MANUAL BOST FUNCTION

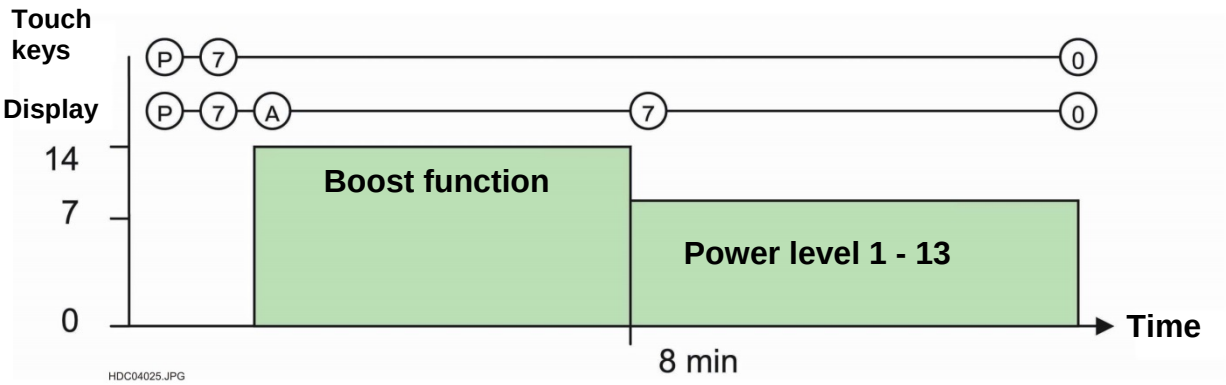


Fig. 42

5.9.1 - POWER LEVELS DEPENDING ON COOKING ZONE

14 POWER LEVELS	9 POWER LEVELS	POWER LEVEL %	BOST TIME MIN.	Ø 145 mm	Ø 180 mm	Ø 210 mm MAXIMA	Ø 210 mm HP	Ø 280 mm 3,7 Kw	Ø 280 mm 5,2 Kw	Ø 280 mm INNER
STOP&GO	1*	2,50%	0,20	30W	40W	60W	60W	88W	88W	40W
1	1	3,00%	0,20	40W	50W	70W	70W	105W	105W	50W
2	2	5,50%	0,20	80W	100W	130W	130W	193W	193W	100W
3		8,00%	1,35	110W	140W	180W	180W	280W	280W	140W
4	3	10,50%	3,12	150W	190W	240W	240W	368W	368W	190W
5		13,00%	4,40	180W	240W	300W	300W	455W	455W	240W
6	4	15,50%	5,85	220W	280W	360W	360W	543W	543W	280W
7		18,00%	8,20	250W	320W	410W	410W	630W	630W	320W
8	5	21,00%	10,20	290W	380W	480W	480W	735W	735W	380W
9		25,00%	10,60	350W	450W	580W	580W	875W	875W	450W
10	6	31,00%	2,02	430W	550W	710W	710W	1085W	1085W	550W
11		38,00%	2,02	530W	650W	870W	870W	1330W	1330W	650W
12	7	45,00%	2,46	630W	810W	1040W	1040W	1575W	1575W	810W
13	8	64,00%	2,87	900W	1150W	1470W	1470W	2240W	2240W	1150W
14	9	100,00%	-	1400W	1800W	2300W	2300W	3500W	3500W	1800W
P	P		-	2500W	2800W	3200W	3700W	3700W	5200W	2800W
POWER TIME				2 min.	8 min.	10 min.	10 min.	10 min.	5 min.	5 min.

5.10 - AUTO SWITCH OFF FUNCTION

If a cooking level isn‘t changed for a certain time, the zone is switched off.
If the auto switch-off was activated the customer should be informed that the auto switch-off was active to avoid false calls for failure.

Cooking level 0 - 9	Cooking level 0 - 14	Auto power off (hours)
1 - 2	1 - 3	6
3 - 4	4 - 7	5
5	8 - 9	4
6 - 9 (P)	10 - 14 (P)	1,5

5.11 - LANGUAGE AND SIGNAL FUNCTION

To change the language, start the appliance with and than touch **OK**.
In the display appear the language- and signal- menu.
Select with arrows the language menu. Touch **OK** to confirm. The display shows the list of languages. Touch or to set the language. Touch **OK** to confirm.

Language-menu: It may be selected of 17 **language** and International.

Signal-menu: It may be selected a Click, **Beep** or sound off (see the table).

SOUND MODE	CLICK	BEEP	SOUND OFF
On/Off	yes	yes	yes
Bridge	yes	yes	no
Child lock	yes	yes	no
Stop&Go	yes	yes	no
Timer select	yes	yes	no
Up	yes	yes	no
OK	yes	yes	no
Down	yes	yes	no
Slider1	Every level change	Touch slider	no
Slider2	Every level change	Touch slider	no
Slider3	Every level change	Touch slider	no
Slider4	Every level change	Touch slider	no
Alarm	yes	yes	no
Timer ended	Timer signal	Timer signal	Timer signal
Pot detection	Double beep	Double beep	no

5.12 - RESIDUAL HEAT INDICATION FUNCTION

	DISPLAY FORM	COLOR	TEMPERATURE
Level 0	Circle small	Grey	< 65°C
Level 1	Circle small	Light red	65 – 79°C
Level 2	Circle large	Light red	80 – 103°C
Level 3	Circle large	Red	> 103°C

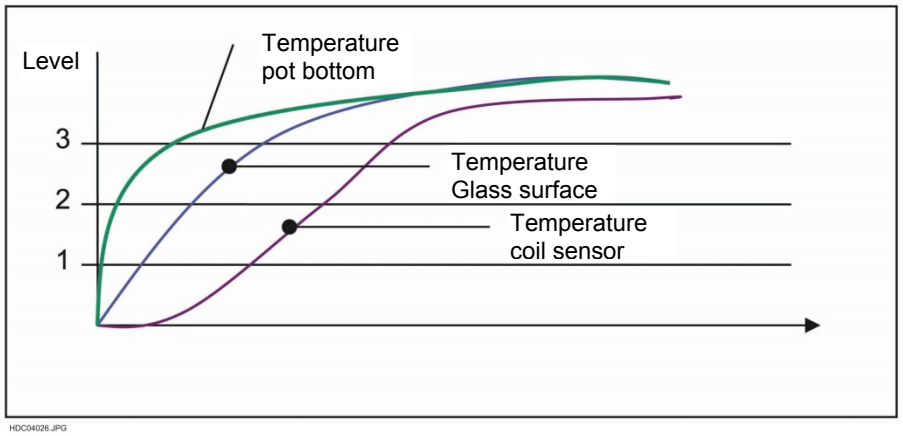


Fig. 43

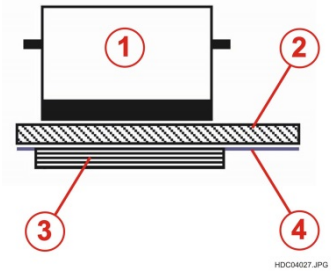


Fig. 44

1 - POT
2 - GLASS CERAMIC
3 - INDUCTION COIL WITH SENSOR
4 - INSOLATION-PLATE

ELECTROLUX MODELS

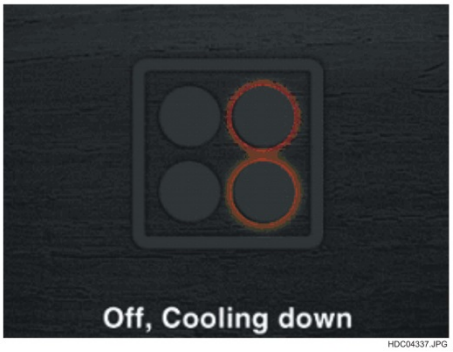


Fig. 45

AEG MODELS

Fig. 46

NOTE:
At short cooking processes the glass surface can be hot, while no residual heat is displayed. This causes by the slow temperature transmission of the glass that takes time until the sensor „sees“ the temperature of the glass..

5.13 - FRY ASSIST

The hob measures the pan temperature with a special sensor in the coil through the glass. Depending on the temperature measured power is applied to maintain the set temperature.

Use the function:

1. Switch on the hob. The zones are off.
2. Press the assist key . Then in the TFT appears.
3. With the key and the desired temperature can be set, then confirm with OK. The hobs starts with pot detection on BOTH left zones with Cook Assist.
4. If on both zones a pan is detected, hob asks, if the PLANCA mode shall be activated. Select yes or no using or and confirm with OK.

   NOTE: The mode works only with Electrolux Plancha! No guarantee for correct function with any other product! If just on the front left a pan is detected, the request for the Plancha mode is skipped.

5. The hob heats up the pan or Plancha. When the heat up is finished, the hob beeps and the „heating up“ indication is clear. The hob is in operating mode Cook Assist.
6. To adjust the temperature select to increase or to decrease.
   When you increase the temperature the symbol comes on.
   When you decrease the temperature the symbol comes on.
   The hob reminds itself to the last used settings when the level is used next time.

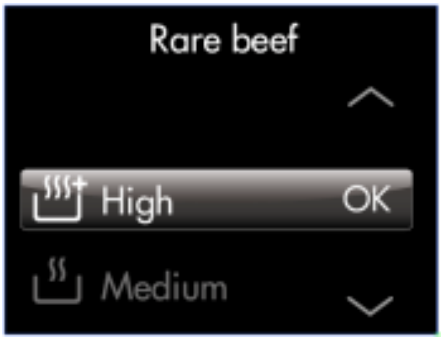


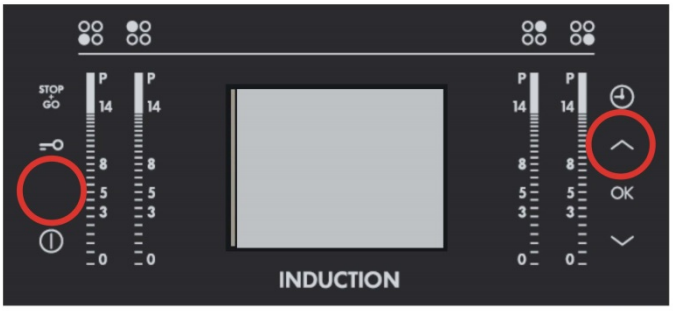
Fig. 47

Fig. 48

6 - SERVICE MODE

To start the Service Mode follow the steps:

1. Switch appliance on
2. Touch both keys together for 2 seconds



HDC03984.JPG

Fig. 49

3. The version of the user interface and the power module will be displayed.

HDC03985.JPG

Fig. 50

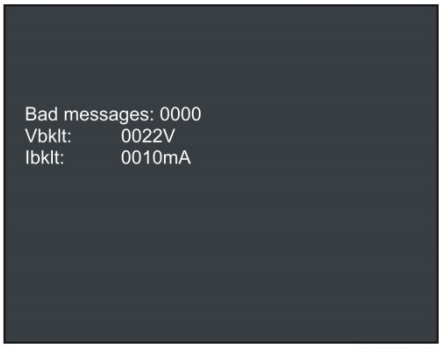
4. With the Arrow up the following screens can be displayed step by step.

Display of the configuration setting. This is required for the check of the zone configuration for the electrician.
The values are dependent on the appliance, size of zone and its position.

HDC03986.JPG

Fig. 51

Required for the electrician to verify if the display is supported with power.

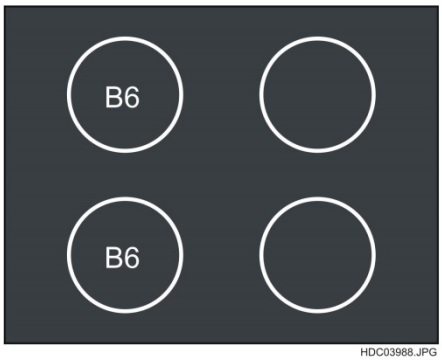


HDC03987.JPG

Fig. 52

The actual failure is displayed a Hexadecimal code the detect the failure source more detailed.

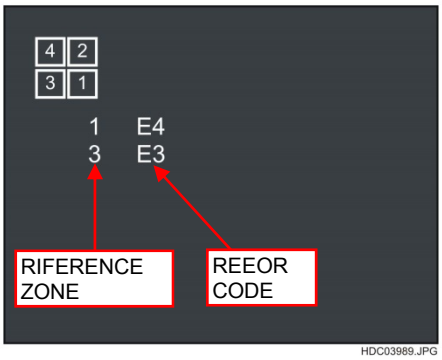
Fig. 53



6.1 - LIST THE SEQUENCE OF ERROR CODES

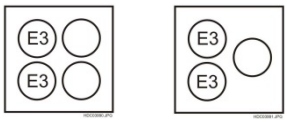
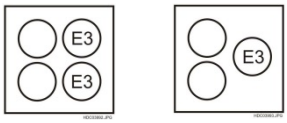
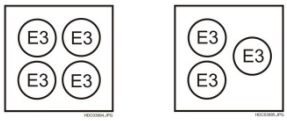
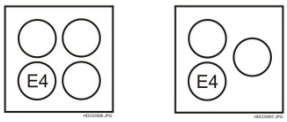
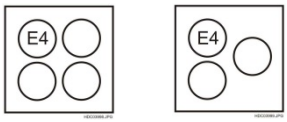
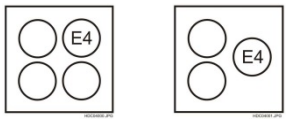
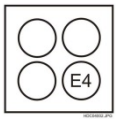
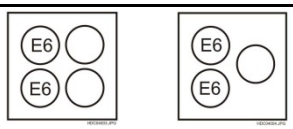
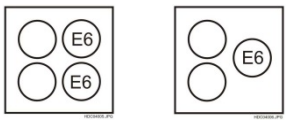
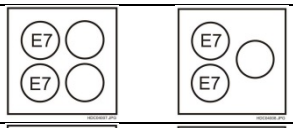
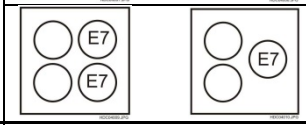
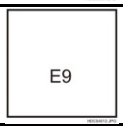
The number in the boxes are showing the related zone.
A list shows the last 20 failures with number of the zone.

Fig. 54



7 - FAILURE ANALISIS

7.1 - DISPLAYED FAILURE CODES

ERROR CODE	DISPLAY	ROUTE CAUSE	SOLUTION
E3		Over voltage by wrong connection Black = Phase Brown = Neutral Blue/Grey = Phase	Connect appliance in right way Black = Phase Brown = Phase Blue/Grey = Neutral
		Over voltage by wrong connection Black = Neutral Brown = Phase Blue/Grey = Phase	Connect appliance in right way Black = Phase Brown = Phase Blue/Grey = Neutral
		Over voltage by wrong connection Black = Phase Brown = Phase Blue/Grey = Phase	Connect appliance in right way Black = Phase Brown = Phase Blue/Grey = Neutral
E4		Temperature sensor coil front left detects over temperature	Cool down appliance. If E4 still displayed → coil defect
		Temperature sensor coil front left defect	Change coil front left
		Temperature sensor coil rear left detects over temperature	Cool down appliance. If E4 still displayed → coil defect
		Temperature sensor coil rear left defect	Change coil rear left
		Temperature sensor coil rear right detects over temperature	Cool down appliance. If E4 still displayed → coil defect
		Temperature sensor coil rear right defect	Change coil rear right
		Temperature sensor coil front right detects over temperature	Cool down appliance. If E4 still displayed → coil defect
		Temperature sensor coil front right defect	Change coil front right
E6		Power board on left induction module defect	Change power board on left side. Attention! No Jumper on the left induction module
		Power board on right induction module defect	Change power board on right side. **Attention**! Place Jumper and 14V power supply for interface on the right module.
E7		Fan on the left module is hard going or defect	Change fan of the left module.
		Fan on the right module is hard going or defect	Change fan of the right module.
E8		Connection failure between modules left/right and interface	1.Check mains connection/supply; 2. Check cable harness / bus Wiring
E9		Internal failure of the user interface	Change interface

7.2 - FAILURE

FAILURE DESCRIPTION	ROUTE CAUSE	ACTION
Continuous signal sounds. When the appliance is switched on the „E3“ is display	Wrong connection; details see table failure code	Connect the appliance in the right way
Appliance is not operating	L2 (Brown) without voltage	Check installation and fuses
	Power board right is defect	Change Power board Right
	Interface defect	Change Interface
	5V power supply is not available	Check voltage on bus wiring at Interface
Defects on bus wiring and induction module visible	Bus wiring got contact to ground	Change module and bus wiring.
Signal sounds at switching on but no display within 10sec	14V voltage supply is defect	Check voltage, eventually exchange wiring
	If 14V voltage is present, Interface is defect	Change Interface
E8 Failure is displayed in the left cooking zones	Mains voltage on left module is not available (black cable)	Check installation, Check wiring between connector box and induction module
	Bus wiring between the both modules worse in contact or defect	Check wiring and change it eventually.
	Left module is defect	Change left module
E8 Failure in all cooking zone displayed	Bus wiring to the interface not connected or defect	Change bus wiring to the interface
E7 Failure is displayed on the cooking zones but the zones can still operate.	Fan is blocked or defect	Remove parts which are blocking the fan. If it helps not exchange fan.
E4 Failure is displayed in the cooking zone	Sensor of the displayed zone is defect	Change relation coil
On double circuit coil changes the display between „?“ and power level. No power, only click like at non magnetic pots.	Outer circuit of double coil is defect or not connected	Check connection; Exchange coil
No function on the cooking zone. Display „?“	Coil defect or not connected	Check connection; Exchange coil
On 2-circuit coil got no power	Inner circuit of coil is defect or not connected	Check connection; Exchange coil
	Dummy NTC defect	Exchange Dummy NTC
E6 in the left zones displayed	Left module defect	Change left module
E6 in the right zones displayed	Right module defect	Change right module

8 - DEMOUNT OF THE APPLIANCES

ATTENTION!
Don’t use a screw driver or other tools to lift the glass from the worktop. This will cause damages on the back printing of the glass ceramic. These damages are visible from the top and could not repair. Push the appliances from lower side upwards out of the worktop.

IMPORTANT NOTE:
Do not lay the hob with the glass surface to open the appliances. The coils and the interface may move from its position while the appliance is turned.

8.1- OPEN THE APPLIANCE

8.1.1 - STANDARD APPLIANCE

Do following steps:

1. Place the hob on a protection layer to avoid scratches on the worktop
2. Take the **tools for opening** the hob and open spring by spring.
3. Lift the glass in the corners a little bit that the springs are not locking again.
4. Remove the glass carefully that the back coating is not damaged.

ATTENTION! Do not use a tool to lift the glass from the coil carrier

Fig. 55

8.1.2 - FRY ASSIST APPLIANCE

Do following steps:

1. Place the hob on a protection layer to avoid scratches on the worktop.
2. Take the **tools for opening** the hob and open spring by spring.
3. Lift the glass in the corners a little bit that the springs are not locking again.
4. Remove the glass carefully that the back coating is not damaged.

ATTENTION! Do not use a tool to lift the glass from the coil carrier

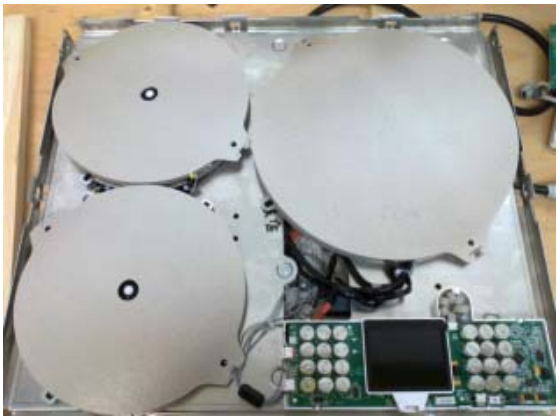


Fig. 56

8.2 - CLOSE THE APPLIANCE

8.2.1 - STANDARD APPLIANCE

Do following steps:

1. Make sure that the interface and the coils with the insulations are mounted in right positions.
2. By the use of a new glass or new interface the protection foils need to be removed before the glass is placed.
3. Before closing the appliance make sure that no dust is between glass and screen. Blow the dust away or clean it with a clean towel.
4. Make sure that all springs are clicked in the right way.

IMPORTANT NOTE! The brackets in the corners of the coil carrier may not remove before insertion of the appliance to the worktop.

8.2.2 - FRY ASSIST APPLIANCE

60cm single and bi-phase supply

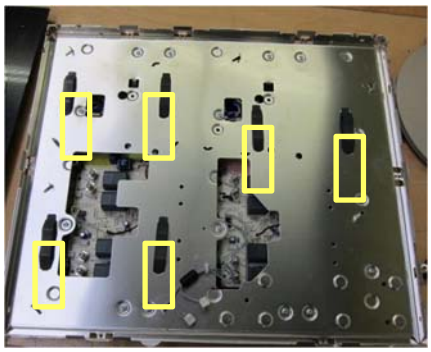


Fig. 57

80cm

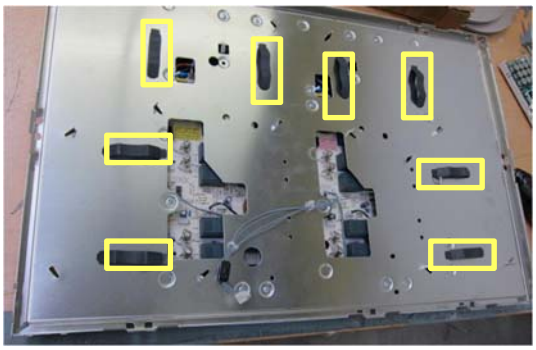


Fig. 58

Do following steps:

1. Check if all springs below the coils are in the correct positions.
2. Make sure that the interface and the coils with the insulations are mounted in right positions.
3. By the use of a new glass or new interface the protection foils need to be removed before the glass is placed.
4. Before closing the appliance make sure that no dust is between glass and screen. Blow the dust away or clean it with a clean towel.
5. Make sure that all springs are clicked in the right way.

IMPORTANT NOTE! The brackets in the corners of the coil carrier may not remove before insertion of the appliance to the worktop.
Ensure that all coils are in correct position to avoid a damage of the glass!

8.3 - REPLACE OF THE USER INTERFACE

Do following steps:

1. Remove the insulation plate.
2. Remove the user interface complete and remove the connectors of the cables on the left side.
3. Connect cables to the new electronic and place it to the coil carrier.
4. Place the Insulation plate again.
5. Remove the protection foil on the screen before closing the hob.

Fig. 59

NOTE:
Do not touch on the screen because of the sensitivity of the displays. If the frame with the screen is removing the display loses the contact to the display board. To reconnect the screen the frame need to be mounted and afterward the screen with the sealing is connected and pressed into the frame. But this is not recommended in terms of sensitivity.

8.3.1 - ASSEMBLING THE DISPLAY

Before installing the display in the electronic card is necessary to insert the silicone frame.

Mounting the silicone frame:

Place the TFT-display in two edges of the silicone frame (see Fig. 60), afterwards put the other both edges in the silicone frame (see Fig. 61).

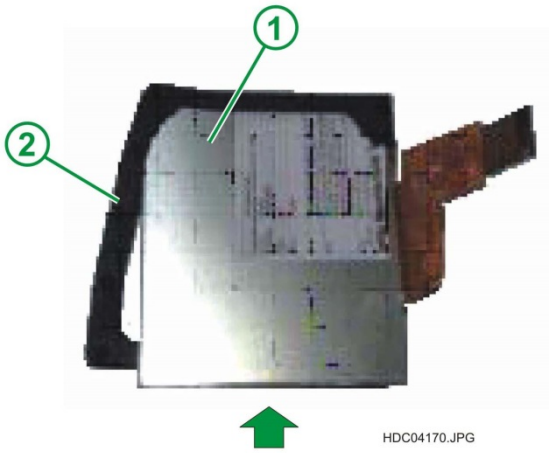


Fig. 60

1 - TFT COLOR DISPLAY
2 - SILICONE FRAME

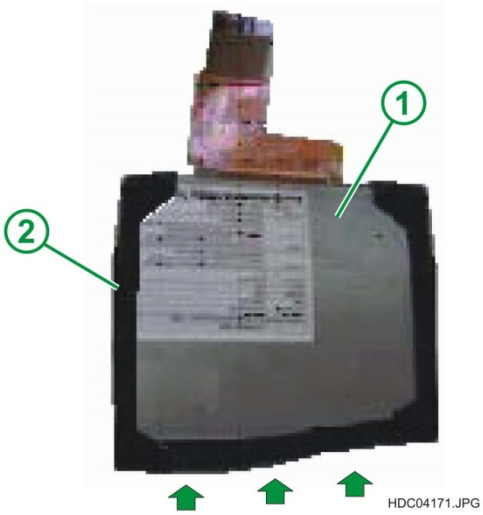


Fig. 61

1 - TFT COLOR DISPLAY
2 - SILICONE FRAME

Display assembly (see Fig. 51):

1. Assemble the display support (1) on the electronic.
2. Connect the flat cable (3) in the connector (2). Open the flap connector, fit in the flat cable (3) and close the flap connector.
3. Place the TFT-display (4) in the support display (1) from rear, afterwards fit the front of the display on the display support.

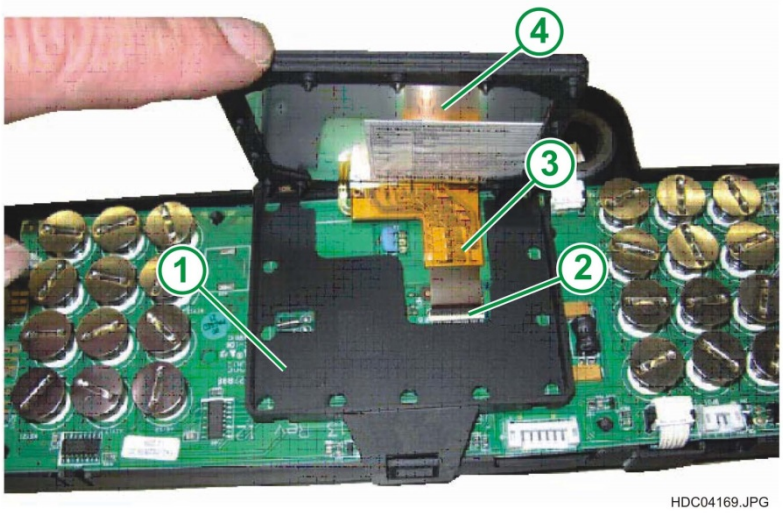


Fig. 62

1 - TFT DISPLAY SUPPORT
2 - CONNECTOR
3 - FLAT CABLE
4 - TFT COLOR DISPLAY

8.4 - EXCHANGE OF COILS

8.4.1 - STANDARD PRODUCTS

Do following steps:

1. Loose the screws of the coils and remove the wires.
2. Loose the sensor cable.
3. Remove the aluminium finger and the insulation of the old coil and place it on the new one.
4. Reconnect the coil to the power board and place the coil on the coil carrier.

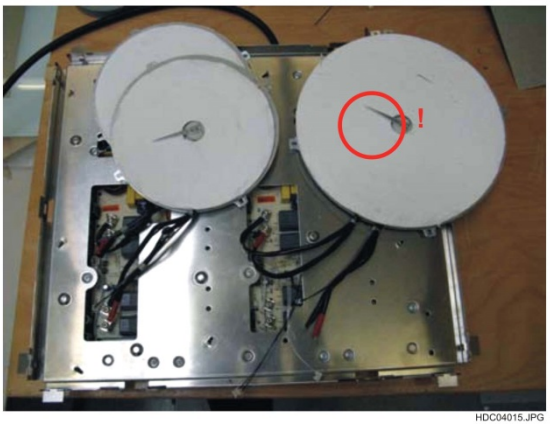


Fig. 63

NOTE:
The aluminium fingers on the coils need to be mounted to make sure that the temperature limits are covered.

8.4.2 - FRY ASSIST PRODUCTS

Do following steps:

1. Loose the screws of the coils and remove the wires.
2. Loose the sensor cable.
3. the new coil comes with the temperature sensor
4. Reconnect the coil to the power board and place the coil on the coil carrier.

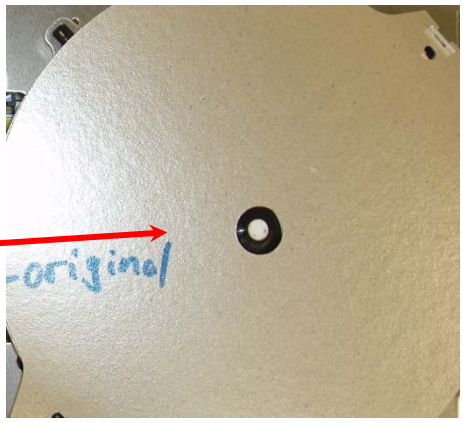


Fig. 64

NOTE:
There are NO aluminium fingers on the 210 coils!

8.5 - EXCHANGE OF THE INTERNAL WIRING

Some failures are caused by worse contacts to the internal wiring.

Do following steps:

1. Open appliance.
2. Demount coils and user interface.
3. Remove the 15 screws to the coil carrier, which connects the modules with the coil carrier.
4. Exchange the defect wires and check if all connectors are well linked (it must be engaged).
5. Assemble the coil carrier again and make sure the ground is connected. Apply coils and interface.

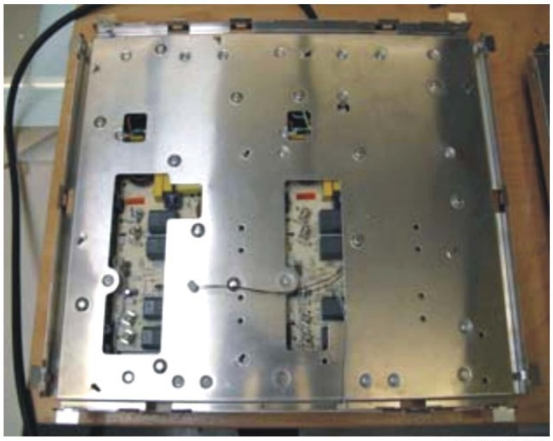


Fig. 65

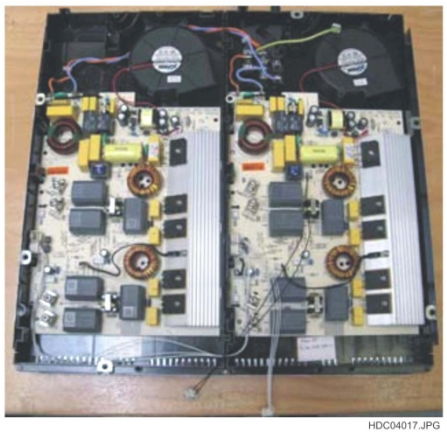


Fig. 66

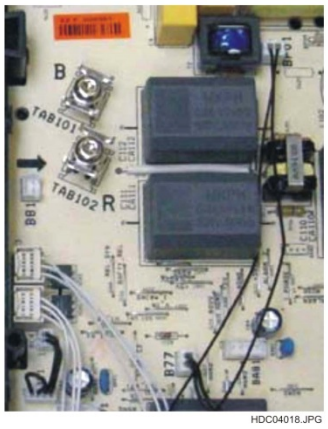


Fig. 67

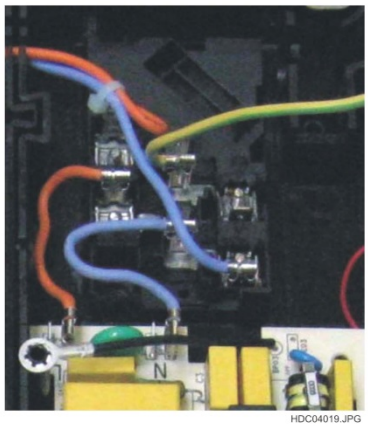
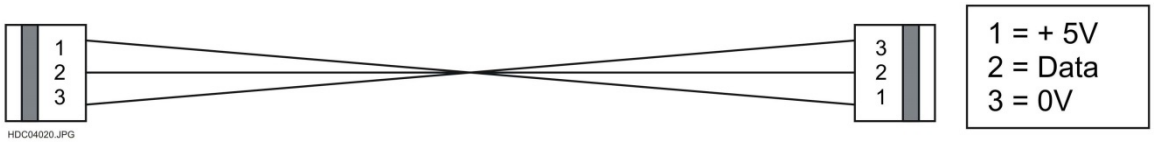


Fig. 68

NOTE:
The screen may not touch because of the sensitivity against mechanical stress and finger dips.

Bus-Wiring Module – Module 450mm

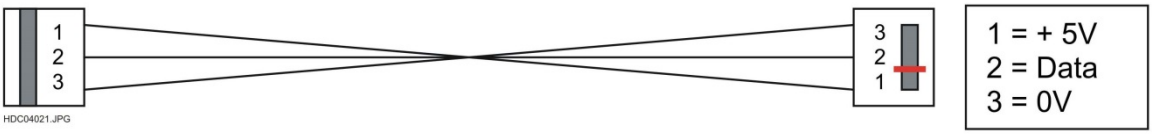


Module Module

Plug: 2x Rast2,5 open, without Coding

Fig. 69

Bus-Wiring Module – User interface



Module Interface

Fig. 70

Power supply cable 14V Module right – user interface

Interface Module

Fig. 71

8.5.1 - WIRING DIAGRAM

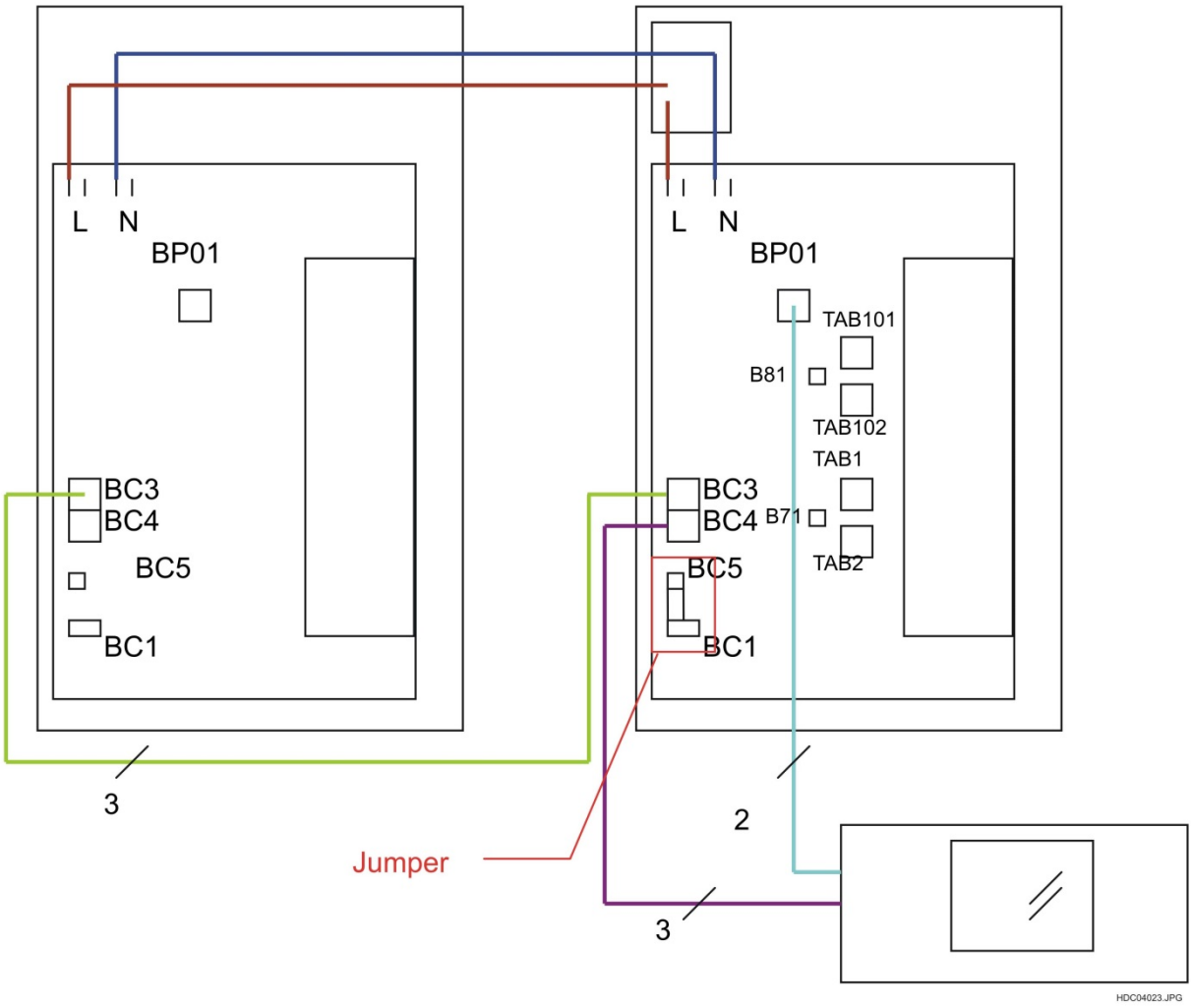


Fig. 72

8.6 - EXCHANGE OF THE FAN

The failure code E7 on the relating module (both left zones displayed ⟶ left module). On defect or hard going the semiconductors are not cooled enough and the power output will be reduced to minimum power.

Do following steps:

1. Open the appliance.
2. Remove coils and user interface.
3. Remove the coil carrier.
4. Disconnect the fan from the power board.
5. Turn the module and loose the screws of the fan.
6. Screw the new fan and connect it to the power board.
7. Mount the coil carrier again and make sure that the ground is connected. Apply coils and interface.

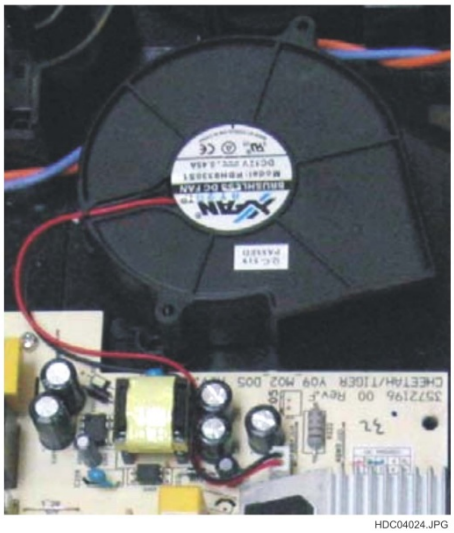


Fig. 73

NOTE:
The screen may not touched because of the sensitivity against mechanical stress and finger dips

9 - ALARM SIGNALES

9.1 - HOT POT ON THE DISPLAY RANGE

Fig. 74

If a hot pot or other hot objects are placed on the interface, it can be damaged the display.
The display is heat resistant approx. 80°C. If there are more than a protection on the display is required.

If one or more keys are covered for at least 10 seconds a signal sounds (2 seconds on….. 2 seconds off) and the screen starts to flash in red colour.

NOTE: Hot pots on the places over the screen may cause that the contrast of the screen disappears. The contrast normally gets back when the screen is cooled down again.

9.2 - OVERHEATING OF THE SCREEN

In normal use and also in the extreme use the picture of the screen stays stabile. Hot pots or oven pans can have an influence on the contrast of the screen if they are placed of the user interface. If this happens more often the screen could be damaged.

10 - NOISE IN OPERATION MODE

10.1 - HOW IT WORKS INDUCTION

By a changing magnetic field the magnetic part of the pots is creating energy inside of the pot.

10.2 - FAN NOISE

Induction hobs are changing the frequency by semiconductors from 50/60Hz into 19 – 30kHz. For that process the semiconductors produces heat which need to be blown away. The heat sink stores the energy what causes the fan starts in a delay and works ahead while the hob is off. The speed of the fan is dependent on the heat of the heat sink.

10.3 - LOW FREQUENCY VIBRATIONS

By the high energy of the magnetic field the forces causes vibrations of the pot which transfer it back to the hob.

11 - DEMO MODE

The Demo Mode is used to operate the appliances without power output on fairs or stores.

11.1 - DEMO MODE ON

1. Touch on/off for 10 seconds, a triple beep sounds

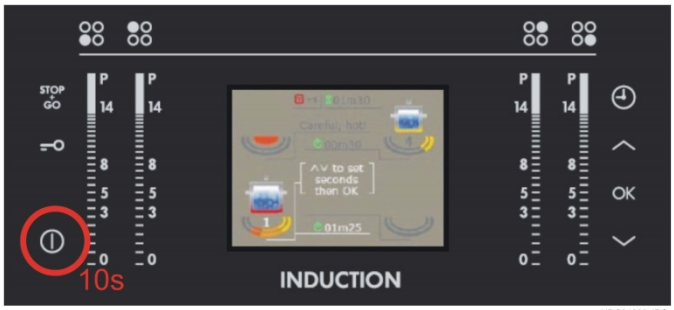


Fig. 75

2. Touch the arrow up for 3seconds. The display shows „DEMO“

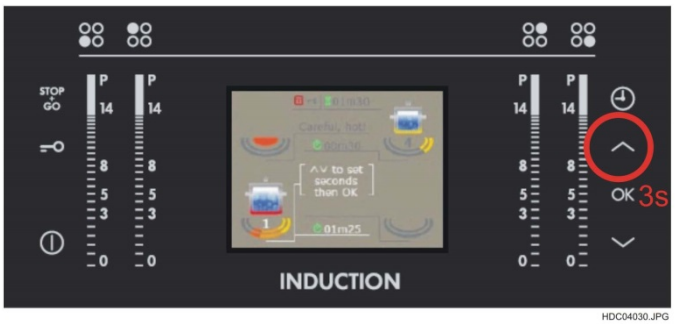


Fig. 76

11.2 - DEMO MODE SWITCH OFF

1. Touch on/off for 10seconds, a triple beep sounds

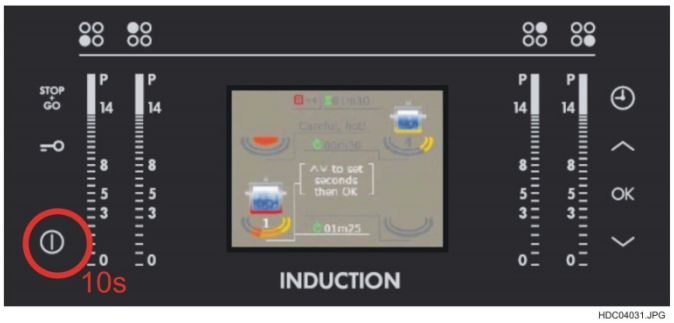


Fig. 77

2. Touch the arrow down for 3seconds. The display shows no “Demo”

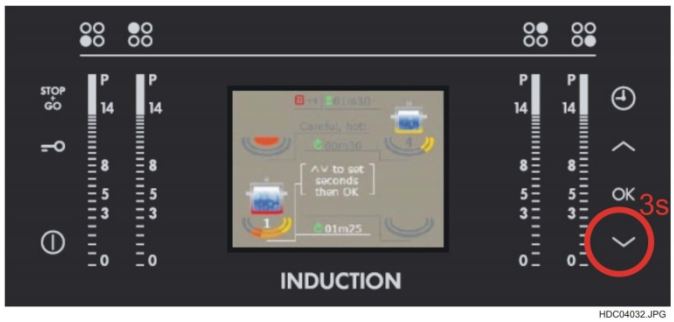


Fig. 78

12 - FRY ASSIST- GENERAL HITS:

- No manual heat up! Done by the hob itself!
- No change of settings necessary during frying using the Cook Assist, The temperature control ensures the correct temperature.
- Cook assist is designed for pan frying; Deep frying need to be performed in manual mode.

Pans

- Pans need to have a flat bottom; NO EMBOSSMENT accepted! The embossment prevents a correct temperature measurement and a correct function of the Cook Assist.
- Best use: Stainless steel pans or cast iron pans with flat bottom.
- Big and heavy pans have higher heat capacity and have a longer heat up time.
- The pan size and pan material have impact on the final pan temperature
- Frozen food has an impact on the frying process. It takes a lot of heat energy for melting the food in the pan.
- Assist: Coated pans on the low and medium level only to avoid an overheating of the pan’s coating. Just non coated for high level frying to avoid damaging of overheating using high temperature with assisted frying.
- Plancha-Modus with Cook Assist:
- The cook assist just works with AEG or Electrolux-Plancha. Other equipment Will not work correctly. No warranty on function of no responsibility is accepted for damaged cook ware.
- NEVER place 2 single pans or pots with Cook Assist in Plancha-mode

12.1 - HOW TO SELECT THE RIGHT COOK WARE

There popped up the need of pan test at the customer: some pan's bottom are bended too much so Havana won't work.

1. use a 2ct or 5ct EU-coin (1.7mm).
2. use a ruler.
3. place the ruler on its edge over pan's bottom.
4. try to move the coin between ruler and pans bottom.

Result:

Coin can pass: pan failed, NOT suitable for Fry Assist.
Coin cannot pass: pan IS suitable for Fry Assist.

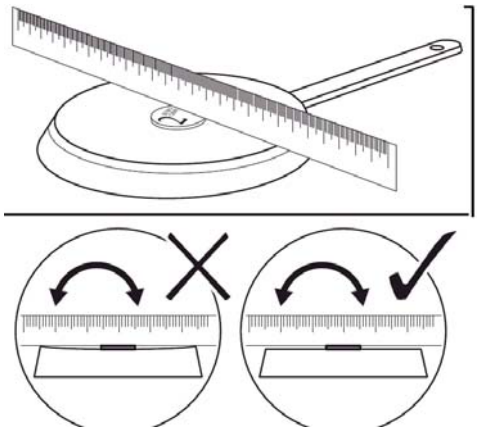


Fig. 79

12.2 - TROUBLE SHOOTING

- Pans have a reasonable influence on food quality provided by Fry Assist:
  The Influence parameters are:
  - power consumed
  - diameter (mass)
  - bending of bottom (air gap) – thermal contact to sensor

  In general:
  - small light weight pans get hotter than big heavy ones
  - bigger gap causes higher temperature in pan than a small air gap
- Reasonable temperature deviation on different pans, the guidance of customer in the user manual to achieve a reproducible result and how to come to a good result is tricky.
- Food conditions (frozen / out of fridge) and pan type increase the deviation of temperature in the pan impacting the frying. This can require the next higher temperature level (mid -> high)
- Customer needs to find suitable temperature settings by himself.
  Customer need to these run tests by his own, just guided by user manual.
- Longer heat up duration: Assist: < 8 minutes <=> manual mode: around 2-3 min

12.3 - NOT SATISFYING FRYING RESULTS

Pan smokes during heat up	wait until heat up is ready. Some fat residuals are in the pan.
Heat up too slow	You are using a heavy pan, it can store a high level of heat, which needs a certain time. A heavy pan usually needs 5 min and more to heat up. Light weight pans are heated up much quicker, but can store just a little energy
Food inside still raw	frying time too short, extend frying time
	Temp level too high, select lower temperature level
Food burnt	level too high, select lower temperature level
Food too pale, browning insufficiently	time too short, extend frying time
	level selected too low, select higher level
frying process do not start when food in fat applied	the oil needs some time to be heated up.
	It needs a certain time to bring the high amount of oil to frying temperature. 500ml oil need 2-3 min to be ready for frying
Is the frying according your expectations?	Yes => no change No, too less => increase level using fine adjustment No, too strong => decrease level using fine adjustment

13 - REVISIONS

Revision	Date	Description	Author	Approved by - on
00	12/2009	Document Creation	[DGT]	
00	11/2010	Complete revision of the Manual	FV [DGT]	
02	01/2014	- Add chapter 2.1.2 and 2.1.4 (FRY ASSIST). - Add chapter 4.2 and 4.4 (FRY ASSIST). - Add chapter 5.1.3 (FRY ASSIST). - Add chapter 8.1.2 and 8.2.1 (FRY ASSIST). - Add chapter 8.4.2 (FRY ASSIST). - Add chapter 12 (FRY ASSIST). - Updated Chapter 13 - Revisions. - Renamed chapters and figures.	FV [KR - DGT]	