FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900

INSTRUCTIONS	Notes
PM 700/800/900 ED	
Technical Support Contact	Keep the information with you when contact technical support, this will help us to identify the equipment and trouble shoot accurate
IMPORTANT!	• All part replacements must be carried out by trained personnel • Use only original parts • Electrical work must always be performed by authorized personnel

OVEN IDENTIFICATION	Notes

1. Model-Type

_____

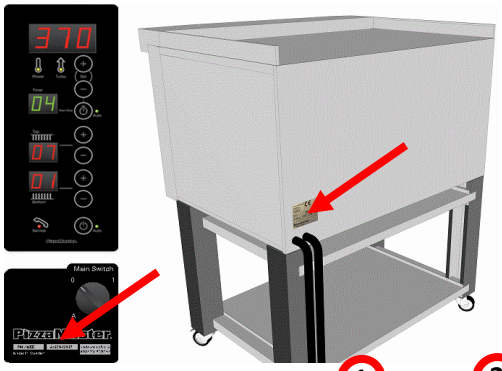
2. Serial No.

_____

3. Power Supply:

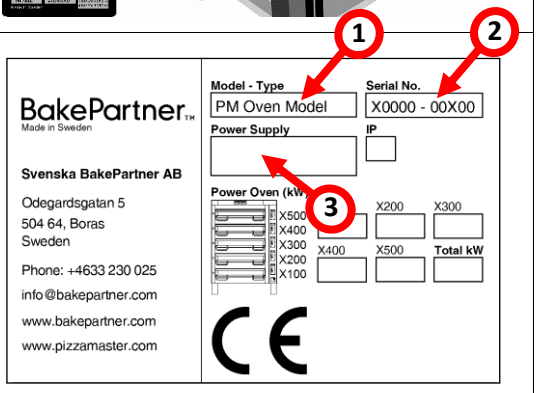
a) 230V 1ph + N ..... ☐
b) 400V 3ph + N ..... ☐
c) 480V 3ph + N ..... ☐
d) 230 3ph/400V 3ph + N... ☐
e) 200V 3ph ..... ☐
f) 208V 1ph ..... ☐
g) 208V 3ph ..... ☐
h) 240V 1ph ..... ☐
i) 240V 3ph ..... ☐
j) 400V 3ph ..... ☐
k) 480V 3ph (440 - 480)..... ☐

Find the information under the main Switch or on the power rating plate.



Fill points 1 to 3 using the information on the power rating plate.

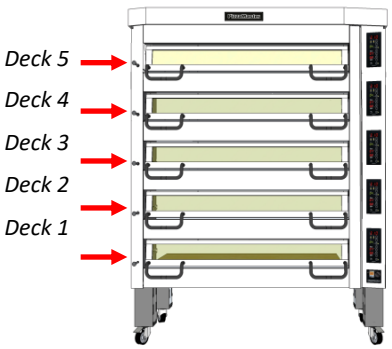
1- Model-Type
2- Serial No.
3- Power Supply



4. Number of decks

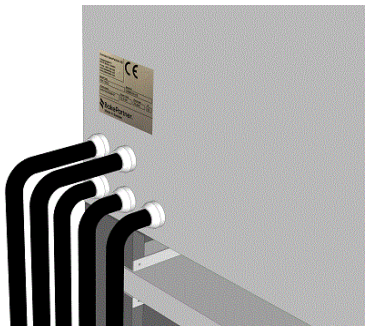
Decks are counted from bottom to top, maximum 5 decks

1 Deck ..... ☐
2 Decks ..... ☐
3 Decks ..... ☐
4 Decks ..... ☐
5 Decks ..... ☐



5. Number of Cables

1 Cable ..... ☐
2 Cables ..... ☐
3 Cables ..... ☐
4 Cables ..... ☐
5 Cables ..... ☐



FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900

VENTILATION CHECK

1. Exhaust Hood -(Recommended Option)*

The oven is located under a commercial hood

Your oven could be connected with one of the following connections

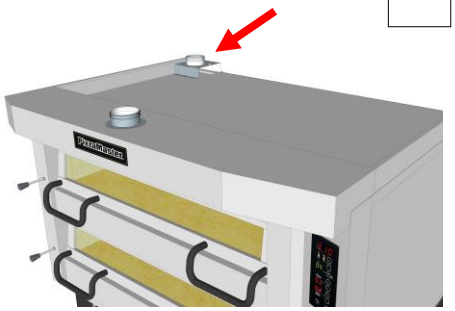
2. Exhaust tube or Pipe

The oven is connected to an exhaust tube ventilation system to the top front and top back of the oven

3. No ventilation

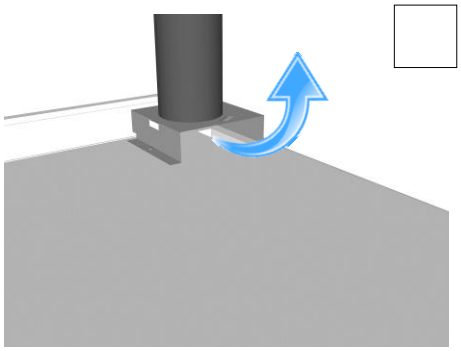
The oven is not connected to a ventilation system

Make these observations and cross all the boxes



4. Flue diverter

Be sure that the back flue diverter is connected firmly to the oven



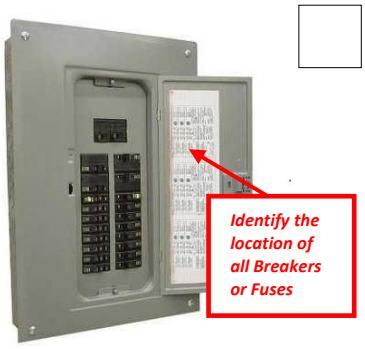
5. Flue diverter air circulation

*Regardless of the connection, the flue diverter base **needs** to be open at all times*

6. Warning!

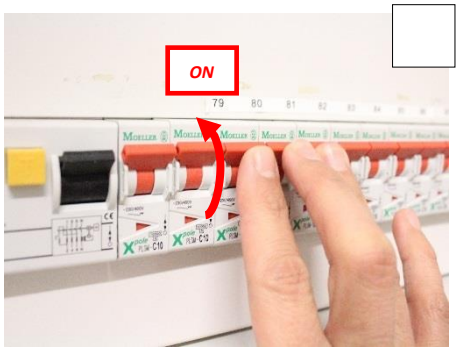
***DO NOT** place any object blocking the ventilation. this affects the baking, oven performance and may cause fire*

EXTERNAL CONNECTION CHECK



***1.** In your **electrical circuit box**, check and identify the position of all the external circuit breakers or fuses for the oven*

Check external breakers or fuses

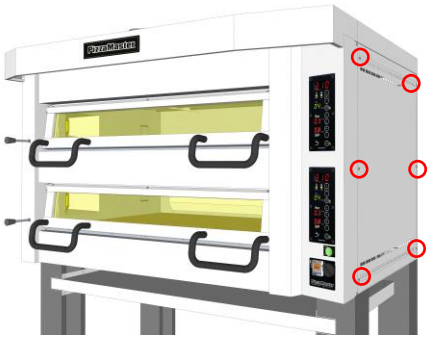
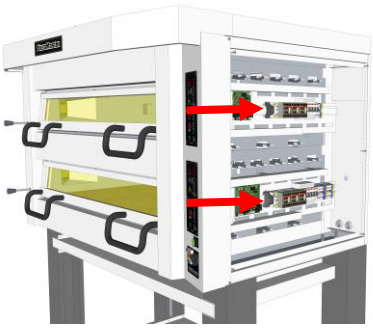
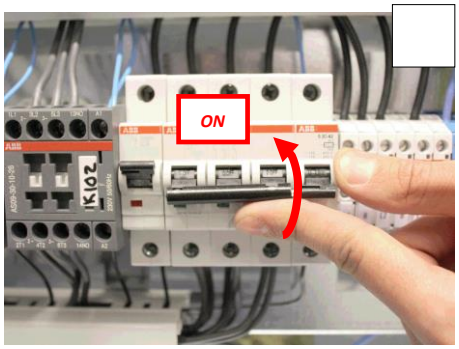
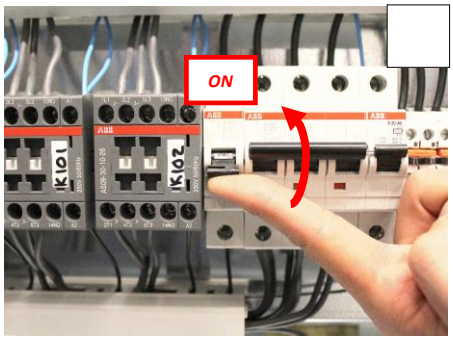
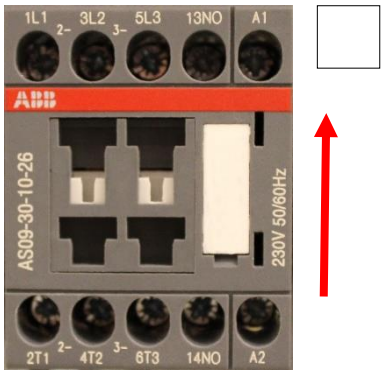
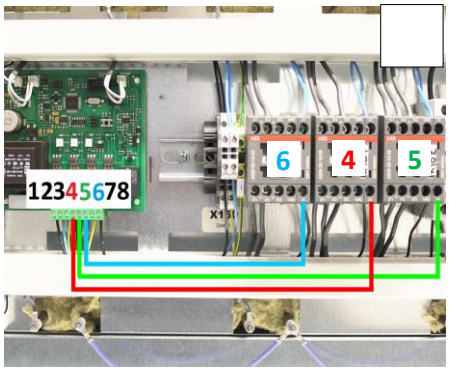
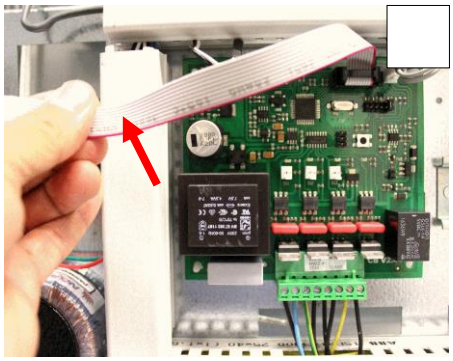


***2.** If you have external circuit breakers. Check that all the breakers are in **ON** position. **IMPORTANT!** Call an electrician if the breaker trip again*

***3**. If you have external circuit fuses. Check and replace broken fuses*

FUNCTION CONTROL CHECKLIST

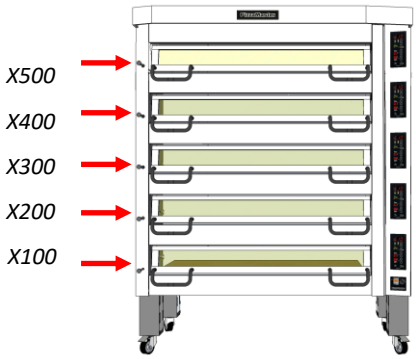
PM 700 / 800 / 900

INTERNAL CONNECTION CHECK	Check Internal Breakers and Cables	
 WARNING-ELECTRICAL HAZARD! **IMPORTANT: The following steps MUST be carried out by a Certified Electrician**	 ***2.** Turn OFF breakers/fuses or unplug the oven before opening the ovens electrical panel*	 ***3.** Open the ovens electrical Panel* *The panel is at the right-hand side of the oven. You need a Phillips screwdriver to open it, six screws*
 ***4.** Every deck has a separate set of circuit breakers and electric components*	 ***5.** Check that all the circuit breakers are in **UP** (ON) position for all decks*	 ***6.** Check breaker for control power. It is located at deck 1 and supply all decks*
 ***7. Check position of contactors** they must be placed upright like this*	 ***8.** Check wiring to contactors from the **8-Pole** green connector on main circuit board.* ***Pole 4** – A1 on middle contactor* ***Pole 5** – A1 on right contactor* ***Pole 6** – A1 on left contactor*	 ***9. Check all cables at the circuit board**. Make sure they are fully inserted and tight. Follow the cable marked on the picture, and check that is connected correctly at the display*

FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900

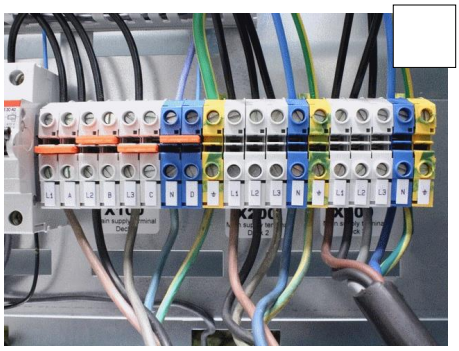
INTERNAL POWER CHECK



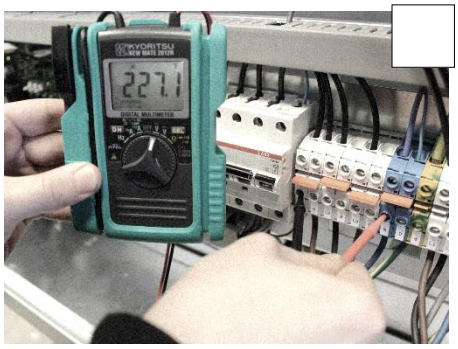
Power Supply

2. Turn ON Breakers/fuses or Plug in the oven: *Connect/plug the oven to the power supply*

3. Use a digital multimeter to check the incoming power supply



4. *Check the voltage for all incoming cables*



5. *Follow the table beside to know between which terminals you need to measure*

Fill the spaces below with the ~Voltage obtained

X100 / Deck 1

L1 – L2	_____ *V*
L1 – L2	_____ *V*
L1 – L3	_____ *V*
L1 – GND	_____ *V*
L2 – GND	_____ *V*
L3 – GND	_____ *V*

*Phase (**PH.**) to Neutral (**N**) connection (if available)*

L1 – N	_____ *V*
L2 – N	_____ *V*
L3 – N	_____ *V*

X200 / Deck 2 *(If available)*

L1 – L2	_____ *V*
L1 – L2	_____ *V*
L1 – L3	_____ *V*
L1 – GND	_____ *V*
L2 – GND	_____ *V*
L3 – GND	_____ *V*

*Phase (**PH.**) to Neutral (**N**) connection (if available)*

L1 – N	_____ *V*
L2 – N	_____ *V*
L3 – N	_____ *V*

X300 / Deck 3 *(If available)*

L1 – L2	_____ *V*
L1 – L2	_____ *V*
L1 – L3	_____ *V*
L1 – GND	_____ *V*
L2 – GND	_____ *V*
L3 – GND	_____ *V*

*Phase (**PH.**) to Neutral (**N**) connection (if available)*

L1 – N	_____ *V*
L2 – N	_____ *V*
L3 – N	_____ *V*

X400 / Deck 4 *(If available)*

L1 – L2	_____ *V*
L1 – L2	_____ *V*
L1 – L3	_____ *V*
L1 – GND	_____ *V*
L2 – GND	_____ *V*
L3 – GND	_____ *V*

*Phase (**PH.**) to Neutral (**N**) connection (if available)*

L1 – N	_____ *V*
L2 – N	_____ *V*
L3 – N	_____ *V*

X500 / Deck 5 *(If available)*

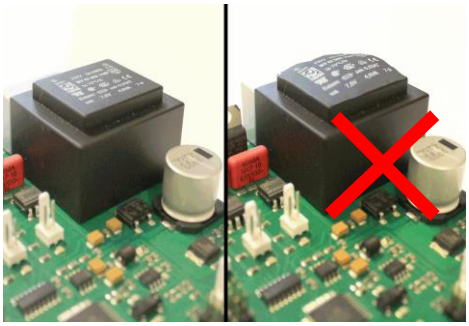
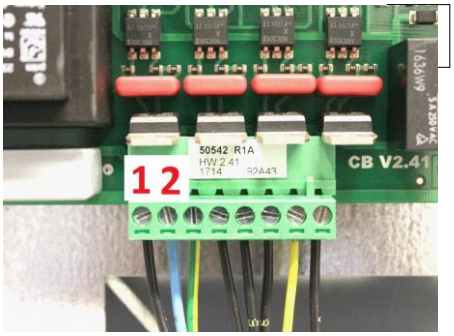
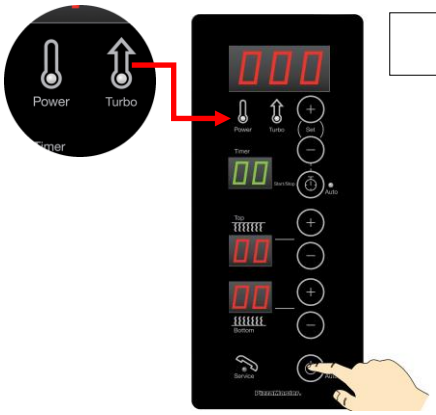
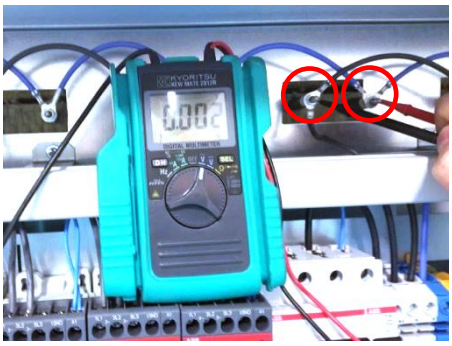
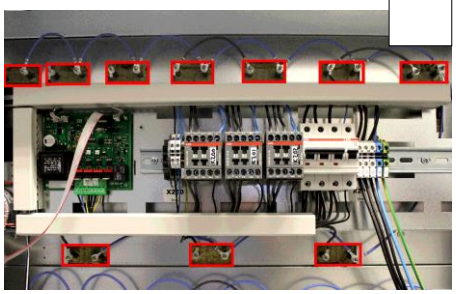
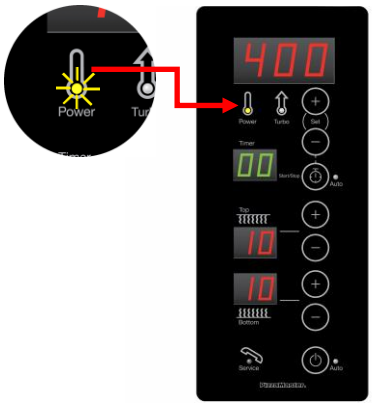
L1 – L2	_____ *V*
L1 – L2	_____ *V*
L1 – L3	_____ *V*
L1 – GND	_____ *V*
L2 – GND	_____ *V*
L3 – GND	_____ *V*

*Phase (**PH.**) to Neutral (**N**) connection (if available)*

L1 – N	_____ *V*
L2 – N	_____ *V*
L3 – N	_____ *V*

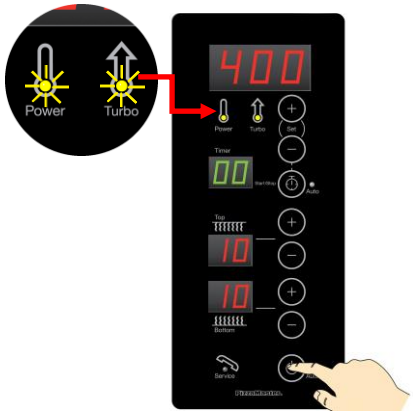
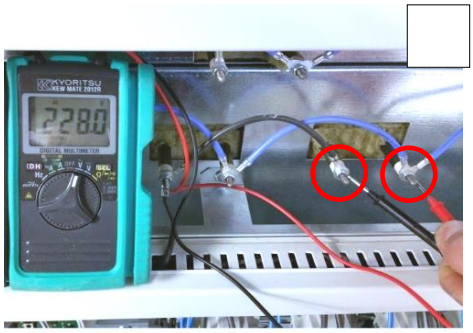
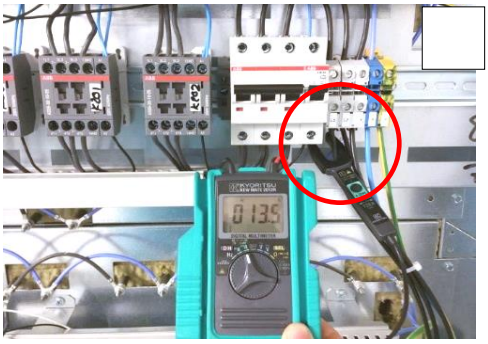
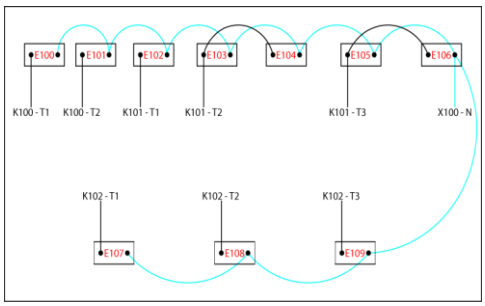
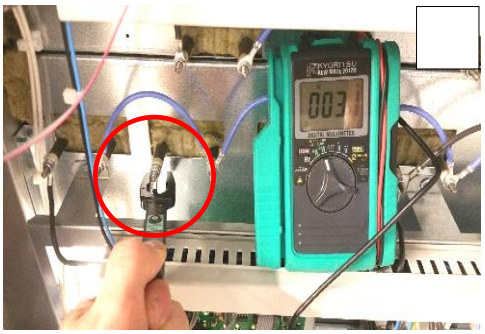
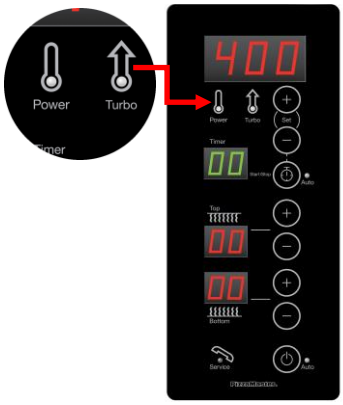
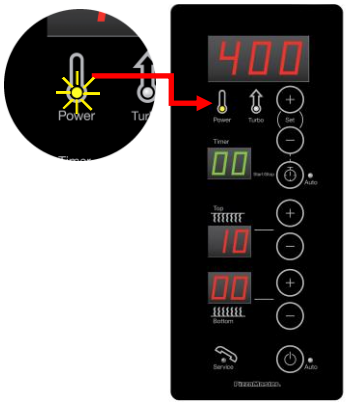
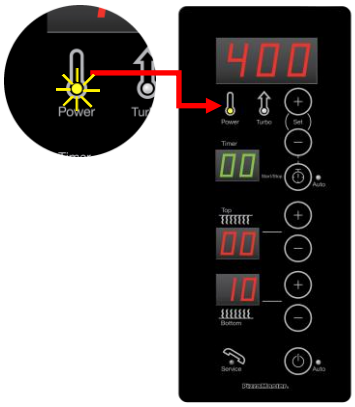
FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900

FUNCTION TEST	Test the function of the electric components	
☐ **1.** *Turn main switch to position 1*	☐ ***2**. Is the display dimmed and can OFF be seen?* **YES** ☐ **NOT** ☐	 **3. *If NOT –*** *Check if the black transformer is rounded, if so is, this is broken due to incorrect installation or a power surge*
 ☐ ***4. Check main circuit board:*** *Measure ~volts between pole **1** and pole **2** on the green 8 pole connector in every deck, fill the next table*	☐ ***5. fill in voltage here*** ***Deck5:*** *(If available)* _____V ***Deck 4:*** *(If available)* _____V ***Deck 3:*** *(If available)* _____V ***Deck** 2: (If available)* _____V ***Deck 1:*** *(lower deck)* _____V	 ☐ ***6. Press ON/OFF button** on deck 1 to start the oven. Set all **heat zones** to **0**, set **temp** to **0 degrees.** Power lamp and turbo lamp should be off*
 ***7. Measure ~volts on all heaters** (700 series = 10 heaters and 800, 900 = 14 heaters) there Should be **no voltage***	 ☐ ***8.** Observe that every heater has its own hole cut out in the metal*	 ***9.** Set all heat zones to 10, set temperature to max. Power lamp should be on*

FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900

FUNCTION TEST	Test the function of the electric components	
 ***10. Turn oven OFF and then ON again,*** *this activates the turbo function (voltage to all heaters) Power lamp on and turbo light should be on*	 ***11. Measure all heaters,*** *there should be voltage on all heaters, top and bottom*	 ***12. Measure Amps on incoming wires*** *and note them in point 13.*
13. Compare with amps list in electric schematic ***Deck 5*** *(if available)* *L1_____L2_____L3_____A* ***Deck 4*** *(if available)* *L1_____L2_____L3_____A* ***Deck 3*** *(if available)* *L1_____L2_____L3_____A* ***Deck 2*** *(if available)* *L1_____L2_____L3_____A* ***Deck 1*** *(lower deck)* *L1_____L2_____L3_____A*	 ***14.*** *Find info where to measure and the correct amps draw in the electric schematic* *see next step picture* -----→	 ***15.*** *Measure amps on all heaters*
 ***16. Set heat zone TOP to 0 and BOTTOM to 0*** *this deactivates turbo*	 ***17. Increase TOP to 10*** *Power light should be on, Upper heaters should have voltage, lower heaters should have no voltage*	 ***18. Set heat zone TOP to 0 and BOTTOM to 10*** *Upper heaters should have no voltage, lower heaters should have voltage* ***REPEAT POINTS 1-18 FOR ALL DECKS***

FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900

CIRCUIT BOARD TEST	Test the function of circuit board

1. TURBO:

*When starting the oven cold, **TURBO** function is **ON**. This is a function to reach the set temperature as fast as possible. All heat zones are set to maximum and the Turbo Light is activated. When the oven reaches the set temperature turbo shuts off, and the heaters works with TOP and BOTTOM configuration (See below)*

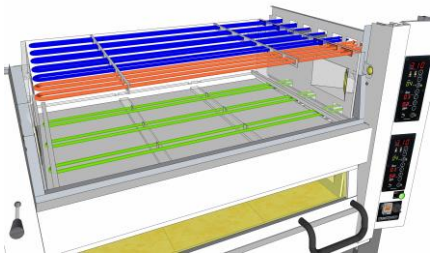
2. HEAT ZONES

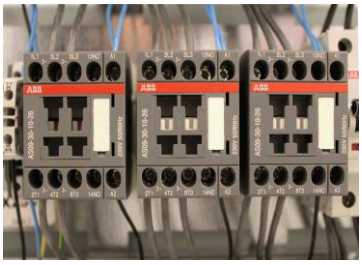
There are three heat zones in the oven.
Each zone has a contactor supplying power to the heaters.

***TOP FRONT** (Orange) – Two Top heaters at the front, Left contactor*

***TOP** (Blue) – Rest of the Top heaters, middle contactor*

***BOTTOM** (Green)- Heaters under the stone, right contactor*



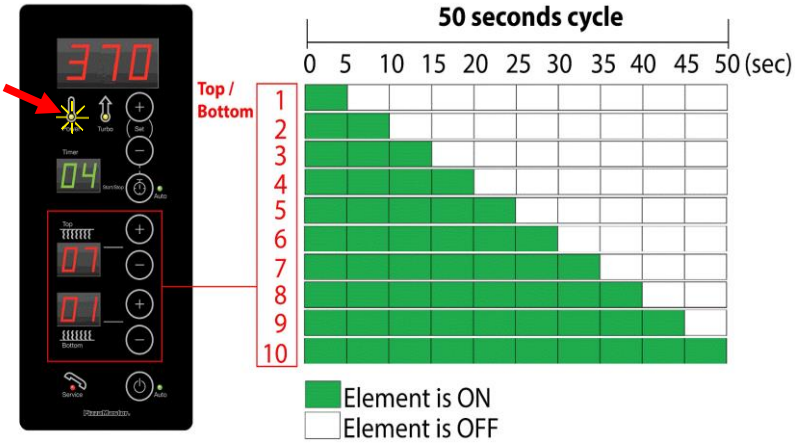


TOP FRONT ***TOP*** ***BOTTOM***

3. TOP and BOTTOM Configuration:

*You can set the **TOP** and **BOTTOM** heat zones from 1 to 10:*
*This means, when the <u>Light Power is **ON**</u>:*

- *Every heat zone has cycles of "50 Seconds"*
- *The 50 seconds are dived in 10 segments of 5 sec. each*
- *During this time the elements at the **TOP** and **BOTTOM** can be **ON** or **OFF**, depending on the settings (see the graphic) on Green the Elements are **ON**, in White the Elements are **OFF***
- *<u>For example:</u>*
  - *If you select 7 on the TOP: The element is ON during 35 seconds and OFF 15 seconds*
  - *If you select 3 on the BOTTOM: the element is ON 15 seconds and OFF 35 seconds.*



Check the Contactors:

- *The contactors must be **INACTIVE** in **OFF** position*
- *The contactors must be **ACTIVE** in **ON** position*

INACTIVE

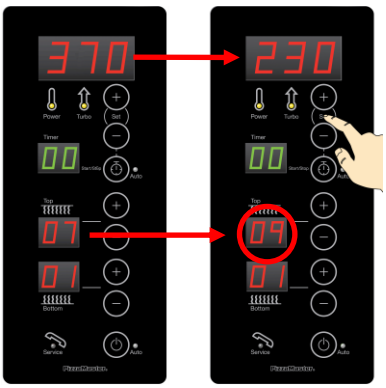
ACTIVE

**** We recommend to replace all the contactors at the same time and replace them after 5 or 6 years***

4. TOP FRONT Zone:

*It is possible to configurate the **TOP FRONT** zone from 0 to +4 with respect of the **TOP** zone.*

See the example:
*Press **SET**, to see the actual temperature and the configuration in the **TOP FRONT** zone.*
*If the configuration of the **TOP FRONT** is +2 and **TOP** is 7, you will have 9 at the **TOP FRONT**.*

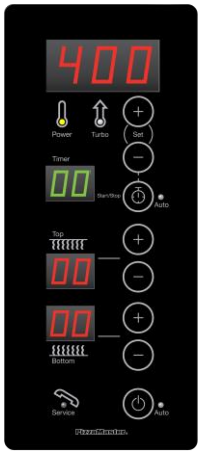


***Factory Settings:** as standard the factory settings are:*

- *For a pizza deck is:* ***+2***
- *For a bakery deck is:* ***0***
  (normally equiped with a high deck and steam system)

FUNCTION CONTROL CHECKLIST

PM 700 / 800 / 900



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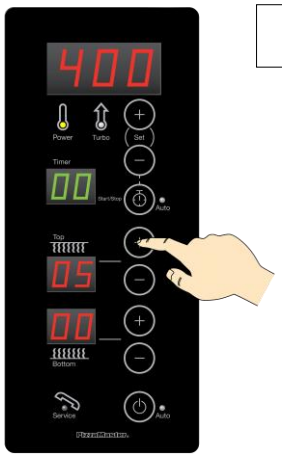
4. *Start the oven, set* ***TEMP*** *to* ***MAX****, set* ***ALL HEAT ZONES*** *to* ***"0"****. This turns turbo off and activates the software.*



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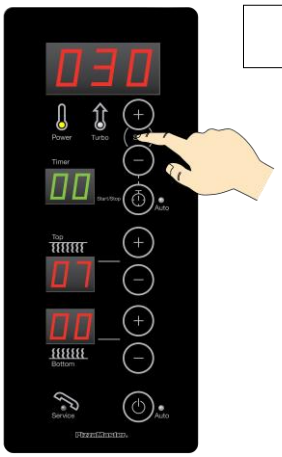
5. *Start with* ***TOP FRONT heat zone****. Set heat zone* ***TOP to "5"*** *and* ***BOTTOM to "0"****, power light is active.*



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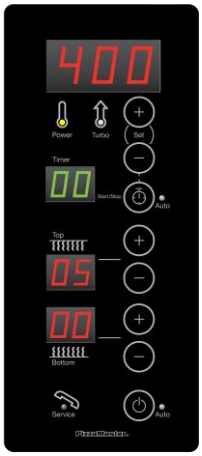
6. *Press* ***SET*** *key to see the setting. Look at the table to know the cycle times. Look at the* ***LEFT CONTACTOR*** *and time the active/inactive cycles with a watch to see that the software works properly*



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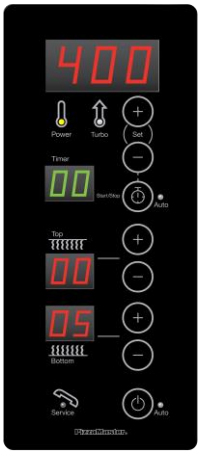
7. TOP heat zone, *Setting is* ***TOP "5"*** *and* ***BOTTOM 0****. Look at* ***MIDDLE CONTACTOR*** *and time the active/inactive cycles. Should be approx 25 seconds active and 25 seconds inactive ac ording to the table*



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8. BOTTOM heat zone*, set* ***TOP to 0*** *and* ***BOTTOM to "5"****. Look at* ***RIGHT CONTACTOR*** *and time the active/inactive cycles. Should be approx 25 seconds active and 25 seconds inactive, all acording to the table*