Bravo Foshan Shunde Bravo Electric Co., Ltd.

Building A, No.1 ShiLong Road, Xintang, Lunjiao, Shunde, Foshan, Guangdong, China, 528308

Service Manuals

HOBS

1. General Information

These instructions serve the repairing of built-in induction hob or built-in ceramic hob, including 30cm 1 zone, 30cm 2 zones, 60cm 3 & 4 zones, 70cm 2&3 zones (combined hob), 77cm 4 & 5 zones, 90cm 5 & 6 zones.

Please search for the corresponding alarm symptom and then go through the alarm remedy measures from top to bottom. Information concerning the replacement parts is to be found in the corresponding exploded view or corresponding spare part list.

All disassembly and maintenance work are only to be carried out when power is off and the hob is cool down. i.e should the cooking hob be heated up to hot pan being on the zone, no heating display “H” is displayed when switched off.

2. Alarm Symptoms

2.1 *Appliance not functioning at all, cannot be switched on (Completely not working)*

Alarm Symptom	Cooking Hob Display	Possible Alarm Cause	Alarm Remedying
House fuse triggered	None	Incorrect connection at the power connection terminal.	Test the pin assignment and 220-240VAC between N and the phases on the supply line.
No response when power on, no buzzer sound or digital display, key presses are invalid.	None	No mains voltage	① Make sure the main power supply switch is powered on properly; ② Check if the power cord is securely connected and make sure there is no looseness; ③ Ensure that the voltage between L and N at the input terminal of the power cord is 220-240V.
		Incorrect connection	① See the connection method sticker of power cable pasted next to the terminal/ junction box; ② Check whether the power cord is correctly connected (pay attention to the color distinction of neutral and live lines, single-phase and multi-phase

			connection); ③ Ensure that the voltage between L and N is 220-240V.
		The connector of cable to display board not inserted.	Test 5VDC between Pin "+5V" & "GND" of the Bus for the display board or power board. If 5VDC output on the power board, but no 5VDC input on display board; ① Ensure that the connecting wire of display board is properly connected to power board; ② Replace the intermediate connection wire.
		Power board failure	Test 5VDC between Pin "+5V" & "GND" of the Bus for the display board or power board. If no 5VDC output on the power board (+5V & GND port), replace the power board;
		Display board failure	Test 5VDC between Pin "+5V" & "GND" of the Bus for the display board or power board. If 5VDC output on the power board and 5VDC input on display board, replace the display board.
Normally powered on, there is a buzzer sound but the key is invalid.	None	Display panel overflow protection	Cut off the main power supply, clear the overflow water, then power on again and reset.
		① Display board failure; ② Power board failure.	① Replace the display board; ② Replace the power board.
Power-on tripping / Blown fuse	None	Incorrect wire connection on the power cable.	Check whether the power cord is correctly connected (pay attention to the color distinction of neutral and live wire, single-phase and multi-phase connection)
		Power board failure	Replace the power board.
Normally powered on, there is a power-on trip / blown fuse when selecting power level (Only for induction hob)	None	Main board failure	Replace the main board, if the fuse on power board has been damaged, replace the power board as well.

2.2 ***Individual cooking zones do not work (partially) or work incorrectly or cannot be used（not working properly）***

Bravo
Foshan Shunde Bravo Electric Co., Ltd.

Building A, No.1 ShiLong Road, Xintang, Lunjiao, Shunde, Foshan, Guangdong, China, 528308

Alarm Symptom	Cooking Hob Display	Possible Alarm Cause	Alarm Remedying
Insensitive touch keys or individual buttons can't always be used.	Normal	① Display board failure ② Check if there is any oil stain at the position corresponding to the display board on the back of the glass.	Replace the display board. ① Remove the stain and ensure cleanliness.
Normal touch, but abnormal display	Abnormal	Display board failure	Replace the display board
Pan does not heat up (Only for induction hob)	Flashing "U"	Pan not detected.	Check whether the pots or pans are suitable for induction (Mismatch of cookware material, too small size of the bottom of the pot or the bottom of the pot is not flat enough.). See the selection guide for pan or pots in the user manual.
		Coil not correctly connected	Check whether the coil lines are connected
		Cookware is not placed in the designated area	Always centre your pan on the cooking zone and make sure your pan is the same as cooking zone.
		The flat cable between the display board and main board is disconnected or display board failure	① First check the flat cable whether it is in well connection or whether the cable is disconnected; ② Replace the display board.
		Main board failure or no power on the main board	Replace the main board and at the same time check whether the fuse on the power board is damaged. If so, replace the power board as well.
Poor heating performance (Only for induction hob)	Normal cooking	The fan does not start.	① When power level >0, the fan runs at a slow speed, if not, check the fan for foreign bodies, remove these where appropriate. ② If necessary, replace fan. ③ Should this not succeed, replace power board. if symptom still continues, replace the display board.
		Incorrect installed, exhaust not possible to the front, resulting in abnormal heat dissipation.	Refer to the installation instructions in the manual.
		Pan in the border area of the pan detection and only works the	Use different pot or this pot on a smaller hob.

		lower power.	
"H" in the display when cooking hob and oven cold and switched off	"H"	Temperature sensor failure	Replace corresponding coil with temperature sensor.
Power level display is normal, but the burner is not working (Only for ceramic hob)	Normal	The thermocouple corresponding to the burner is damaged (use a multimeter to measure whether the thermocouple is open-circuited)	If the thermocouple is open-circuited, replace the thermocouple corresponding to burner.
		The burner is damaged (use the multimeter to measure whether the heating wire on the burner is open-circuited or not)	If the heating wire is open-circuited, replace the corresponding burner.
		① Display board failure; ② Power board failure.	① Replace the display board; ② Replace the power board.
Poor heating performance (Only for ceramic hob)	Normal	Using a non-conductive pan, or a pan or pot without flat bottom, or a pan that is too large for the heating zone.	Use pots and pans as specified in the instructions.

2.3 ***2.3 Alarm message "E" (only for induction hob)***

If an abnormality comes up, the induction hob will enter the protective state automatically and display corresponding protective codes.

When the hob is switched on, Error code "E + number" is displayed, the affected heating zones are subsequently displayed with "E + number" in the zone indicator and thereby disabled. The other zones can still be used.

Alarm Symptom	Cooking Hob Display	Possible Alarm Cause	Alarm Remedying
An error code shown in the display board	E1	The coil is open circuit	① Check that the connections on the coil are securely connected; ② Replace the coil.
		Main board failure	Replace the main board.
	E2	High input voltage protection	Overvoltage of power grid. ① If the rear and front right zone shows E2, power cord is wrongly connected or the right main board is damaged. ② If front and rear left heating zone shows E2, and the left main board is damaged.
	E3	Low input voltage protection	① Too low mains voltage ② Main board failure

	E4	Thermistor open circuit	① Replace the thermistor corresponding to the heating zone. ② Replace the main board
	E5	Thermistor short circuit	① Replace the thermistor corresponding to the heating zone. ② Replace the main board
	E6	Over-temperature thermistor	① The hob is under dry burning, and it may be used again after it is completely cooled down. ② Should this not succeed, replace main board.
	E7	IGBT sensor open circuit	Main board failure
	E8	IGBT sensor short circuit	Main board failure
	E9	Over-temperature IGBT sensor	① Check whether the fan is working or not; (Failure of the fan may be due to a fault in one of the fan/display board/power board.) ② Select cookware as required by the instructions, and make sure the hob is installed correctly and can exhaust air properly;
	ED	The thermistor failure	Two thermistors corresponding to the same main board are inserted in reverse, or the ambient temperature is too low. It can be restored by cutting off the power and restarting.
	EE	Incorrect communication between the display board and power board.	① Disconnect hob from mains, wait 10 seconds and reconnect the main power supply. ② Should error code still be displayed, replace the display board. ③ If it still cannot be solved, replace the main board.

The above are the judgment and inspection of common failures.

2.4 ***Other alarm symptoms (only for induction hob)***

Alarm Symptom	Cooking Hob Display	Possible Alarm Cause	Alarm Remedying
Some pans make crackling or clicking noises.	Normal	This may be caused by the construction of your cookware (layers of different metals vibrating differently).	This is normal for cookware and does not indicate a fault.
The induction hob makes a low humming noise when used on a high heat setting.	Normal	This is caused by the technology of induction cooking.	This is normal, but the noise should quieten down or disappear completely when you decrease the heat setting.
Multiple cooking zones work at the same time but with electromagnetic noise	Normal	Using pots and pans made of multiple materials at the same time, or using one pot or pan covers more than one cooking zone.	Place the pans or pots according to the instructions. It is recommended to use the pans or pots with same materials.
Fan noise coming from the induction hob.	Normal	A cooling fan built into your induction hob has come on to prevent the electronics from overheating. It may continue to run even after you've turned the induction hob off.	Check whether the fan of a foreign body and clean the fan, if not, replace the fan.
Inermittent heating	Normal	This is caused by the heating principle of induction hob or high temperature inside the induction hob.	This is normal. ① Chose the cookware with good heat conductivity; ② Select high power level for cooking; ③ Check the air exhaust if it is met the requirement.

3. Pot Detection information

Suitable pot materials:

- Steel enamel
- Stainless steel (with magnet. bottom)
- Aluminium (with magnet. bottom)
- Cast iron

Unsuitable materials:

- Aluminium (too much power)
- Copper
- Stainless steel (not magnetic)

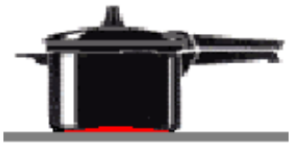
- Glass
- Ceramic

The pot detection is designed for the following diameters:

Size of burner (mm)	The minimum pot bottom (diameter/mm_
150	120
160	120
180	140
210	160
Independent coil 220x200	160
Flexible zone 400x200	250
Independent coil 210x190	160
Flexible zone 210x380	250
Independent coil 280x220	220
Flexible zone 400x280	300

The performance for different pots can vary by as much as +/- 10-15%.

- As reference pots, we recommend enamelled steel pots (e.g. Silit).
- 2-3 mm thick round steel plates in various diameters are very suitable for testing the pot detection function.
- With regard to stainless steel pots with sandwich bottoms, the diameter of the magnetic part of the pot bottom is decisive
- An additional influencing factor is the vertical distance from the coil, i.e. an uneven sandwich bottom has a negative effect on the power consumption. The effect is exactly the same if the induction coil is not pressed on the glass ceramic.



- The bottom diameter of the pot is decisive and not the exterior diameter.

- With regard to stainless steel pots with sandwich bottoms, the diameter of the magnetic part of the pot bottom is decisive.