

COMBISNACKPRO

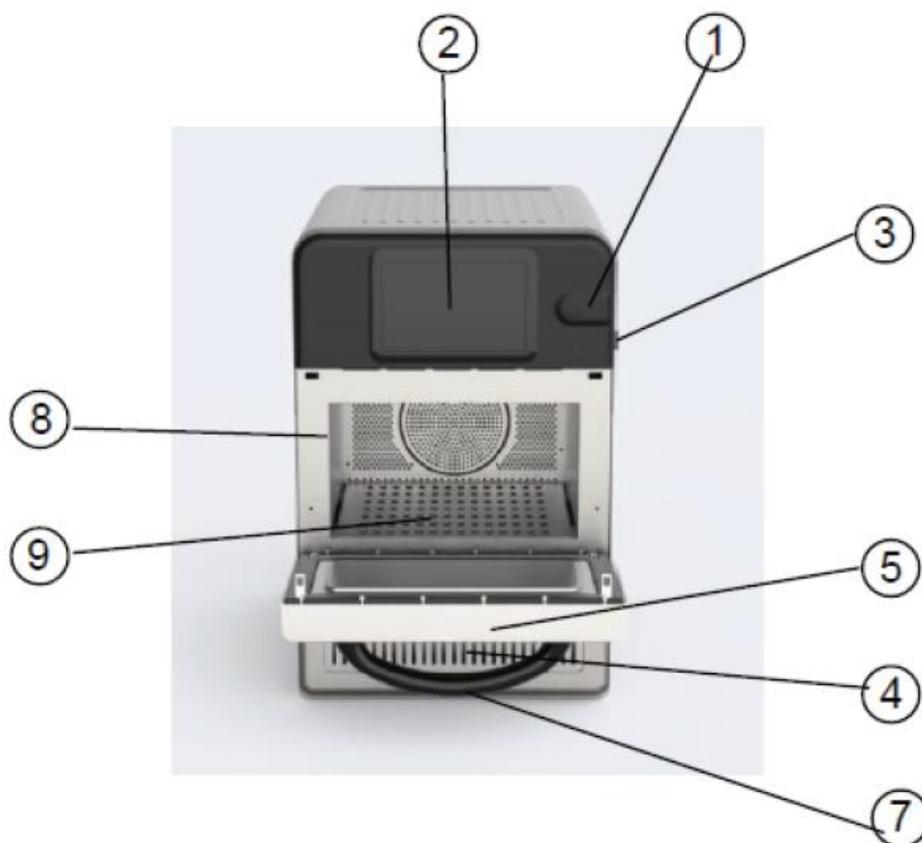
Guide assistance technique





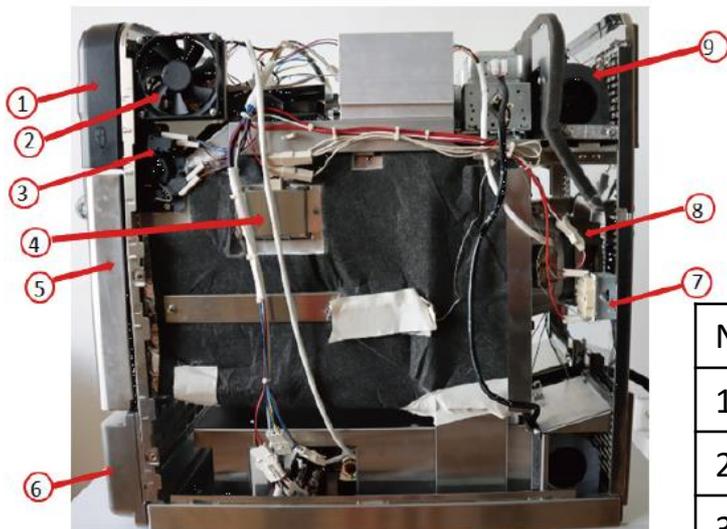
1. Introduction au produit
2. Diagnostics
3. Mise en service de l'appareil

1. Introduction au produit



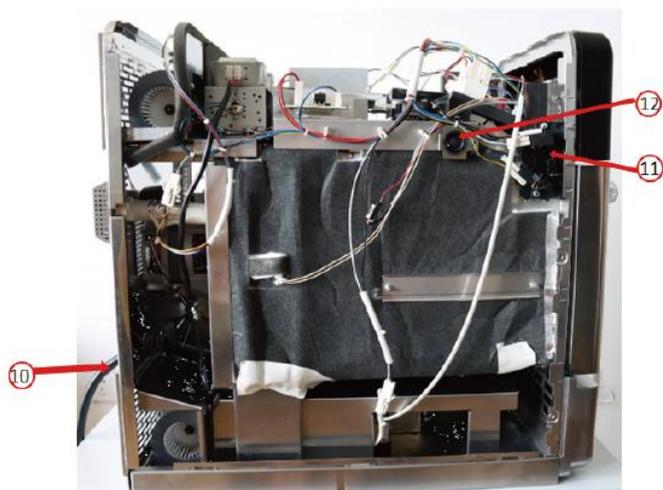
N°	Nom
1	Interrupteur marche/arrêt de l'appareil
2	Écran de contrôle TFT 7 pouces
3	Port USB
4	Bouches d'aération
5	Porte de l'appareil
6	Filtre à air (non illustré)
7	Poignée de porte
8	Cavité
9	Plaque inférieure

Vue de droite

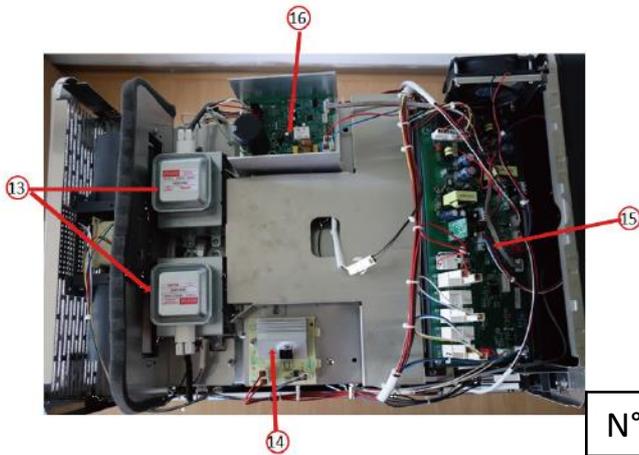


N°	Nom
1	Panneau avant
2	Ventilateur
3	Mécanisme d'interverrouillage (droit)
4	Lampe
5	Ensemble de la porte
6	Plaque de base métallique
7	Thermostat à dilatation
8	Module de convection
9	Module de ventilation
10	Câble d'alimentation
11	Mécanisme d'interverrouillage (gauche)
12	Haut-parleur

Vue de gauche

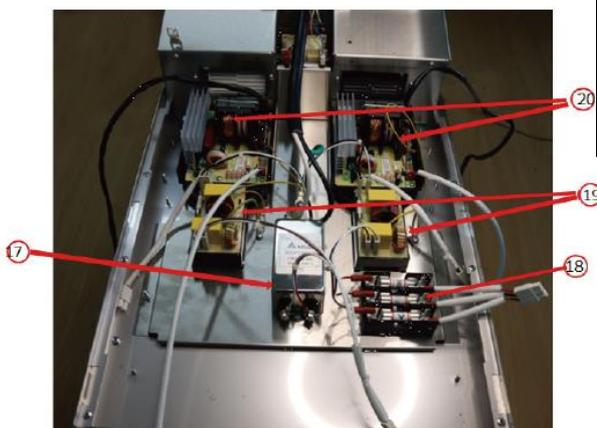


Vue de haut



N°	Nom
13	Magnétron
14	Carte électronique (Redresseur commandé au silicium)
15	Panneau de commande principal
16	Carte de commande
17	Filtre
18	Fusible
19	Bloc filtre antiparasite
20	Inverseur

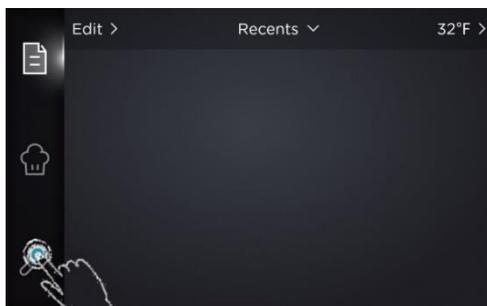
Vue du bas



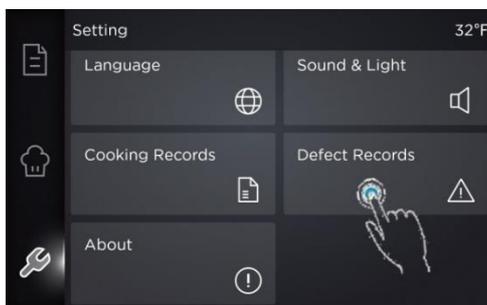
2. Diagnostic



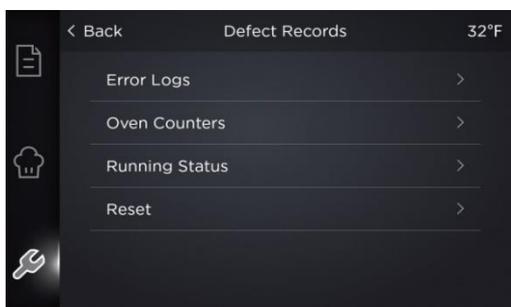
Au démarrage, cliquer sur le bouton
« **No Preheat** » pour accéder
à l'interface suivante

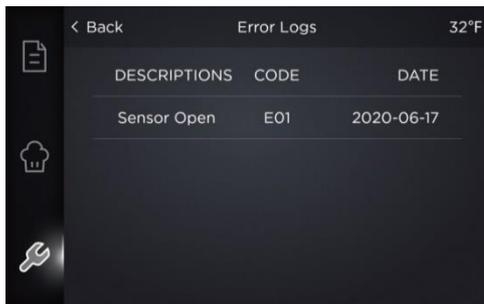


Sélectionner le symbole de la clé



Cliquer sur le bouton « Historique des défauts »
pour afficher :
« Defect records »
« Cooking record »
« Running status »
« Reset »

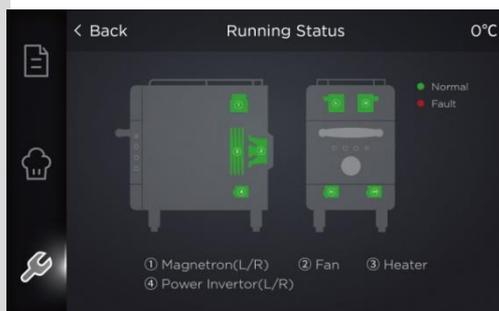




Consulter le « **Journal des erreurs** » pour obtenir des détails sur les erreurs enregistrées de l'appareil et se référer aux codes d'erreur pour plus d'informations



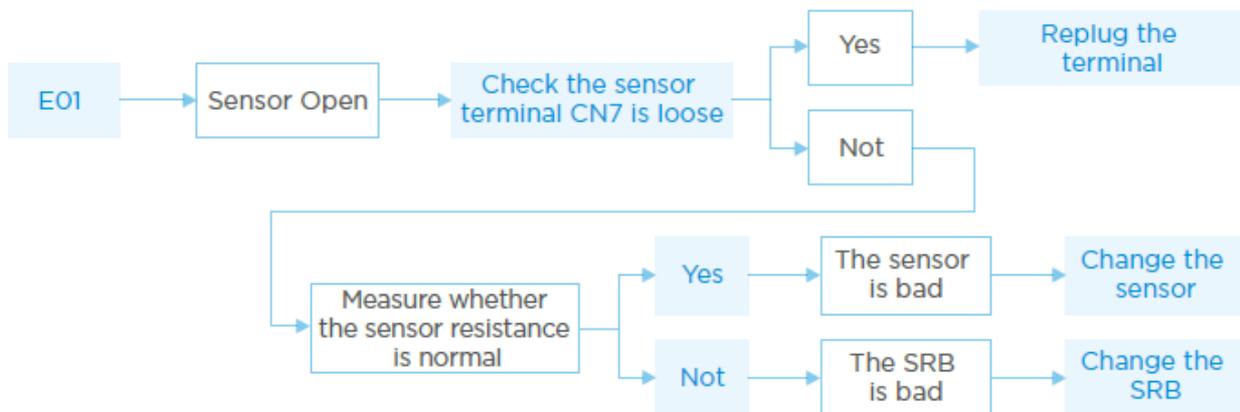
Consulter les « **Compteurs du four** » pour connaître l'utilisation des composants



Consulter le « **Statut de fonctionnement** » pour vérifier les performances opérationnelles des composants principaux.

Code erreur	Condition d'erreur	Description
E01	Capteur ouvert	Capteur de cavité déconnecté ou endommagé
E02	Court-circuit capteur	Court-circuit du capteur de cavité
E03	Erreur électrique	Tension d'alimentation hors spécifications
E17	Erreur capteur	Aucun courant de chauffe détecté à la demande
F11	Surchauffe	Température de la cavité trop élevée (plus de 300 °C)
CB	Panne de communication	Aucune communication possible entre l'écran TFT et le SRB
U02	Pas de communication moteur	Aucune communication possible entre le SRB et le moteur
U21	Surcharge moteur	Surcharge de courant du moteur
U22	Basse tension moteur	Détection d'une tension d'alimentation hors spécifications

Code erreur	Condition d'erreur	Description
U23	Surtension moteur	Tension d'alimentation hors spécifications
U25	Surchauffe moteur	Température du variateur au-dessus de la limite
U26	Perte de phase moteur	Le variateur perd une phase moteur
D11	Erreur zéro	Le SRB ne reçoit pas de signal de fréquence d'alimentation pendant plus de 10 secondes
E-1	Magnétron 1/2_1	Fuite de l'onduleur
E-5	Magnétron 1/2_5	Le magnétron ne s'est pas mis en marche
E-6	Magnétron 1/2_6	Surcharge de courant du magnétron
E-8	Magnétron 1/2_8	Courant du magnétron trop faible



E01 → Capteur ouvert

→ Vérifier si le terminal du capteur CN7 est desserré

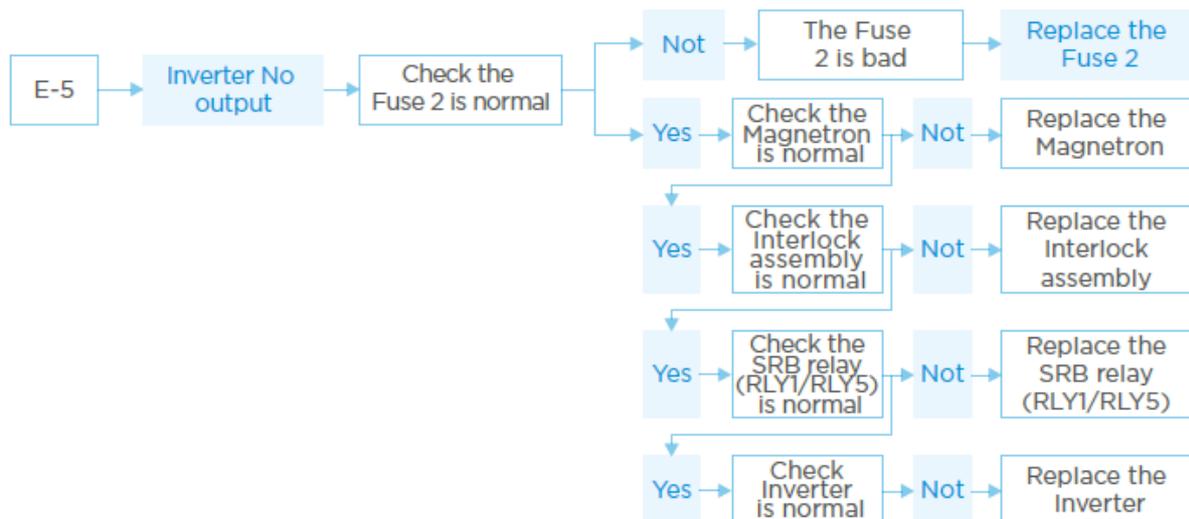
→ **Oui** → Rebrancher le terminal

→ **Non** →

→ Mesurer si la résistance du capteur est normale

→ **Oui** → Le capteur est défectueux → Remplacer le capteur

→ **Non** → Le SRB est défectueux → Remplacer le SRB



E-5 → Aucune sortie de l'onduleur

→ Vérifier si le **fusible 2 est normal**

→ **Non** → Le fusible 2 est défectueux → Remplacer le fusible 2

→ **Oui** → Vérifier si le **magnétron est normal**

→ **Non** → Remplacer le magnétron

→ **Oui** → Vérifier si le **système d'interverrouillage est normal**

→ **Non** → Remplacer le système d'interverrouillage

→ **Oui** → Vérifier si le **relais SRB (RLY1/RLY5) est normal**

→ **Non** → Remplacer le relais SRB (RLY1/RLY5)

→ **Oui** → Vérifier si l'**onduleur est normal**

→ **Non** → Remplacer l'onduleur

Procédure de test des composants

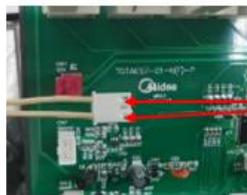
● Fusible

Retirez-le et mesurez la résistance à ses deux extrémités à l'aide d'un ohmmètre.

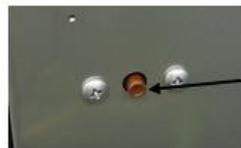
Fusible	Composants associés
Fusible 1	Système d'interverrouillage, Magnétron, Ventilateur de refroidissement / Lampe, Onduleur gauche
Fusible 2	Système d'interverrouillage, Magnétron, Moteur de convection
Fusible 3	Onduleur droit, Résistance de chauffe

Fuse 1	Interlock Assembly
	Magnetron
	Cooling Motor/Lamp
	Left Inverter
Fuse 2	Interlock Assembly
	Magnetron
	Convection Motor
Fuse 3	Right Inverter
	Heater

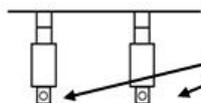




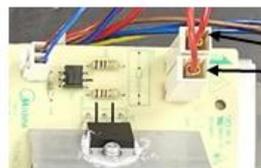
The sensor normal terminal resistance is 1000~1200 Ω (20-30 $^{\circ}$ C)



Press button on the back of machine, "ring", reset success. If there is no reaction, the thermostat is in reset position



The heater resistance between the two terminals is 15-25 Ω



Under preheating mode, the resistance between terminals is lower 1 Ω



Under preheating mode, the resistance of RLY 11 between is lower 1 Ω



Unplug the terminals and measured the resistance between any two terminal :
Red-White : 9 Ω
Red-Black : 9 Ω
Black-White : 9 Ω

1. La résistance normale aux bornes du capteur est de 1000~1200 Ω (à 20–30 $^{\circ}$ C)

2. Appuyer sur le bouton à l'arrière de la machine, un "clic" ("ring") indique une réinitialisation réussie.

S'il n'y a aucune réaction, cela signifie que **le thermostat est déjà en position de réinitialisation.**

3. En mode préchauffage, la résistance entre les bornes est inférieure à 1 Ω

4. La résistance du chauffage entre les deux bornes est de 15 à 25 Ω

5. En mode préchauffage, la résistance du relais RLY11 est inférieure à 1 Ω

6. Débrancher les bornes et mesurer la résistance entre deux bornes quelconques :

- Rouge – Blanc : 9 Ω
- Rouge – Noir : 9 Ω
- Noir – Blanc : 9 Ω

3. Mise en service de l'appareil

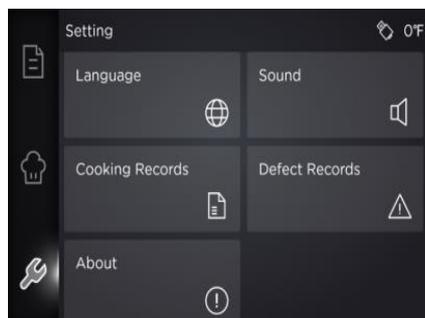
Menu de test



Appuyer sur « **No Preheat** »



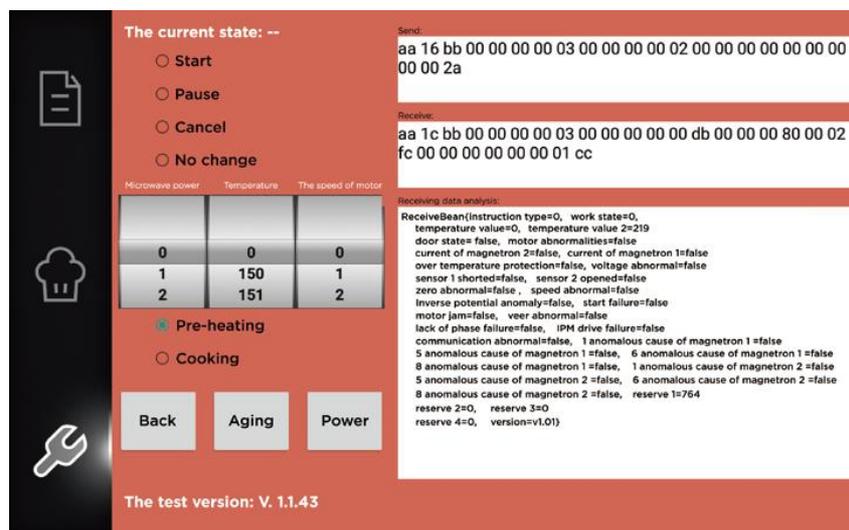
Appuyer sur la **catégorie « Settings »**



Appuyer sur « **About** » dans l'affichage

Test de puissance micro-ondes

- Remplir un récipient compatible micro-ondes (en verre) avec **1 litre d'eau à 20 °C (68 °F)**
- Placer le récipient **au centre de la cavité**
- Sélectionner une **puissance micro-ondes de 100 %** (faire défiler le pavé de puissance : **touche "a"**)
- Appuyer sur la touche de démarrage ("**b**") et laisser fonctionner pendant **1 minute**
- Ouvrir la porte ou appuyer sur la touche d'arrêt ("**c**")
- Retirer le récipient de la cavité
- **Remuer immédiatement** et mesurer la température de l'eau à l'aide d'un thermomètre
- **Calculer l'élévation de température** de l'eau (température finale – température initiale)
- L'élévation de température doit être de **20 °C ± 10 %**



The current state: --

- Start
- Pause
- Cancel
- No change

Microwave power	Temperature	The speed of motor
0	0	0
1	150	1
2	151	2

Pre-heating

Cooking

Back Aging Power

The test version: V. 1.1.43

```

Send:
aa 16 bb 00 00 00 00 03 00 00 00 00 02 00 00 00 00 00 00 00
00 00 2a

Receive:
aa 1c bb 00 00 00 00 03 00 00 00 00 00 db 00 00 00 80 00 02
fc 00 00 00 00 00 01 cc

Receiving data analysis:
ReceiveBean(instruction type=0, work state=0,
temperature value=0, temperature value 2=219
door state= false, motor abnormalities=false
current of magnetron 2=false, current of magnetron 1=false
over temperature protection=false, voltage abnormal=false
sensor 1 shorted=false, sensor 2 opened=false
zero abnormal=false, speed abnormal=false
Inverse potential anomaly=false, start failure=false
motor jam=false, veer abnormal=false
lack of phase failure=false, IPM drive failure=false
communication abnormal=false, 1 anomalous cause of magnetron 1 =false
5 anomalous cause of magnetron 1 =false, 6 anomalous cause of magnetron 1 =false
8 anomalous cause of magnetron 1 =false, 1 anomalous cause of magnetron 2 =false
5 anomalous cause of magnetron 2 =false, 6 anomalous cause of magnetron 2 =false
8 anomalous cause of magnetron 2 =false, 6 anomalous cause of magnetron 2 =false
reserve 2=0, reserve 3=0
reserve 4=0, version=v1.01)
    
```

Test de fuite micro-ondes

- Placer le **bécher au centre de la cavité**.
- Mettre la **charge d'eau** dans le four à micro-ondes, au centre de la **surface de charge**.
- Fermer la porte du four.
- Le four doit fonctionner à **100 % de puissance** (faire défiler le pavé de puissance : **touche "a"**)
- Appuyer sur la touche de démarrage ("**b**") et faire fonctionner pendant **5 minutes**
- Maintenir la **sonde** sur la poignée fournie et **se déplacer à 2,5 cm/seconde**
- Appuyer sur la touche d'arrêt ("**c**") après avoir terminé le test
- La fuite **ne doit pas dépasser 5 mW/cm²**

The current state: --

Start
 Pause
 Cancel
 No change

Microwave power	Temperature	The speed of motor
0	0	0
1	150	1
2	151	2

Pre-heating
 Cooking

Back Aging Power

The test version: V. 1.1.43

```

Send:
aa 16 bb 00 00 00 00 03 00 00 00 00 02 00 00 00 00 00 00
00 00 2a

Receive:
aa 1c bb 00 00 00 00 03 00 00 00 00 00 db 00 00 00 80 00 02
fc 00 00 00 00 00 00 01 cc

Receiving data analysis:
ReceiveBean(instruction type=0, work state=0,
temperature value=0, temperature value 2=219
door state=false, motor abnormalities=false
current of magnetron 2=false, current of magnetron 1=false
over temperature protection=false, voltage abnormal=false
sensor 1 shorted=false, sensor 2 opened=false
zero abnormal=false, speed abnormal=false
Inverse potential anomaly=false, start failure=false
motor jam=false, veer abnormal=false
lack of phase failure=false, IPM drive failure=false
communication abnormal=false, 1 anomalous cause of magnetron 1=false
5 anomalous cause of magnetron 1 =false, 6 anomalous cause of magnetron 1=false
8 anomalous cause of magnetron 1 =false, 1 anomalous cause of magnetron 2 =false
5 anomalous cause of magnetron 2 =false, 6 anomalous cause of magnetron 2 =false
8 anomalous cause of magnetron 2 =false, reserve 1=764
reserve 2=0, reserve 3=0
reserve 4=0, version=v1.01)
    
```


Nettoyage de la cavité — après réparation

- Retirer le pare-projections et le guide d'air
- Nettoyer la cavité

Pare-projections



Guide d'air

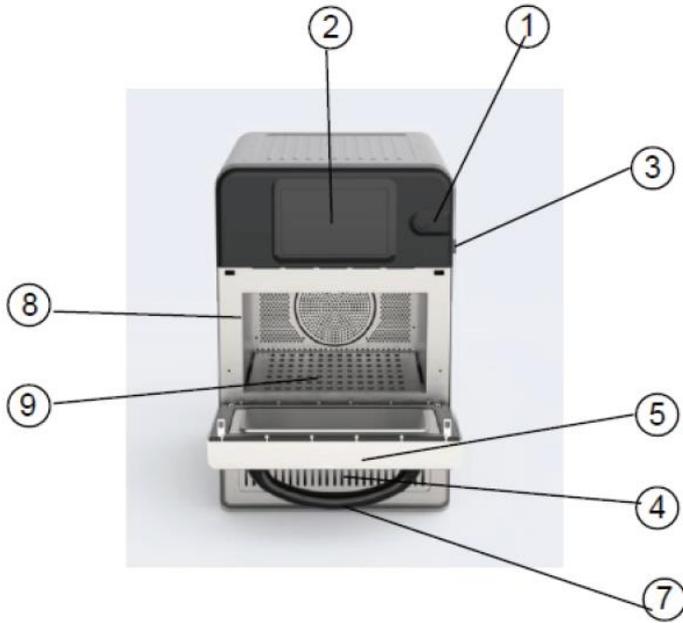


1.Product Introduction

2.Diagnostics

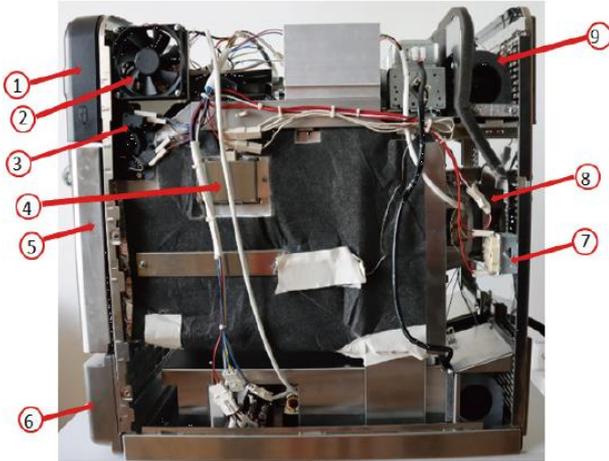
3.Commissioning The Appliance

1.1 Product Introduction

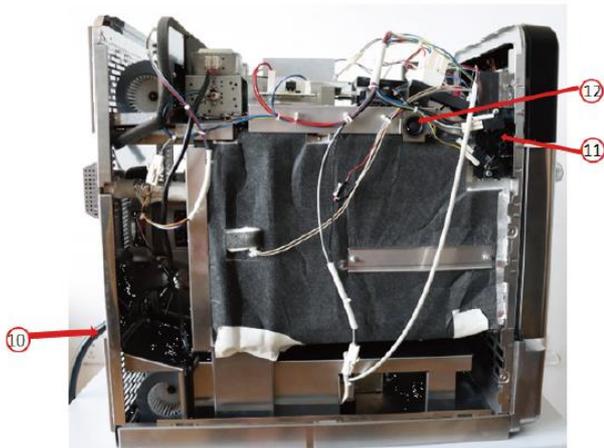


Item	Name
1	ON/OFF appliance switch
2	Control Panel 8 inch TFT Screen
3	USB port
4	Air outlets
5	Appliance door
6	Air filter(no picture)
7	Door handle
8	Cavity
9	Lower plate

Right hand View

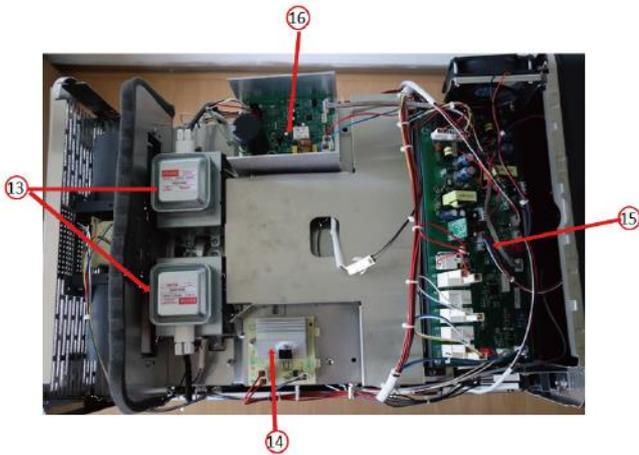


Left hand View



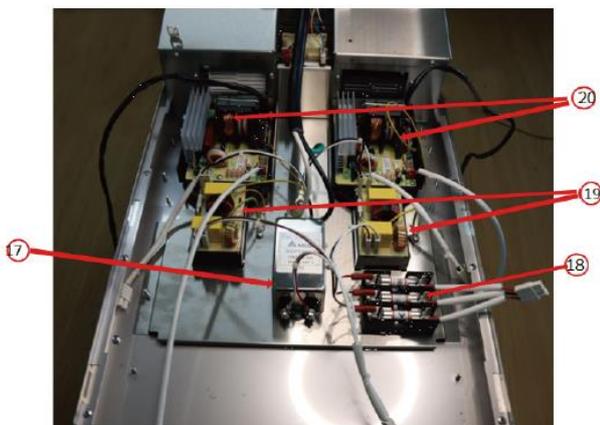
Item	Name
1	Front panel
2	Fan
3	Interlock Assembly (Right)
4	Lamp
5	Door Assembly
6	Metal Base Plate
7	Inflatable Thermostat
8	Convection Assembly
9	Fan Assembly
10	Power Cord
11	Interlock Assembly (Left)
12	Speaker

Top side View



Item	Name
13	Magnetron
14	PCB Assembly (Silicon Controlled Rectifier)
15	Main control panel
16	Driver Board
17	Filter
18	Fuse
19	Noise Filter Assembly
20	Inverter

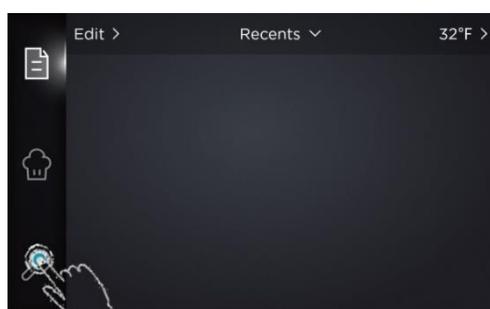
Baseplate side View



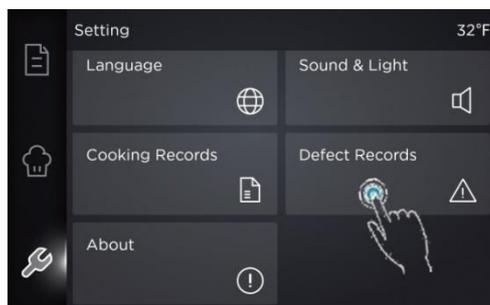
2. Diagnostic



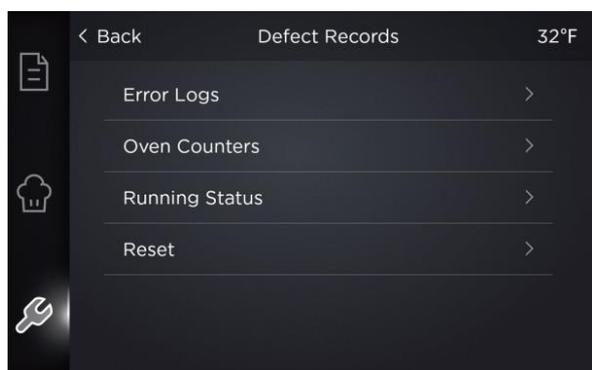
On start up, Click on “ No Preheat”
button, Enter the next UI interface.

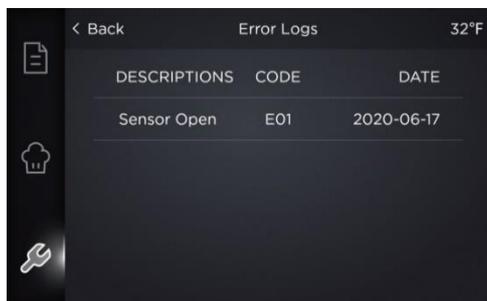


Select the spanner symbol



Click “Defect Records” button to display
“Error Logs”、 “Oven Counters”、
“Running”、 “Status”、 “Reset”.





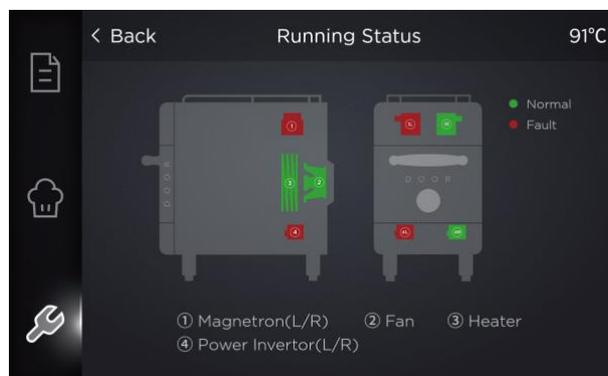
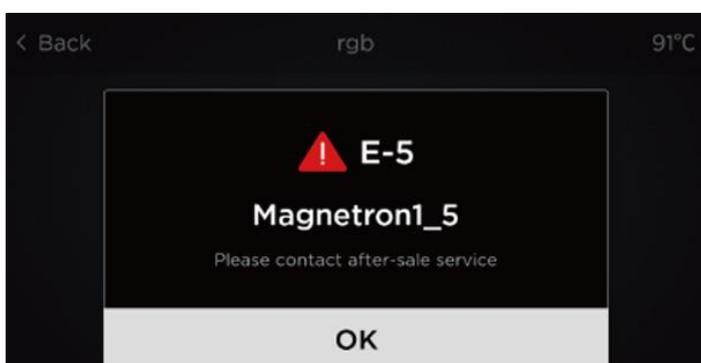
Check the "Error Log" for details of any logged appliance errors and refer to the error codes for more details.



Check the "Oven Counters" to find the usage of components.

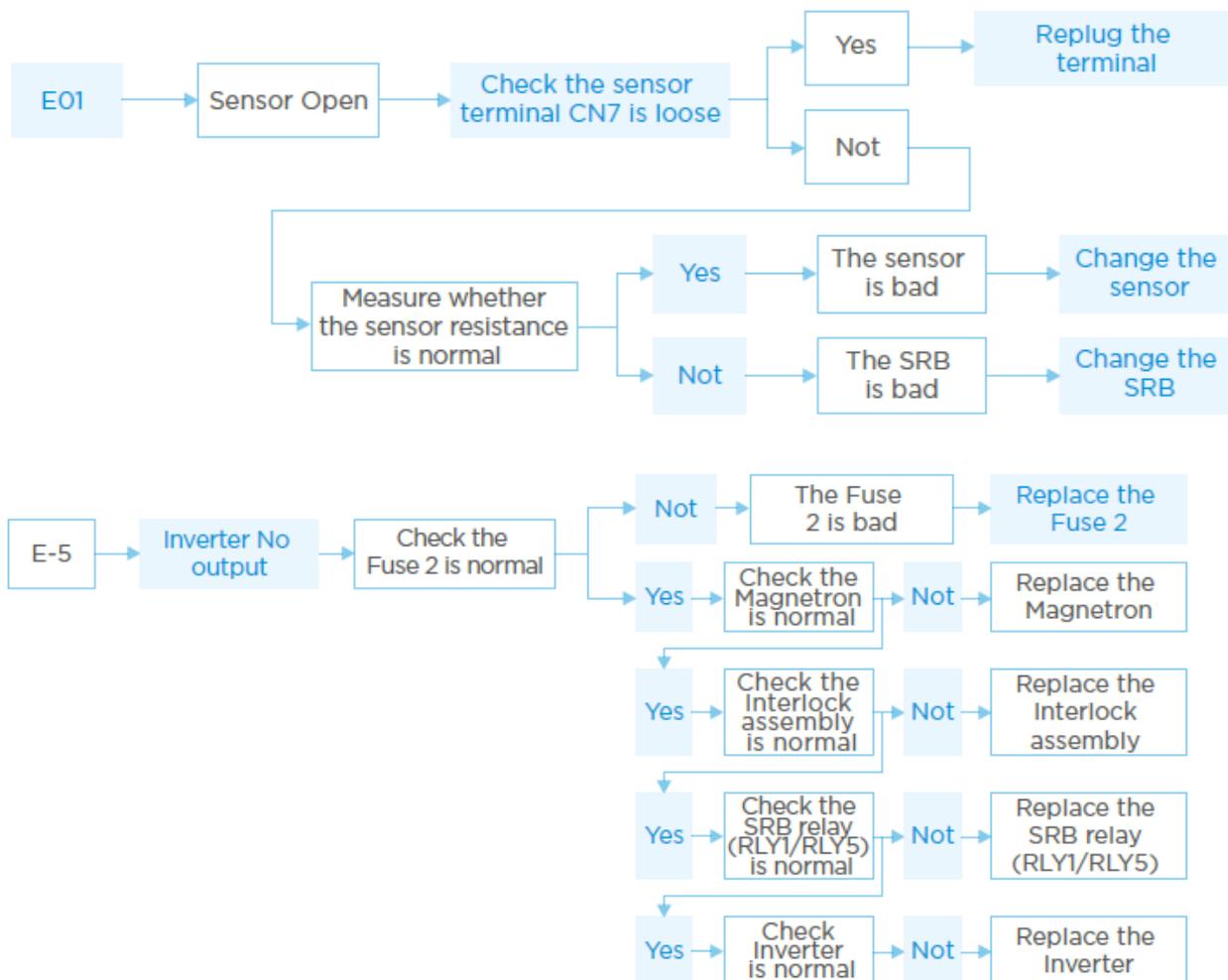


Check the "Running Status" to find the operational performance of the main components.



Error Code	Error Condition	Description
E01	Sensor Open	Cavity sensor broken/unplugged
E02	Sensor Short	Cavity sensor short
E03	Elec Error	Detects if the power supply voltage is outside specification
E17	Sensor Error	No heater current detected when requested
F11	Over Temp	Cavity temperature is too high (more than 300°C)
CB	Common Breakdown	No communication can be made between the TFT screen and SRB
U02	Motor Driver NC	No communication can be made between the SRB and Motor driver
U21	Motor Over Current	Motor over current
U22	Motor Low Voltage	Detects if the power supply voltage is outside specification

Error Code	Error Condition	Description
U23	Motor Over Voltage	Detects if the power supply voltage is outside specification
U25	Motor Over Temperature	Detects if the driver is operating above temperature
U26	Motor Loss Phase	The drive lose motor phase
D11	zero Error	Detects if SRB cannot receive power supply frequency signal more than 10 second
E-1	Magnetron 1/2_1	Inverter leakage
E-5	Magnetron 1/2_5	Magnetron failed to energies
E-6	Magnetron 1/2_6	Magnetron over current
E-8	Magnetron 1/2_8	Magnetron current is too low



Component Test Procedure

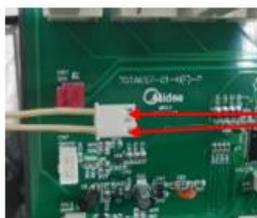
- Fuse

Take it out and measure the resistance at both ends with an ohmmeter.

Fuse 1	Interlock Assembly
	Magnetron
	Cooling Motor/Lamp
Fuse 2	Left Inverter
	Interlock Assembly
	Magnetron
Fuse 3	Convection Motor
	Right Inverter
	Heater



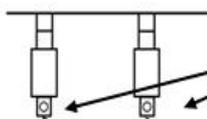
Other Parts



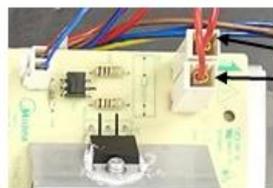
The sensor normal terminal resistance is $1000\sim 1200\Omega$ ($20\sim 30^{\circ}\text{C}$)



Press button on the back of machine, "ring", reset success. If there is no reaction, the thermostat is in reset position



The heater resistance between the two terminals is $15\sim 25\Omega$



Under preheating mode, the resistance between terminals is lower 1Ω



Under preheating mode, the resistance of RLY 11 between is lower 1Ω



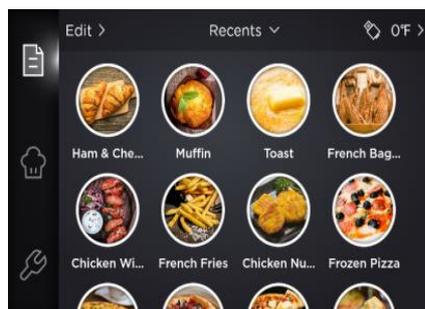
Unplug the terminals and measured the resistance between any two terminal :
Red-White : 9Ω
Red-Black : 9Ω
Black-White : 9Ω

3. Commissioning The Appliance

Test Menu



Touch the “No Preheat”



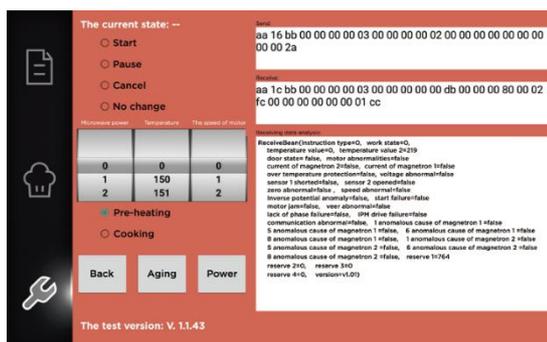
Touch the setting category



Touch the “About” in the display



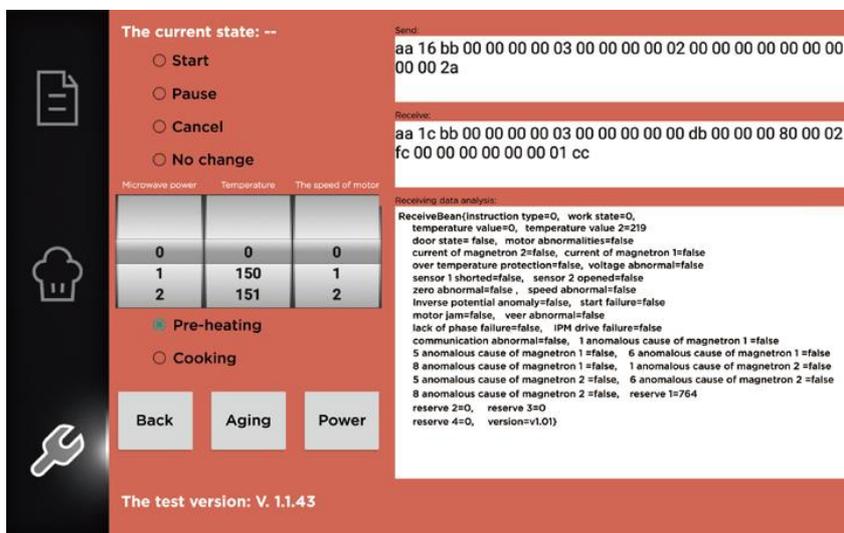
Touch the “97%” or “ Available Memory” pad more than 5 times in the display



The display will appear to operate the microwave and heater output

Microwave Power Test

- Fill a microwave safe container (Glass) with 1 liter of water at 20°C (68F)
- Place the container into the center of cavity.
- Select microwave power 100% (scroll the power level pad : "a")
- Touch start key ("b") and operate for 1 minute.
- Open the door or touch stop key("c")
- Remove the container form cavity.
- Immediately stir and measure the water temperature by using thermometer
- Calculate the temperature rise of water (End temperature minus start temperature)
- The temperature rise should be 20C +/- 10%



The current state: --

Start
 Pause
 Cancel
 No change

Microwave power	Temperature	The speed of motor
0	0	0
1	150	1
2	151	2

Pre-heating
 Cooking

Back Aging Power

The test version: V. 1.1.43

```

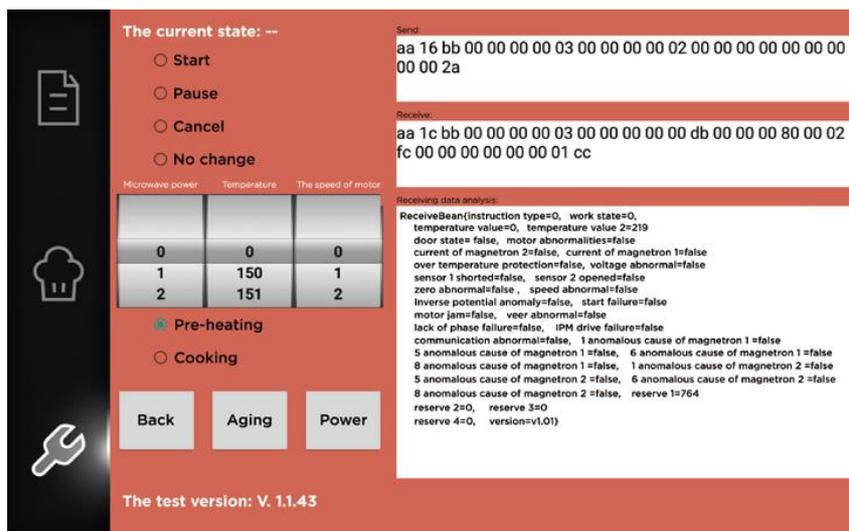
Send:
aa 16 bb 00 00 00 00 03 00 00 00 00 02 00 00 00 00 00 00
00 00 2a

Receive:
aa 1c bb 00 00 00 00 03 00 00 00 00 00 db 00 00 00 80 00 02
fc 00 00 00 00 00 01 cc

Receiving data analysis:
ReceiveBean(instruction type=0, work state=0,
temperature value=0, temperature value 2=219
door state=false, motor abnormalities=false
current of magnetron 2=false, current of magnetron 1=false
over temperature protection=false, voltage abnormal=false
sensor 1 shorted=false, sensor 2 opened=false
zero abnormal=false, speed abnormal=false
inverse potential anomaly=false, start failure=false
motor jam=false, veer abnormal=false
lack of phase failure=false, IPM drive failure=false
communication abnormal=false, 1 anomalous cause of magnetron 1=false
5 anomalous cause of magnetron 1=false, 6 anomalous cause of magnetron 1=false
8 anomalous cause of magnetron 1=false, 1 anomalous cause of magnetron 2=false
5 anomalous cause of magnetron 2=false, 6 anomalous cause of magnetron 2=false
8 anomalous cause of magnetron 2=false, reserve 1=764
reserve 2=0, reserve 3=0
reserve 4=0, version=v1.01)
    
```

Microwave Leakage Test

- Place the beaker into the center of cavity.
- Place the water load into the microwave oven on the center of the load bearing surface.
- Close the oven door.
- The microwave oven is to be operated at 100 % power (scroll the power level pad : "a")
- Press start key ("b") and operate for 5 minutes.
- Hold the probe on the grip provided and move at 2.5 cm/second.
- Touch stop key ("c") after finishing the test.
- The leakage should not exceed 5 mW/cm².



The current state: --

- Start
- Pause
- Cancel
- No change

Microwave power	Temperature	The speed of motor
0	0	0
1	150	1
2	151	2

Pre-heating

Cooking

Back Aging Power

The test version: V. 1.1.43

```

Send:
aa 16 bb 00 00 00 00 03 00 00 00 00 02 00 00 00 00 00 00
00 00 2a

Receive:
aa 1c bb 00 00 00 00 03 00 00 00 00 00 db 00 00 00 80 00 02
fc 00 00 00 00 00 01 cc

Receiving data analysis:
ReceiveBean(instruction type=0, work state=0,
temperature value=0, temperature value 2=219
door state= false, motor abnormalities=false
current of magnetron 2=false, current of magnetron 1=false
over temperature protection=false, voltage abnormal=false
sensor 1 shorted=false, sensor 2 opened=false
zero abnormal=false, speed abnormal=false
Inverse potential anomaly=false, start failure=false
motor jam=false, veer abnormal=false
lack of phase failure=false, IPM drive failure=false
communication abnormal=false, 1 anomalous cause of magnetron 1 =false
5 anomalous cause of magnetron 1 =false, 6 anomalous cause of magnetron 1 =false
8 anomalous cause of magnetron 1 =false, 1 anomalous cause of magnetron 2 =false
5 anomalous cause of magnetron 2 =false, 6 anomalous cause of magnetron 2 =false
8 anomalous cause of magnetron 2 =false, reserve 1=764
reserve 2=0, reserve 3=0
reserve 4=0, version=v1.01)
    
```

Convection temperature Test

- Open the door and take out the wire rack and pizza pan and then close door.
- Select convection temperature 150°C for 10 minutes (scroll the power level pad : "a").
- Check the temperature in the display ("b").
- The temperature should be within 150 °C +/- 15 °C

The current state: --

Start
 Pause
 Cancel
 No change

Microwave power	Temperature	The speed of motor
0	0	0
1	150	1
2	151	2

Pre-heating
 Cooking

Back Aging Power

The test version: V. 1.1.43

```

Send:
aa 16 bb 00 00 00 00 03 00 00 00 00 02 00 00 00 00 00 00
00 00 2a

Receive:
aa 1c bb 00 00 00 00 03 00 00 00 00 00 db 00 00 00 80 00 02
fc 00 00 00 00 00 01 cc

Receiving data analysis:
ReceiveBean(instruction type=0, work state=0,
temperature value=0, temperature value 2=219
door state= false, motor abnormalities=false
current of magnetron 2=false, current of magnetron 1=false
over temperature protection=false, voltage abnormal=false
sensor 1 shorted=false, sensor 2 opened=false
zero abnormal=false, speed abnormal=false
Inverse potential anomaly=false, start failure=false
motor jam=false, veer abnormal=false
lack of phase failure=false, IPM drive failure=false
communication abnormal=false, 1 anomalous cause of magnetron 1 =false
5 anomalous cause of magnetron 1 =false, 6 anomalous cause of magnetron 1 =false
8 anomalous cause of magnetron 1 =false, 1 anomalous cause of magnetron 2 =false
5 anomalous cause of magnetron 2 =false, 6 anomalous cause of magnetron 2 =false
8 anomalous cause of magnetron 2 =false, reserve 1=764
reserve 2=0, reserve 3=0
reserve 4=0, version=v1.01)
    
```

Clean the cavity---After repairing



- Take out the Splash Shield and Wind Guide.
- Clean the cavity.