

C11 Service manual

(V01)



❖ Applied Model:

C11 during the period due to product upgrades, there may be differences between the pictures and the actual products please refer to real object.

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2 Safety Instructions

2.1 Safety tips

2.1.1 Consumer Risky



You may get hurt if instructions are not well followed

Do follow below points:

- ❖ Do read the instructions carefully before using;
- ❖ Do not use if the machine is broken or damaged;
- ❖ Changing the internal devices is not permitted;
- ❖ Touching the high temperature components is not permitted;
- ❖ This equipment can be used by children of 8 years and above, and by persons with reduced physical, sensory or mental abilities or of a lesser level of experience and knowledge when they are supervised or have been trained in the safe use of equipment;
- ❖ Take care of the children. Children are not permitted to play with the equipment;
- ❖ Children are not permitted to clean and maintain machines;
- ❖ Machine is installed at obvious site;
- ❖ Self-service use and operation should be supervised by trained personnel to ensure compliance with maintenance regulations and to resolve usage issues at any time;
- ❖ Beans hopper only for beans, powder hopper only for powder, and manual inlet only for cleaning tablet.



Improper use of electrical equipment can cause electric shock

Do follow below points:

- ❖ Working on electrical equipment can only be carried out by electrical professionals;
- ❖ The machine must be connected with fuse-connection circuit(connection by selective protection);
- ❖ Observe the corresponding low voltage instructions and local and regional safety regulations;
- ❖ The connection must obey the regulation to avoid the electric shock;
- ❖ The voltage must be matched with the data on rating plate;
- ❖ Do not touch live parts;
- ❖ Power off while maintenance, disconnected the machine;
- ❖ Replacing cable only permitted to the trained professional person.



Drinks with additives or residues may cause allergies

Do follow below points:

- ❖ In self-service, check for possible allergenic products listed on the coffee machine;
- ❖ In self-service, check for possible allergenic products with professional person.



There is risk of getting poisoned by in taking cleaning agent

Do follow below points:

- ❖ Always keep cleaning agent away from children and un-authorized person;
- ❖ Do not intake cleaning agent;
- ❖ Do not mix with acidic compounds or other chemicals;
- ❖ Do not add cleaning agent in milk container;
- ❖ Do not add cleaning agent in the water tank;
- ❖ Cleaning agent and decalcifying agent must be used under instructions(follow the label);
- ❖ Do not eat or drink during using cleaning agent;
- ❖ Good ventilation must be ensured when using cleaning agent;
- ❖ Wear gloves;
- ❖ Wash hands immediately after using cleaning agent.



It is risky to get burned, keep hands far away from steam outlet



High temperature on the outlet and brewing equipment, only rinse the brewing system after cooling down.



It is risky of being crushed by touching any active parts. Do not put your hands in bean hopper, powder hopper and brewing system during working.

2.1.2 Machine Risky



The machine may cause impurities and damages if not used properly

Do follow below points:

- ❖ If the hardness of carbonates is over 5° dHK, please install water filter. if not, the machine may be damaged
- ❖ Turn off the tap water(machines is installed with tap water connection),then turn off the switch or plug off;
- ❖ Observe the corresponding low voltage and local regional safety regulations;
- ❖ If machine is lack of water, do not switch on. Otherwise the boiler and pump will be damaged;
- ❖ Dr. coffee suggested to install check valve in the water tube, in case of the water leakage by the tube crack;
- ❖ If the machine stops using for a while ,deep cleaning must be done before making coffee;
- ❖ Prevent coffee machines from being affected by bad weather;
- ❖ Checking errors with professional person;
- ❖ Please use original Dr. coffee accessories;
- ❖ Please contact with after sale service team to do replacement if find damage on the surface;
- ❖ Washing the machine with water or steam cleaning products is not permitted;
- ❖ Do not place the machine in the location which may jet by water;
- ❖ Beans hopper only for beans , powder hopper only for powder, manual outlet only for tablets;
- ❖ Frozen coffee is not permitted, otherwise the brewer will be stick;
- ❖ If deliver the machine on the temperature condition under 10°C, before switch on the coffee machine must be placed at a room with normally temperature for three hours after shipment, failure to comply with this regulation may

result in a short circuit hazard or damage to electrical components due to condensate;

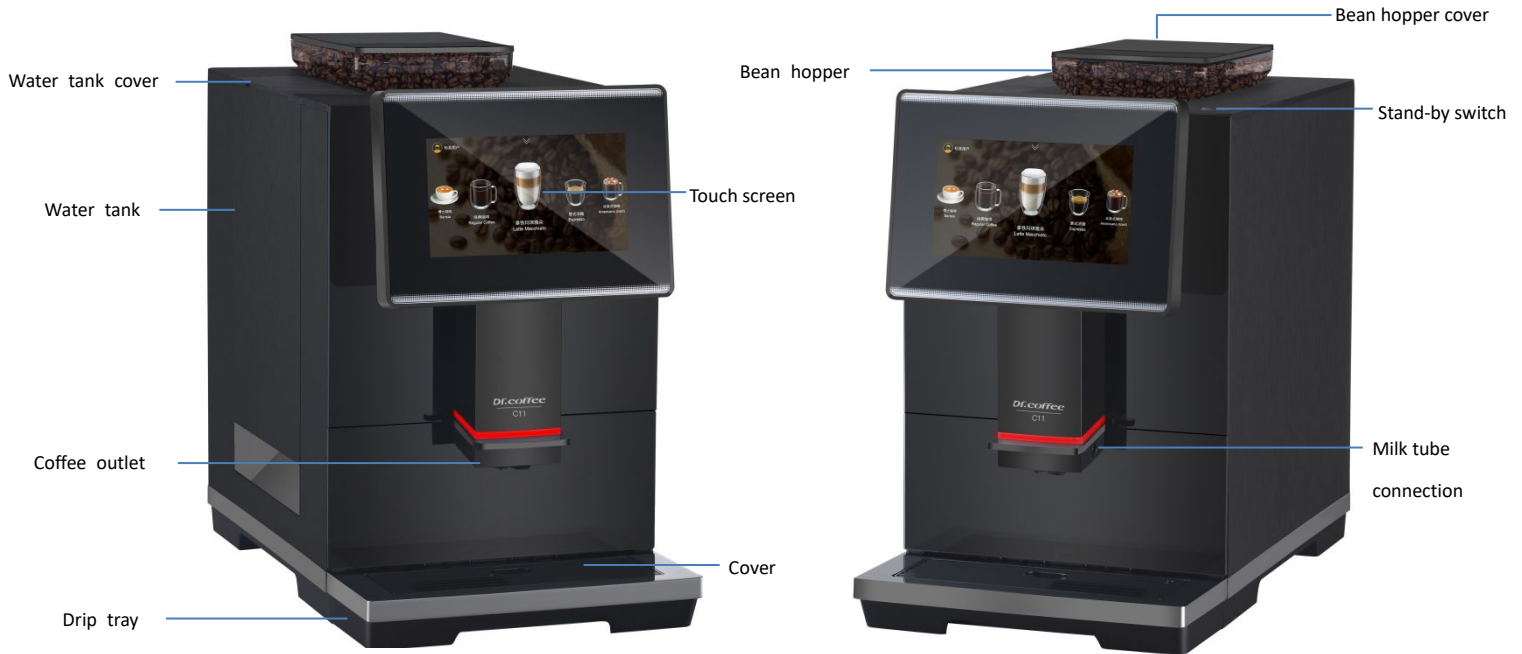
- ❖ Always use a new hose kit (drinking water/waste water hose) supplied with the machine, and do not use old hoses.

3 Structure

3.1 Overview

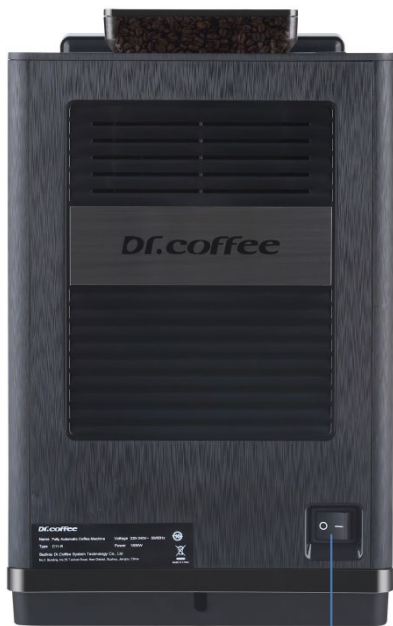
Coffee Machine

(Front)

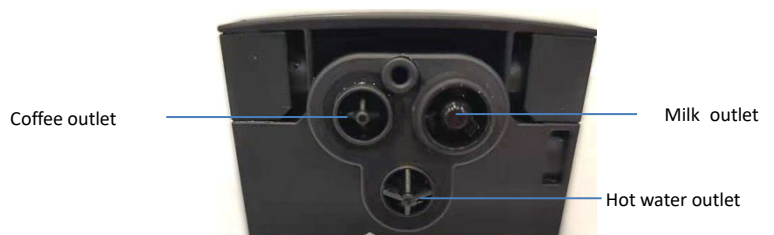


Coffee machine

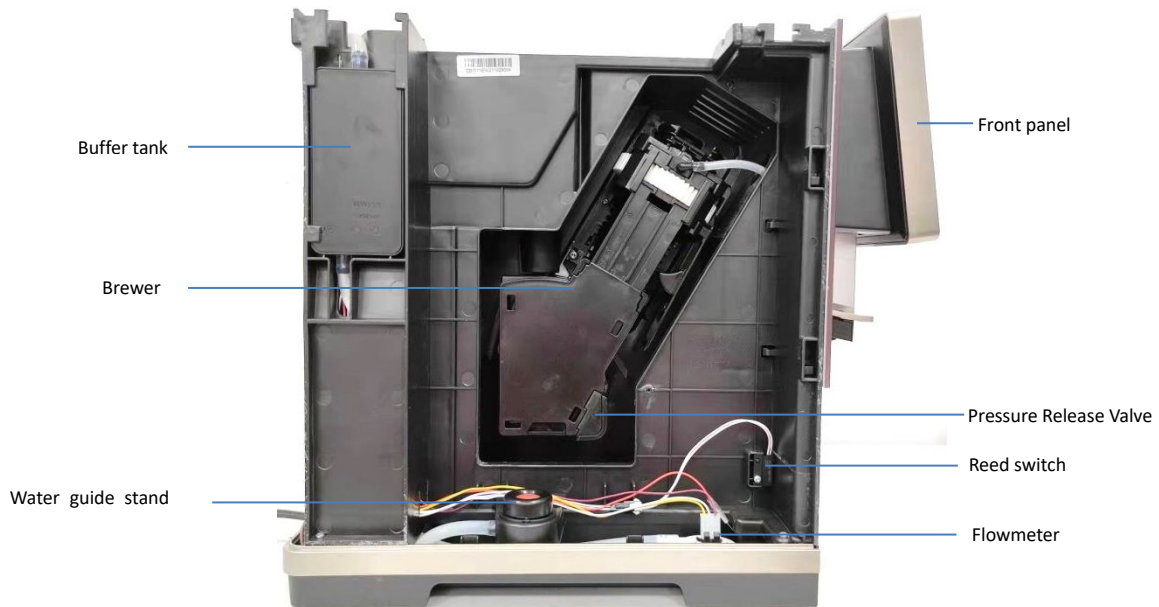
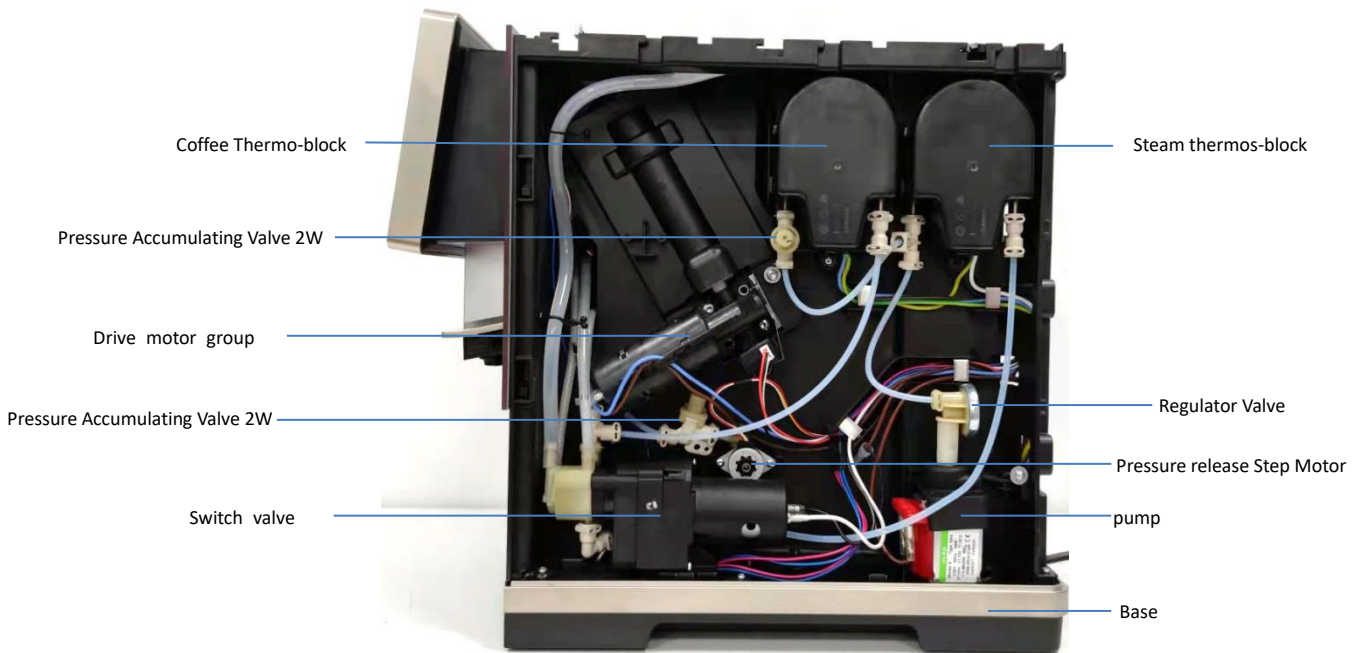
(back side)

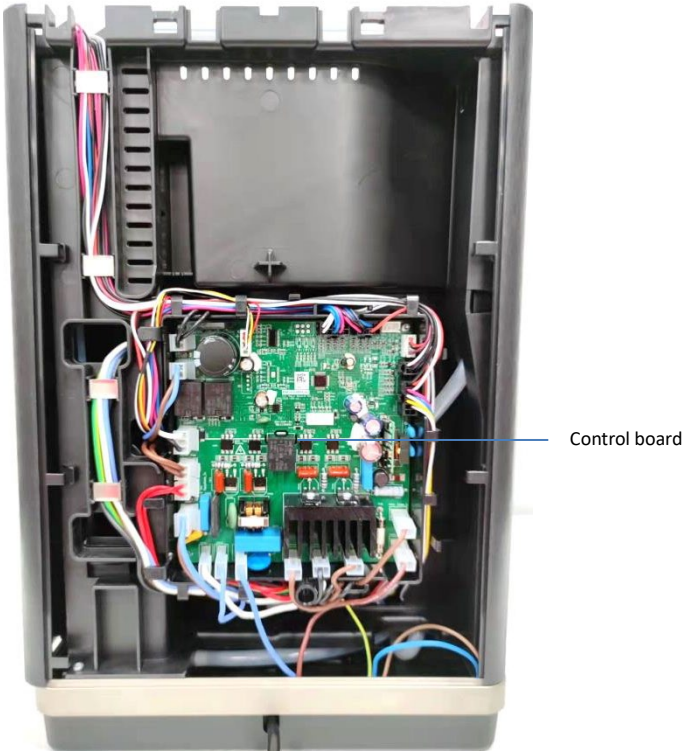
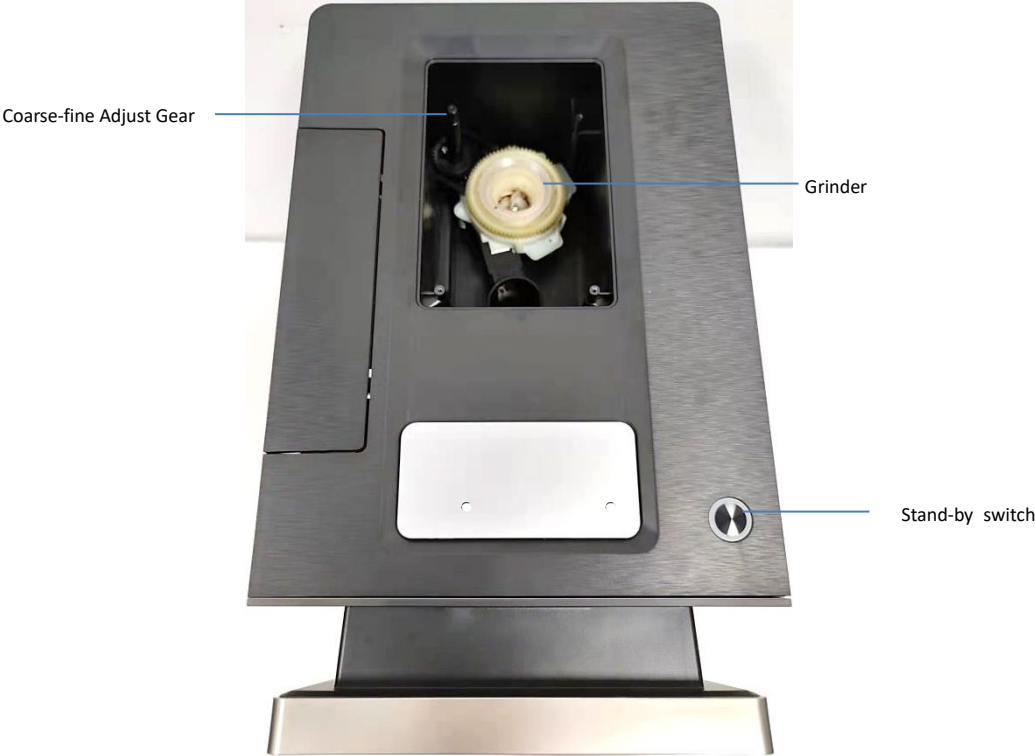


Beverage outlet



3.2 Internal components overview

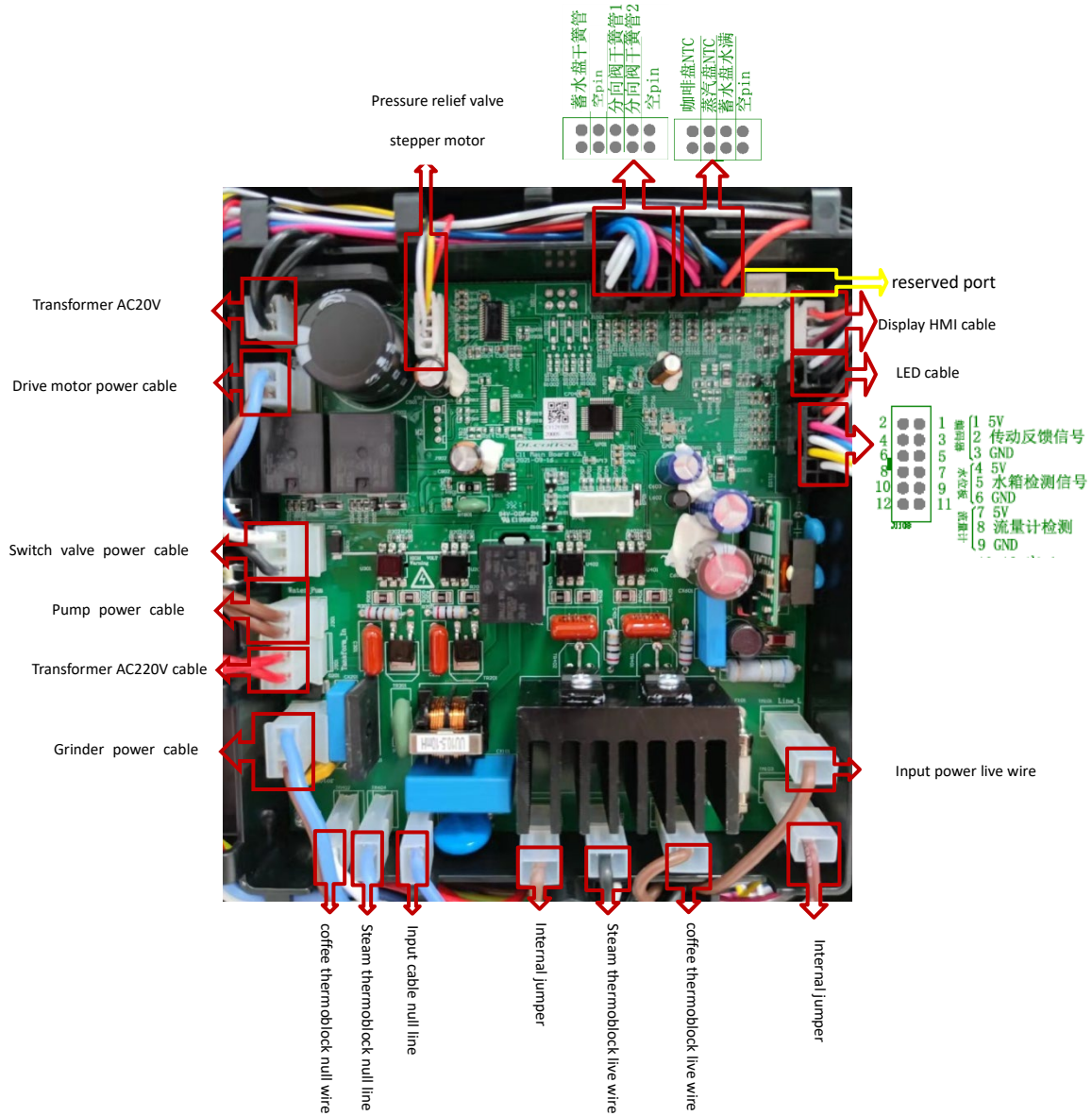




4 Circuit Overview

4.1 Schematic Circuit

4.1.1 C11 Control board schematic circuit



5 Specification

5.1.1 Capacity

Hourly output based on DIN18873-2:

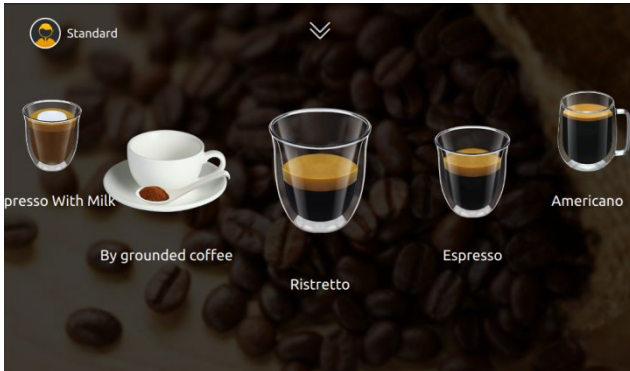
Model	C11
Advised daily output	10cups
Hourly output	single
Espresso 50ml	70
Americano 240ml	50
Cappuccino 180ml	50
Hourly hot water output	15L
Water tank capacity	2L
Bean hopper capacity	Approx. 280g
Ground container capacity	Approx. 15PCS (Based on 10g/pc)

5.1.2 Technical Sheet

Model	C11
Coffee machine	220-240V 50/60Hz
Power	1450W
Coffee machine W*D*H	26*46*42cm

6 Screenshot description

6.1 Drink home screen



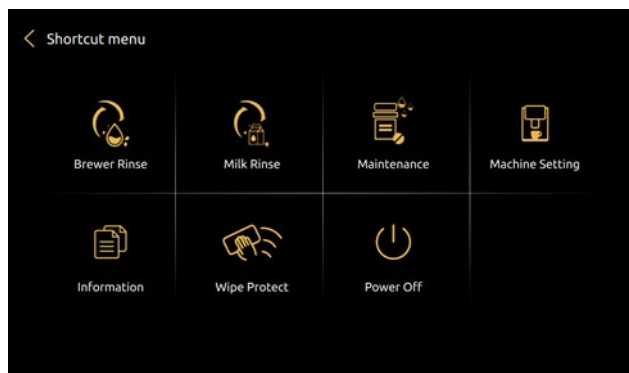
- 1、Touch any picture to get coffee: (see details in the user manual)
- 2、Touch side button to change pages. (see details in the user manual)

6.2 User selection



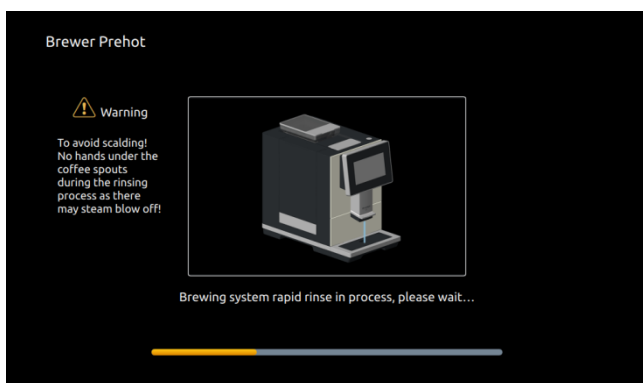
Click the user icon to select the set user (see details in the user manual)

6.3 Shortcut menu bar



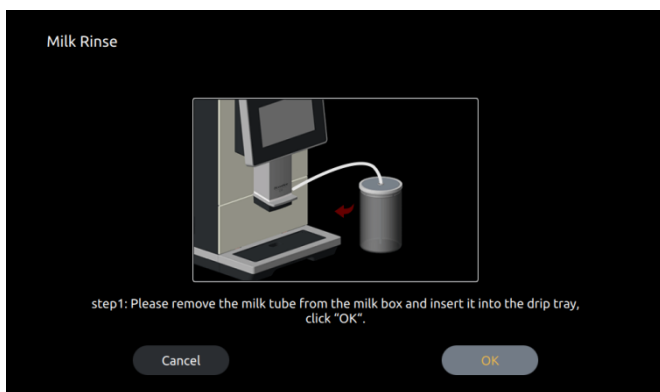
Click or swipe down  icon, Pop-up shortcut menu bar;

6.3.1 Brewer system rapid rinse



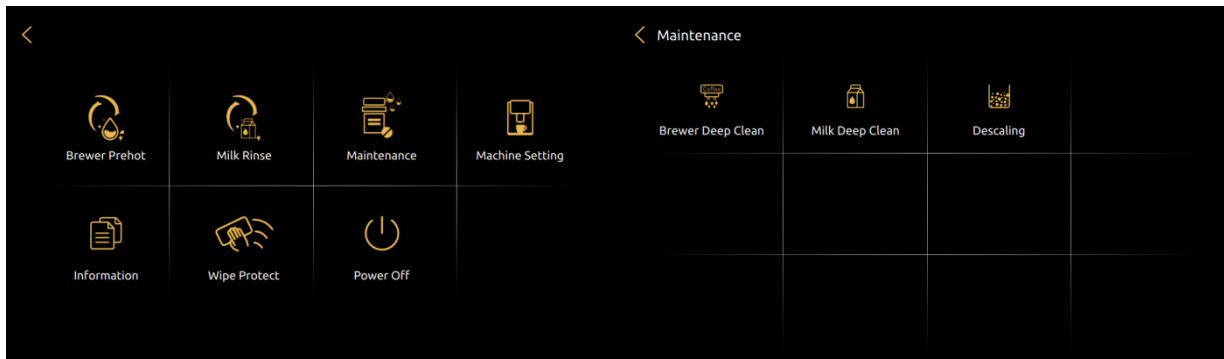
Touch "Brewer rapid rinse", "Back" or "OK" can be chosen on the screen. If no response after 10 seconds, default to "OK" and start rinsing.

6.3.2 Milk Rinse

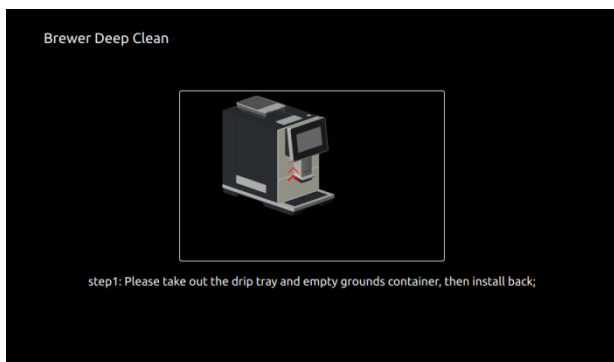


Touch "Milk Rinse", "Back" or "OK" can be chosen on the screen. If no response after 10 seconds, default to "OK" and start rinsing.

6.3.3 Maintenance



6.3.3.1 Brewer deep clean



Use specialized cleaning tablets to do deep clean. Follow the instruction on the screen

❖ See details in User Manual

6.3.3.2 Milk deep clean



Use specialized cleaning powder to do deep clean. Follow the instruction on the screen

❖ See details in User Manual.

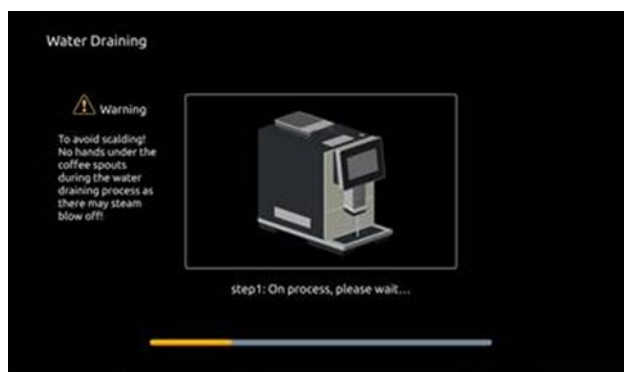
6.3.3.3 Descaling



Use specialized cleaning powder to do deep clean. Follow the instruction on the screen

❖ See details in User Manual

6.3.3.4 Water Draining

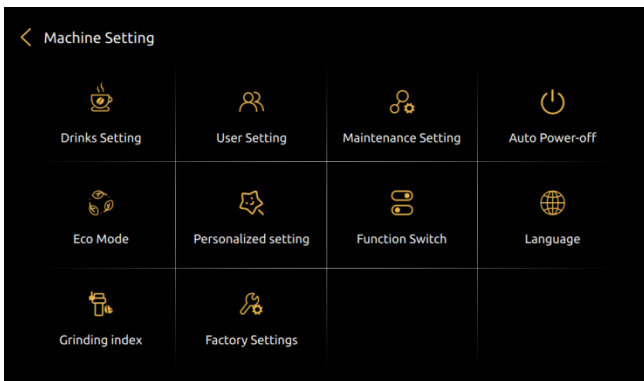


This is hidden function , just for technicians


This is function is to empty the remaining water in the internal piping of the coffee machine to prevent it from freezing and causing cracking after transporting in a low temperature environment.

First remove the water tank then long press the warning interface, water draining process starts.


6.3.4 Machine setting



6.3.4.1 Drinks setting


Click  the icon, and then click the picture of the drink whose position needs to be exchanged, the position of the two drinks can be exchanged.



Click , "Are you sure you want to delete this drink?" interface pops up

- ❖ Cancel: click "cancel" to not perform the delete operation
- ❖ OK: Click "OK" and the drink will be removed from the drink menu



Click , enter the drinks setting interface



Drink Name / English

This column displays the current drink name/English drink name

Change to

Click this column to modify the current drink name

Picture changes

Step 1: Click "System Materials", and the optional images preset by the system will be displayed;

Click "custom material" (if you insert a U disk, the pictures in the U disk will also be displayed)

Step 2: Click the picture that needs to be replaced to realize the replacement of the drink picture.

Click Save to finish, and pull out the U disk.

Order

It means to set the production order of each step when making this drink; (drag the color blocks with different names to the corresponding position to complete the setting; if you cannot put it in a certain position, it means that this matching method is not supported)

※ **Requirements for drink pictures are as follows:**

1. *The naming requirements of pictures: only letters or numbers; (do not name in Chinese, otherwise the coffee machine system will not be able to recognize the pictures)*
2. *Image size requirements: 390x355 pixels;*
3. *Format requirements for pictures: png;*

Drinks Parameters setting

Grounds: Grinding gram level, setting level:1~5

Standard comparison table of grinding amount ---Refer to the content of beverage parameter setting:

Grounds	1	2	3	4	5
Gram	6g±1g	7g±1g	8g±1g	9g±1g	10g±1g

Pre-brewing: The coffee powder pre-soaking time, unit: S, setting level: 0~5.

Coffee: The amount of coffee flowing out, unit: ml. Setting level: See the screen numerical on the interface, different beverage with different beverage value limits.

Extraction Control: Set the extraction control for making drinks.

Setting Range: standard; strong; extra strong

Temperature Range: The temperature for making drinks adjustable: High; Medium; Low

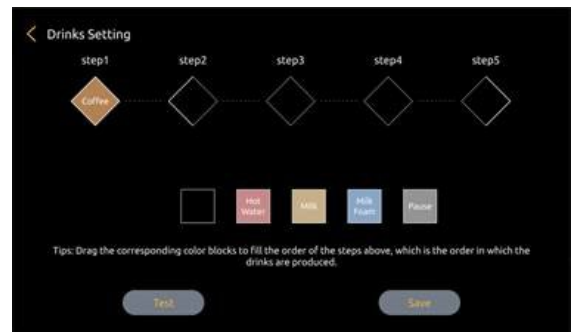
Hot water: The amount of Hot water Unit: ml Setting range: 0~300

Milk: The time of milk output Unit: S Setting range: 0~90


Milk Foam: The time of milk foam output Unit: S Setting range: 0~90

Test: It means that after modifying any parameter of this drink, click the "Test" button to make a drink according to the parameter value of the drink displayed on the current interface.

Save: Indicates that after all parameters of this drink are modified, click the "Save" button to save




6.3.4.2 Create new beverage


Click “”,to create a new beverage;



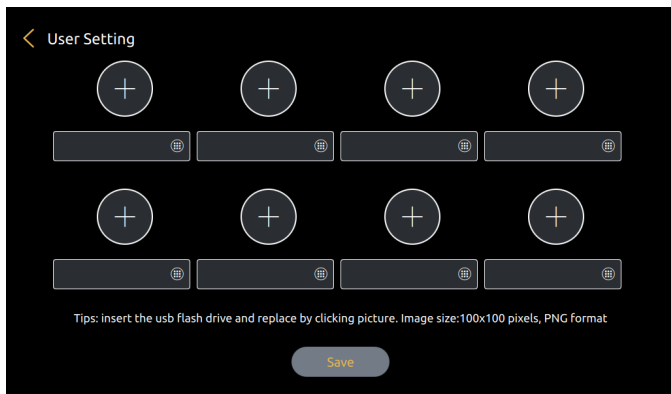
For detailed steps, please refer to the machine manual


6.3.4.3 User setting

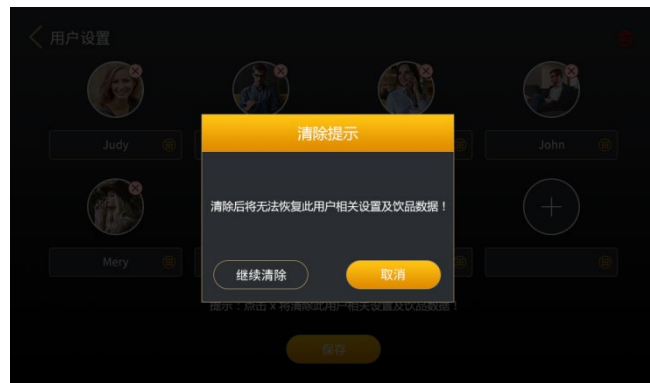
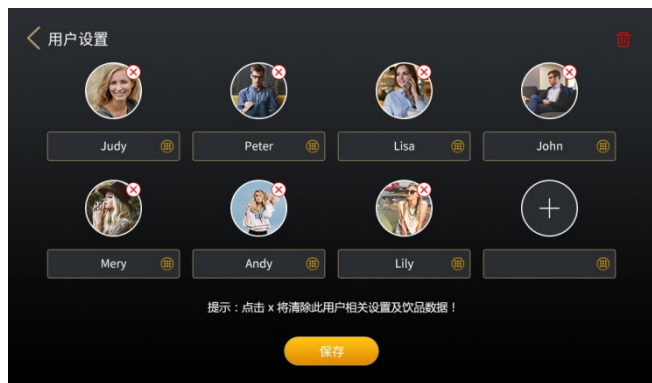
Click “” Click "System Material" to display the optional pictures preset by the system; click "Custom Material" (if you insert a U disk, all the pictures in the U disk will also be displayed). Click the picture to be replaced to realize the replacement of the user's picture, click Save to complete, and pull out the U disk.

Click “” can set the user name

The newly created user drink interface is empty, you need to enter the drink setting interface to recreate the drink

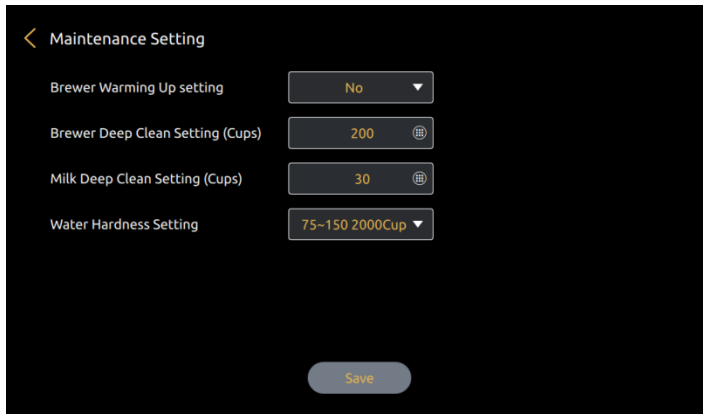


Click “” delete users who have been set up



6.3.4.4 Machine setting

Set the condition values for various maintenance intervals of the machine. Tap "Save" to effect



Brewer Warming Up

Indicates whether the coffee machine needs to turn on the preheat function, and can set the conditions for starting the preheat function. Choices: No, Immediately, 5 Minutes, 10 Minutes, 15 Minutes, 20 Minutes, 2 Hours.

- ❖ For example: Setting "20 minutes later" which means that if the coffee machine is not operated after 20 minutes, the machine will turn on the warm-up function
- ❖ Specific explanation of this function: make any coffee drink after 20 minutes, will pop up the prompt "Brewer warming up?", click "yes", the coffee machine will automatically flush the brewing system with hot water to achieve the effect of preheating.

Brewer Deep Clean Setting (Cups)

This indicates how many cups of coffee to make; the machine will automatically prompt you to use the tablets for deep cleaning of the brewing system. Setting range: refer to the prompt of the input field on the screen, different models are different.

- ❖ For example: Set to "1000", which means that after the coffee machine makes 1000 cups of beverages containing coffee, the machine will automatically prompt that it needs to use tablets for deep cleaning of the brewing system

Milk Deep Cleaning Setting (Cups)

Indicates how long after setting the coffee machine to make drinks containing milk, the machine will automatically prompt that it is necessary to use a milk scale cleaning agent for deep cleaning of the milk system, the unit is: cup. Setting range: refer to the prompt of the input field on the screen, different models are different.

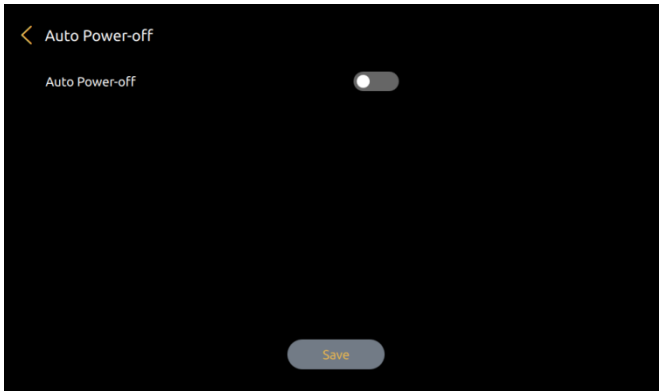
- ❖ For example: set to "500", it means that starting from the coffee machine to make beverages containing milk, the machine will automatically prompt after making 500 cups of milk, it is necessary to use a milk scale cleaner for deep cleaning of the milk system.


Water hardness setting (Descaling)

Indicates how long the machine will automatically prompt after setting the coffee machine to make beverages that require steam, and the unit is: cups.

6.3.4.5 Automatic off

Set the time for the coffee machine to automatically shut down. Click save to take effect



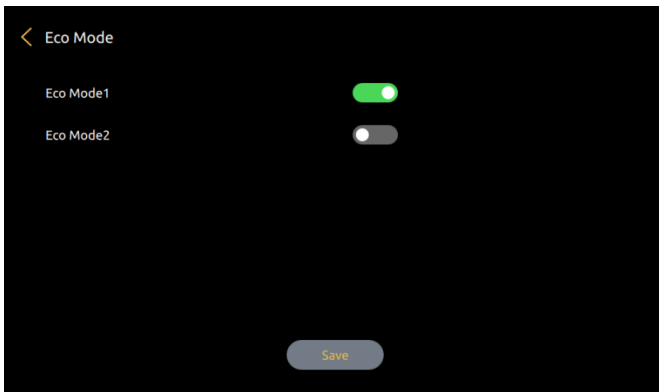
Automatic off : click “” to turn on this function. (orange-on; grey-off); after setting, please “save”

Automatic off(H): Indicates the time to set the specific shutdown time. Setting range: 30 minutes to 24 hours

For example, set 12 hours: it means that the countdown starts from 0 after making coffee, and no one makes coffee after 12 hours, the coffee machine will automatically shut down and the screen will turn off; If someone makes coffee during the countdown, the system will count down from 0 from the current cup, and will automatically shut down after 12 hours;

6.3.4.6 ECO mode

In this item, you can choose to turn on or off any of the modes. Tap “Save” to effect



ECO 1

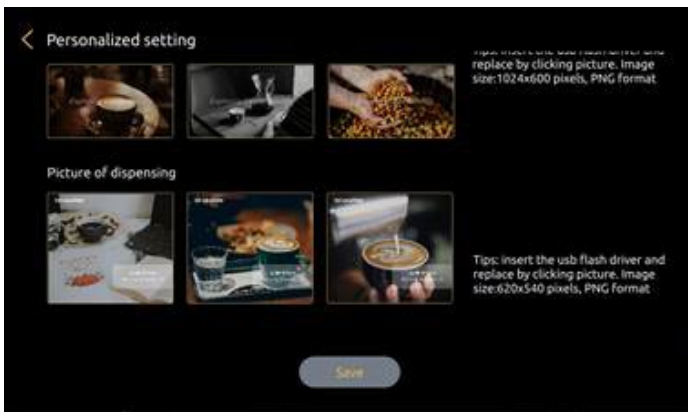
❖ After standing by after 60 minutes, the temperature of Steam Thermo block and Hot water Thermo block will drop to about 65 ° C and remain constant

ECO 2

❖ After standing by after 30 minutes, coffee machine will power off automatically(Soft shutdown state, press the top switch button on the machine for 3 seconds or more, restart)

6.3.4.7 Personalized setting

Personalization related functions can be set



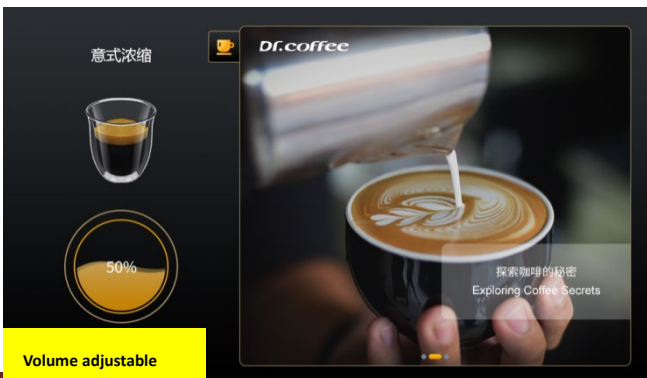
Beverage mode selection: There are two modes: 3D, palace grid



Making mode: Adjustable before production and Adjustable in production

Adjustable before production: Beverage parameters cannot be adjusted before making

Adjustable in production : Beverage parameters can be adjusted in making process



Screen backlight brightness: Slide the progress bar to adjust the screen backlight brightness

LED Strip: In this item, you can turn on or off the light bar function and color selection. Click Save to take effect.

RGB Color: Select the color of the light, the selection range is:

No, Cycle, Red, Green, Blue, Purple, Light Green, Cyan, Light Blue;

light Cycle (S): Select the interval time of light color switching, unit: second, the selection range is: 1~120 seconds.

Picture Of Start Setting

Step 1: Click "Original Boot Image", the optional images in the system material will be displayed;

(If a U disk is inserted, the pictures in the U disk will also be displayed in the custom material).

Step 2: Click on the picture that needs to be replaced, you can realize the replacement of the boot picture,

Click Save to finish, and pull out the U disk.

Screen Setting

Step 1: Click "Original Screensaver Picture" to display the optional pictures in the system material;

(If a U disk is inserted, the pictures in the U disk will also be displayed in the custom material).

Step 2: Click on the picture that needs to be replaced, you can realize the replacement of the boot picture,

Click Save to finish, and pull out the U disk

Picture of dispensing

Step 1: Click "Original Picture" to display the optional pictures in the system material;

(If a U disk is inserted, the pictures in the U disk will also be displayed in the custom material).

Step 2: Click on the picture that needs to be replaced, you can realize the replacement of the

boot picture,

Click Save to finish, and pull out the U dis

※ The requirements for the boot image are as follows:

1 Image naming requirements: only letters or numbers; (do not name in Chinese, otherwise the coffee machine system will not be able to recognize the image)

2 Image size requirements: 1024x600 pixels;

3 Image format requirements: png;

4 Image size requirements: less than 2MB;

※ The requirements for the screen saver image are as follows:

1 Image naming requirements: only letters or numbers; (do not name in Chinese, otherwise the coffee machine system will not be able to recognize the image)

2 Image size requirements: 1024x600 pixels;

3 Image format requirements: png;

4 Image size requirements: less than 2MB;

※ The requirements for making pictures are as follows:

1 Image naming requirements: only letters or numbers; (do not name in Chinese, otherwise the coffee machine system will not be able to recognize the image)

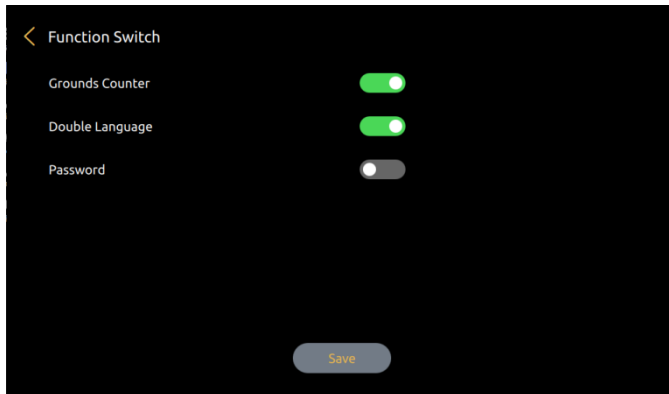
2 Image size requirements: 620x540 pixels;

3 Image format requirements: png;


4 Image size requirements: less than 2MB;

6.3.4.8 Function switch

In this item, you can open or close the related functions in the menu. Click save to take effect




Grounds counter

Click “”, It can be turned on or off, the default is: on; (orange: means open, gray: means close)

After opening: When the machine reaches the warning threshold when the cumulative production of coffee drinks, will pop-up “Grounds container is full”, the system will start counting after clearing confirmation

After closing: the machine will never prompt “Grounds container is full”, please be sure to check the ground container and empty in time.


Double Language

Click “”, It can be turned on or off, the default is: on; (orange: means open, gray: means close)

After opening: both Chinese and English drink names will be displayed;

After closing: English drink names will not be displayed;

Password

Click “”, It can be turned on or off; the default is: off; (orange: means open, gray: means close)

After opening: Enter the password to enter the machine setting menu. The password is divided into digital password and PIN code; (two passwords have the same authority)

Digital password: The initial password is 1609, which can be modified;

PIN code: This password is a 4-digit password obtained through the operation of the random 4-digit PIN displayed by the machine. For example, when the PIN is 9875, the password is as follows;

The first digit of the PIN code is the last digit of the sum of the first and last two digits of the PIN, which is 4. (The first and last two digits of the PIN are added to 9+5=14.) If the first and last two digits are added, there is only one digit. fill in this number;

The middle two digits of the PIN code are copied from the middle two digits of the PIN, which is 87;

The last digit of the PIN code is the last digit of the added value of the middle two digits of the PIN, which is 5. (The middle two digits of the PIN are added to 8+7=15.) If the middle two digits are added, there is only one digit. fill in this number;

Now the PIN code is 4875.

After shutdown: No password is required to enter the machine setup menu.

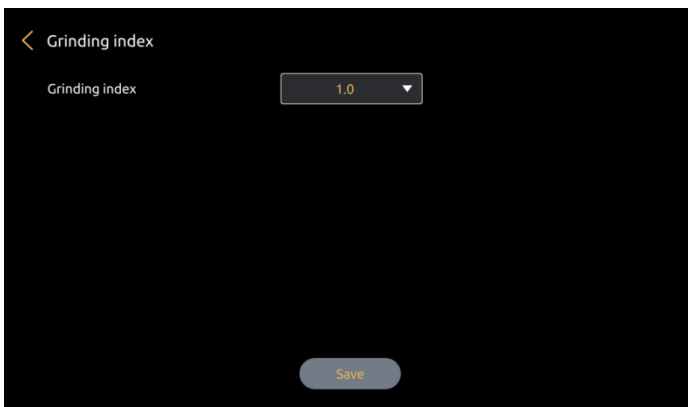
6.3.4.9 Language



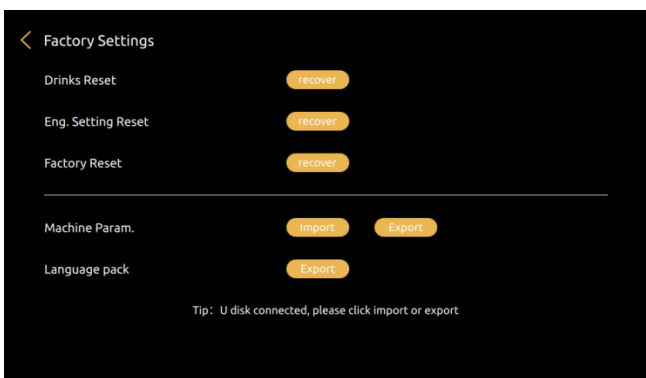
6.3.4.10 Grinding Index

The grinding amount of the grinder can be calibrated. Tap "Save" to effect.

About Grounds Calibration: It is the multiple of the Grounds set in drink setting. Set Choice: 0.7~1.3; Default: 1.0



6.3.4.11 Factory setting



Drinks Reset

After clicking the button next to "Restore Beverage Parameters to Factory Settings", save and restart the coffee machine, the parameters can be restored to the factory state.

Eng. Setting Reset

After clicking the button next to "Restore to factory settings", save and restart the coffee machine, the parameters can be restored to the factory state.

Factory Reset

After clicking the button next to "Restore All to Factory Settings", save and restart the coffee machine, the parameters can be restored to the factory state

Machine Param.

In this item, you can choose to import or export the parameters set by the machine after inserting the U disk according to the on-screen prompts.

Parameter export steps: Insert the U disk into the USB interface of the machine, click the "Export" icon, and the machine will automatically export the parameters to the U disk

Parameter import steps: Insert the U disk into the USB interface of the machine, click the "Import" icon, and the machine will automatically import the parameters into the U disk

Language pack

In this item, you can choose to import or export the parameters set by the machine after inserting the U disk according to the on-screen prompts.

Parameter export steps: Insert the U disk into the USB interface of the machine, click the "Export" icon, and the machine will automatically export the parameters to the U disk

Parameter import steps: Insert the U disk into the USB interface of the machine, click the "Import" icon, and the machine will automatically import the parameters into the U disk

6.3.4.12 Grounds calibration

This is hidden function, just for technicians

Remove the drip tray and long press the interface, calibration function shows up.

The grinding amount of the grinder can be calibrated. Tap "Save" to effect

When the coffee machine is shipped from the factory, it is calibrated with the test beans. However, when using your coffee beans, the speed of the grinder may vary, and the amount of powder may deviate from the factory calibration standard. Therefore, it is recommended to do ground cal. with your own coffee beans before using the coffee machine.

Restore the relevant parameters of the coffee machine to the factory default values. Click Save to take effect after restarting the coffee machine.



Step 1: Empty grounds container, place it on the balance scale, weigh it, and then put it back in the machine;

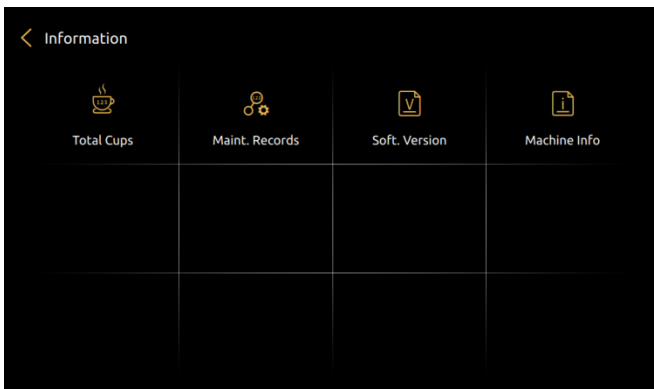
Step 2: Tap "Run" to start grinding coffee grounds will fall into the grounds container;

Step 3: Take out the grounds container and weigh the coffee powder (Note, Weighing from the 3rd time, the first 2 times is to make sure there are coffee grounds in the grinder)

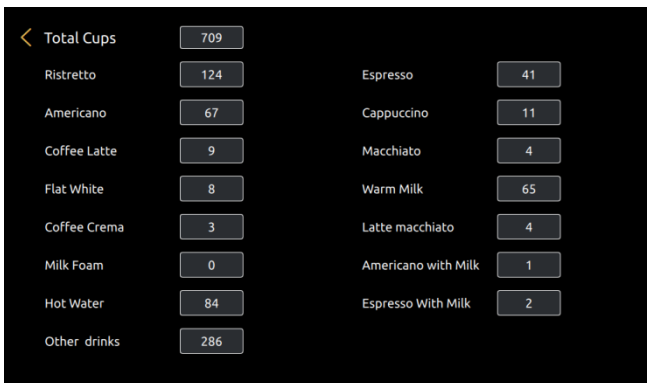
Step 4: Enter the weight of the coffee powder into the "Grounds" on the machine interface; (Enter the value as an integer, round to the nearest decimal point)

Step 5: After repeating the steps above 3 times, "Save" will appear, and all the steps of calibration will be completed after tapping.

6.3.5 Info.

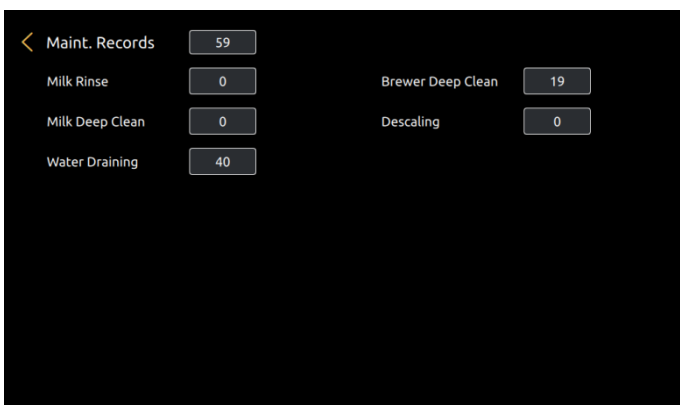


6.3.5.1 Total Cups



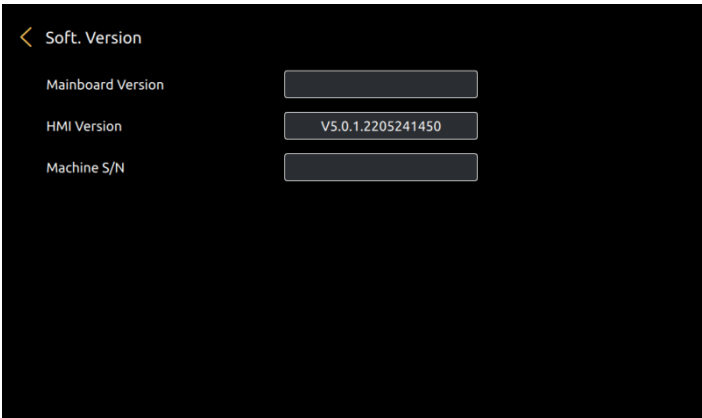
Indicates the total number of cups of all drinks made permanently

6.3.5.2 Maint. Records



Indicates the permanently accumulated maintenance counts

6.3.5.3 Soft. Version

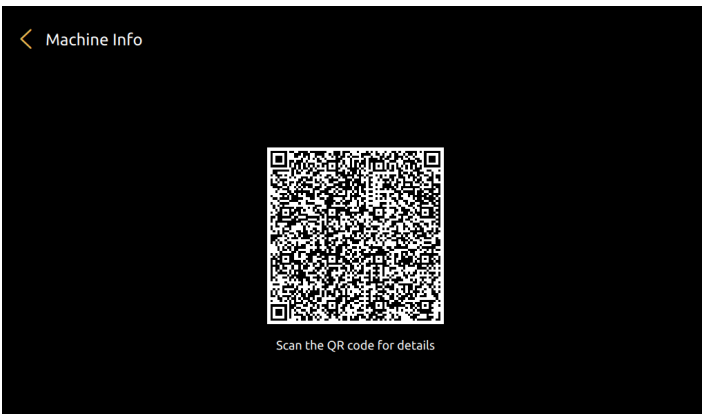


Mainboard Version: Current Software Version Info of Mainboard;

HMI Version: Current Software Version Info of Mainboard;

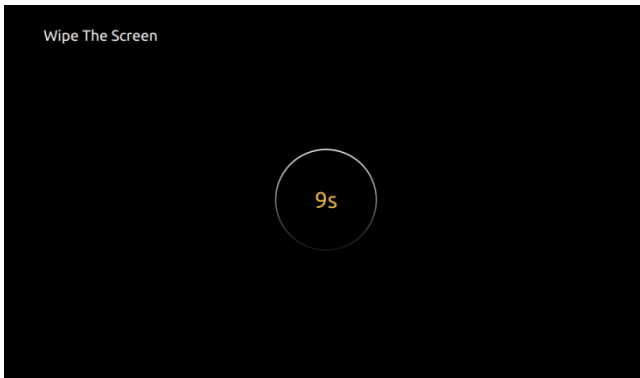
Machine S/N: Series Number of the machine;

6.3.5.4 Machine Info



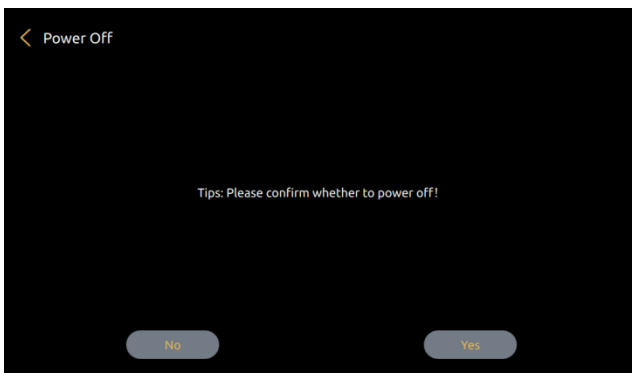
Scan the QR picture to see the info

6.3.6 Wipe Protect



After clicking "Wipe Protection", the drink picture on the screen disappears, and a 10-second countdown is displayed, and the screen can be wiped clean.

6.3.7 Power Off



After clicking "Power off", the machine screen will prompt you to select "Cancel" or "OK". If no selection is made after 10 seconds, it will automatically default to the "Power off" command and begin the flushing procedure


Click "Power off", the machine will automatically flush, and then the screen will turn off and enter the shutdown state;

Click "cancel" to automatically return to the previous interface


7 Warning

7.1 Warning with Tips in the Screen


7.1.1 Water Tank Is Empty

Item	Showing on the Screen	Cause	Solutions
Water Tank Is Empty		<ul style="list-style-type: none"> a) The water in the tank is already below the detection level; b) The water tank is not installed correctly and too far from the sensor; c) Water level sensor is broken 	<ul style="list-style-type: none"> ➤ Take out the tank and add water, make sure the water is not higher than the "Max" line marked on the tank; ➤ Check and reinstall the water tank; ➤ Replace a new sensor


7.1.2 Grounds Container is Full Up

Item	Showing on the Screen	Cause	Solutions
Grounds Container Is Full Up		<ul style="list-style-type: none"> a) The grounds count in the grounds container reaches 15 pieces or is already full; 	<ul style="list-style-type: none"> ➤ Pull out the drip tray, take out the grounds


7.1.3 Bean Hopper Empty

Item	Showing on the Screen	Cause	Solutions
Bean Hopper Empty		<ul style="list-style-type: none"> a) coffee bean hopper is empty; b) Beans sticks together 	<ul style="list-style-type: none"> ➤ Fill coffee beans to the bean box; ➤ Stir the beans in the bopper until they are loose

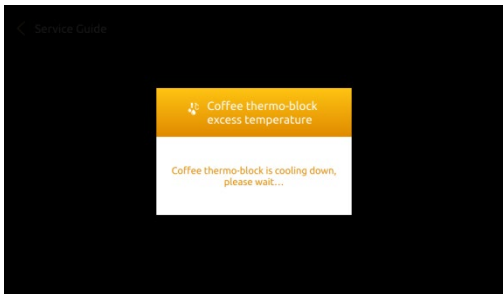
7.1.4 Drip Tray Is Not In Place

Item	Showing on the Screen	Cause	Solutions
Drip Tray Is Not In Place		<ul style="list-style-type: none"> a) Not well fixed; b) Sensor broken ; c) Magnet losing or broken 	<ul style="list-style-type: none"> ➤ Replace the drip tray; ➤ Replace new sensor; ➤ Replace new magnet;

7.1.5 Drip tray is full up

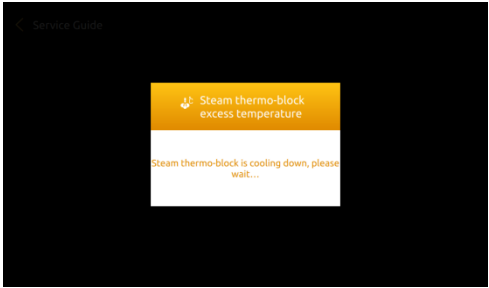
Item	Showing on the Screen	Cause	Solutions
Drip tray is full up		<ul style="list-style-type: none"> a) The waste water in the tray is full; b) Sensor is dirty 	<ul style="list-style-type: none"> ➤ Pull out and empty the tray; ➤ Check and clean up the sensor

7.1.6 Coffee Thermo-Block Over-heated

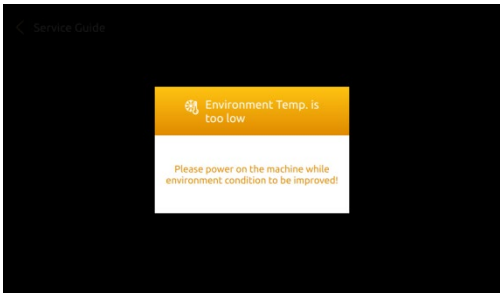
Item	Showing on the Screen	Cause	Solutions
Coffee Thermo-Block Over-heated		<ul style="list-style-type: none"> a) Temperature is over 160°C 	<ul style="list-style-type: none"> ➤ Wait, as the tips in the Screen “The hot water thermos-block is cooling down, please wait ...”; ➤ While the thermos-block is cooling down, no beverage could be made.

7.1.7 Steam Thermo-Block heating over time

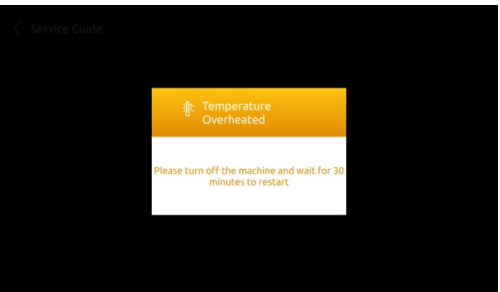
Item	Showing on the Screen	Cause	Solutions
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<p>Steam Therm o- Block heart ing over time</p>		<p>a) Temperature is over 160°C</p>	<ul style="list-style-type: none"> ➤ Wait, as the tips in the Screen “The steam thermos-block is cooling down, please wait ...”; ➤ While the thermos-block is cooling down, no beverage could be made.
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7.1.8 Environment Temp. Is Too Low

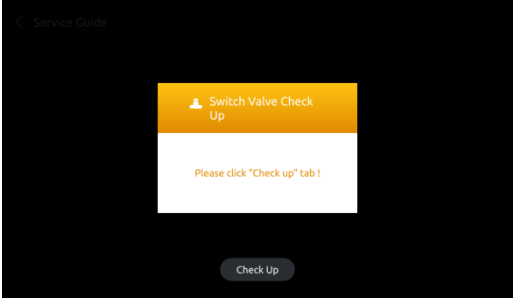
Item	Showing on the Screen	Cause	Solutions
<p>Envi ron men t Temp. Is Too Low</p>		<p>The temperature of the environment is 0°C or lower;</p>	<ul style="list-style-type: none"> ➤ Please power on the machine when the temperature of environment is 10°C~40°C;

7.1.9 Environment Temp. Is too high

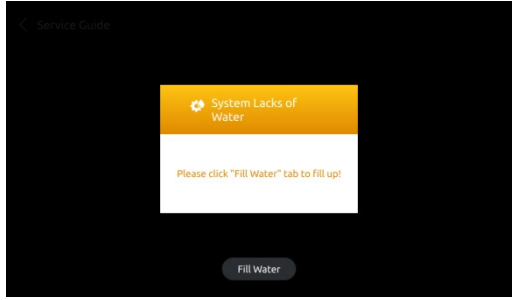
Item	Showing on the Screen	Cause	Solutions
<p>7.1.8 Envi ron men t Temp. Is too high</p>		<p>It is detected that the ambient temperature used by the coffee machine is higher than the alarm temperature of the machine</p>	<ul style="list-style-type: none"> ➤ Turn off the power of the coffee machine, improve the ambient temperature and restart it after 10°C~40°C;

7.1.10 Diverted Valve checking

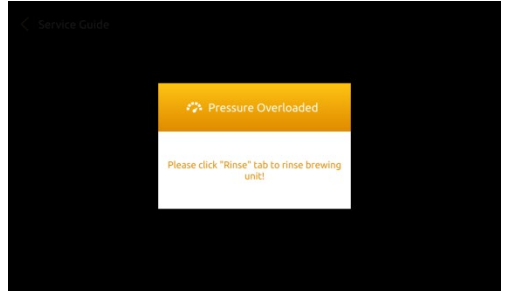
Item	Showing on the Screen	Cause	Solutions
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Switch Valve checking		<p>a) The valve is in the wrong position after multiple self-tests</p>	<p>➤ Tap “checking” to do self-checking; ➤ Switch off, 5 seconds later reboot the machine</p>
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7.1.11 Lack of Water

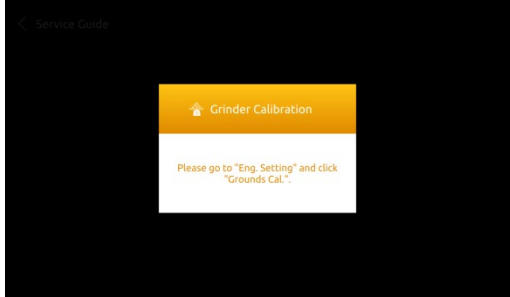
Item	Showing on the Screen	Cause	Solutions
Lack of Water		<p>a) The inlet of tank r is blocked. b) The tank is unfixed; c) The strainer of Brewer is blocked; d) The pump is damaged e) The Flowmeter is damages;</p>	<p>➤ clean the filter of tank; ➤ reinstall and push the tank to the end; ➤ Clean the strainer by Brewer Deep Clean with tablets or by dissembling; ➤ Replace a new pump; ➤ Replace a new flowmeter; ➤ Switch off and restart the machine</p>

7.1.12 Pressure Overloaded

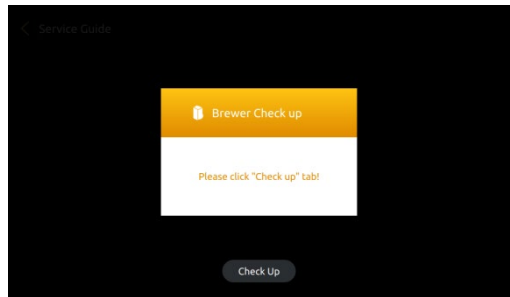
Item	Showing on the Screen	Cause	Solutions
Pressure Overloaded		<p>a) The pipe or strainer of Brewer is blocked; b) Coffee Grounds from Grinder are too fine; c) The amount Coffee Grounds from Grinder are over the max capacity of Brewer; d) Air is coming into the Pump while coffee making</p>	<p>➤ Tap “Rinse” to rinse Brewer; ➤ Adjust the gear position of the coffee machine to clockwise. The bigger number represents coarser. Clean the Inlet of tank; please check if the filter is blocked</p>

7.1.13 Grinder Calibration

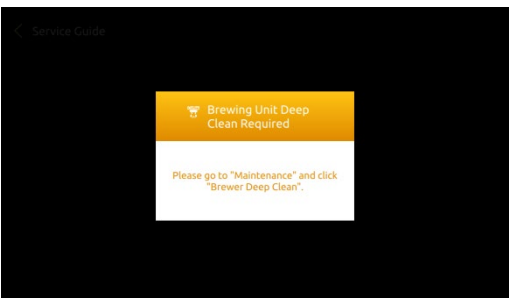
Item	Showing on the Screen	Cause	Solutions
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Grinder Calibration		<p>a) After a certain cups of coffee made, it will alarm;</p> <ul style="list-style-type: none"> ✧ It will alarm at the 2000th cup, 7000th cup, 17000th cup, 27000th cup... and so on.(every 10 thousand cups) ✧ if this function is switch off in the service manual , will not alarm 	<p>Follow the tips and enter service manual to do finish calibration;</p> <p>Follow the instruction of service manual</p>
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7.1.14 Brewer Check Up

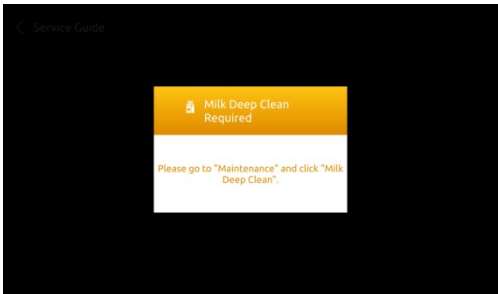
Item	Showing on the Screen	Cause	Solutions
Brewer Check Up		<p>a) The Brewer is not in a right position;</p> <p>b) The Brewer damaged;</p> <p>c) The drive motor of brewer damaged</p>	<p>d) Tap "Check Up";</p> <p>e) Replace a new Brewer;</p> <p>f) Replace new drive motor;</p>

7.1.15 Brewer Unit Deep Clean

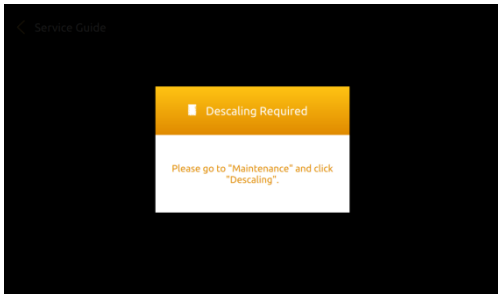
Item	Showing on the Screen	Cause	Solutions
Brewer Unit Deep Clean		<p>a) Reach the set value, it will alarm. Set in Manu;</p> <ul style="list-style-type: none"> ✧ The settled valve can be changed in the service manual 	<p>Follow the tips and enter service manual to do deep clean;</p> <p>Follow the instructions of service manual</p>

7.1.16 Milk System Deep Clean

Item	Showing on the Screen	Cause	Solutions
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Milk System Deep Clean		<p>a) Reach the set value, it will alarm.</p> <ul style="list-style-type: none"> ◇ Set in Manu: The settled valve can be changed in the service manual 	<ul style="list-style-type: none"> ➤ Follow the tips and enter service manual to do deep clean; ➤ Follow the instructions of service manual
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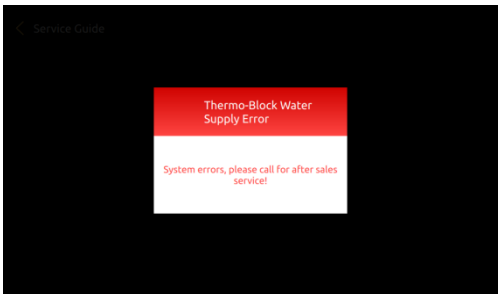
7.1.17 Descaling Required

Item	Showing on the Screen	Cause	Solutions
Descaling Required		<p>a) Reach the set value, it will alarm. Set in Manu;</p> <ul style="list-style-type: none"> ◇ The settled valve can be changed in the service manual 	<ul style="list-style-type: none"> ➤ Follow the tips and enter service manual to do deep clean; ➤ Follow the instructions of service manual

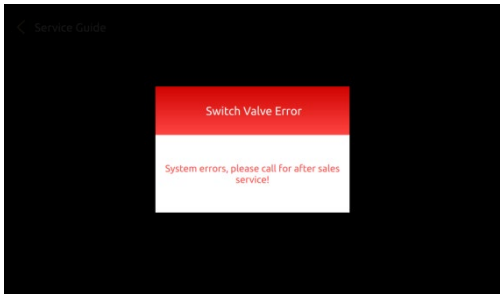
8 Trouble shooting

8.1 Error with Tips in the Screen

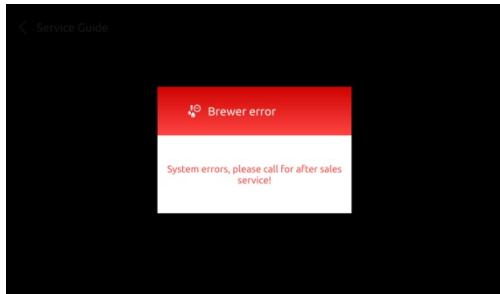
8.1.1 Thermo-block water supply error

Item	Showing on the Screen	Cause	Solutions
Thermoblock water supply error		<p>It will appear after "Lack of water" appearing and filling water for 3 times.</p>	<ul style="list-style-type: none"> ➤ Check if the water supply is ok, switch off the machine and restart. ➤ Check if the connector of water inlet pipe or O-ring are installed correctly;; ➤ Clean the inlet of tank or tap water; ➤ Re-fix the tank. Push it to the end;; ➤ Clean the strainer by Brewer Deep Clean with tablets or by dissembling; ➤ Replace a new Pump; ➤ Replace a new Flow meter;

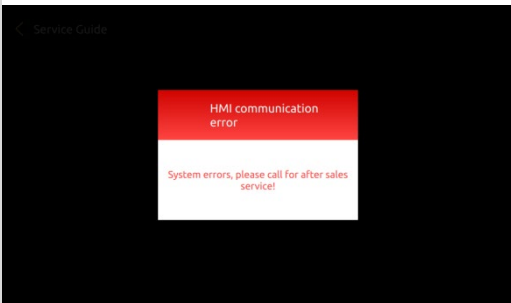
8.1.2 Switch Valve Error

Item	Showing on the Screen	Cause	Solutions
Switch Valve Error		<ul style="list-style-type: none"> a) The valve is still in the wrong position after multiple self-tests; b) Valve damage 	<ul style="list-style-type: none"> ➤ Switch off , 5seconds later reboot the machine ➤ Replace new valve


8.1.3 Brewer System Error

Item	Showing on the Screen	Cause	Solutions
Brewer System Error		<ul style="list-style-type: none"> a) When it prompts " Brewer Check up ", click three times in succession and still can't pass, it will prompt "brewing system error" b) The Brewer is blocked; c) The motor doesn't work; d) The Brewer damages; e) Control Board damages; 	<ul style="list-style-type: none"> ➤ Switch off the machine and restart; ➤ Disassemble the brewer to check and clean ➤ Replace a new motor; ➤ Replace a new Brewer; ➤ Replace a new Control Board;


8.1.4 HMI communication error

Item	Showing on the Screen	Cause	Solutions
HMI communication error		<ul style="list-style-type: none"> a) Main Board and display board connection loose or damaged; b) Control software doesn't match with the HMI software; c) HMI PCB damages; d) Main Board damages 	<ul style="list-style-type: none"> ➤ Check the plugs on HMI PCB and reconnect; ➤ Update Control software and HMI Software; ➤ Replace a new HMI PCB; ➤ Replace a new Main Board.

8.1.5 Coffee Thermo Block NTC Error


Item	Showing on the Screen	Cause	Solutions
Coffee Thermo Block NTC Error		<ul style="list-style-type: none"> a) Connection between Sensor and mainboard damages or disconnects; b) NTC damages; c) The temperature is over 180°C; 	<ul style="list-style-type: none"> ➤ Check the connection, reconnect or replace the wire; ➤ Replace a new NTC; ➤ Switch off the machine and restart after 30 minutes for cooling down; ➤ Replace a new Coffee Thermo Block;

8.1.6 Steam Thermo Block NTC Error


Item	Showing on the Screen	Cause	Solutions
Steam Thermo Block NTC Error		<ul style="list-style-type: none"> a) Connection between Sensor and mainboard damages or disconnects; b) NTC damages; c) The temperature is over 180°C; 	<ul style="list-style-type: none"> ➤ Check the connection, reconnect or replace the wire; ➤ Replace a new NTC; ➤ Switch off the machine and restart after 30 minutes for cooling down; ➤ Replace a new Steam Thermo Block;

8.1.7 Coffee Thermo Block Heating Overtime

Item	Showing on the Screen	Cause	Solutions
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Coffee Thermo Block Heating Overtime		<ul style="list-style-type: none"> a) The temperature of coffee thermo block exceeds the value of the temperature fuse, causing the temperature fuse to be blown; b) NTC sensor damages; c) Coffee thermo block damages; 	<ul style="list-style-type: none"> ➤ Turn off the machine, disassemble the cover of machine to replace fuse ➤ Replace a new NTC temperature sensor; ➤ Replace a new Coffee Thermo block;
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8.1.8 Steam Thermo- Block Heating Overtime

Item	Showing on the Screen	Cause	Solutions
Steam Thermo-Block Heating Overtime		<ul style="list-style-type: none"> a) The temperature of coffee thermo block exceeds the value of the temperature fuse, causing the temperature fuse to be blown; b) NTC sensor damages; c) Coffee thermo block damages; 	<ul style="list-style-type: none"> ➤ Turn off the machine, disassemble the cover of machine to replace fuse ➤ Replace a new NTC temperature sensor; ➤ Replace a new Coffee Thermo block;

8.2 Error without Tips in the Screen

8.2.1 Fail to Switching On

Item	Showing on the Screen	Cause	Solutions
Fail to Switching On		<ul style="list-style-type: none"> a) No power connection ; b) Voltage isn't high enough; c) Not Switched on d) Power PCB damages; e) The fuse of Main Power is blown 	<ul style="list-style-type: none"> ➤ Check if the machine is connected with power; ➤ Connect the machine with acceptable power; ➤ Check if the machine is switched on; ➤ Replace a new Power PCB; ➤ Replace a new Fuse of Main Power;

8.2.1 No Milk

Item	Showing on the Screen	Cause	Solutions

No milk		<ul style="list-style-type: none"> a) The milk box is empty; b) The pipe or outlet of steam is blocked; c) The pipe of steam is broken; d) The number of Air Intake is set too high. e) The Milk Frother is blocked; 	<ul style="list-style-type: none"> ➤ Refill milk to the milk box; ➤ Do Milk Deep Rinse; ➤ Disassemble the Cover of machine, check the pipe of steam. ➤ Set the number of Air Intake lower;; ➤ Dissemble and clean the Milk Frother ➤ Replace a new Milk Frother;
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8.2.2 No Milk Foam, Warm Milk Only

Item	Showing on the Screen	Cause	Solutions
No Milk Foam, Warm Milk Only		<ul style="list-style-type: none"> a) The inlet of Air Intake Valve is blocked b) The pipe of Air Intake Valve is blocked c) The Air Intake Valve damages 	<ul style="list-style-type: none"> ➤ Unclog the air intake or replace it ➤ Check and clear the air intake pipe ➤ Replace the new intake valve

8.2.3 No Coffee

Item	Showing on the Screen	Cause	Solutions
No coffee		<ul style="list-style-type: none"> a) The Coffee Grounds are too fine; b) The amount Coffee Grounds from Grinder are over the max capacity of Brewer; c) The pipe or strainer of Brewer is blocked; d) The Brewer damages; e) The Strainer of inlet valve is blocked; 	<ul style="list-style-type: none"> ➤ Adjust the gear position of the coffee machine to clockwise. The bigger number represents coarser; ➤ Do Grounds Calibration; ➤ Do Brewer Deep Rinse with tablets; ➤ Re-fix the Brewer, or replace a new Brewer; ➤ Clean Strainer or replace a new one;

8.2.4 Software System Crashed

Item	Showing on the Screen	Cause	Solutions
Software system crashed		The system stopped working and no reaction unexpectedly;	<ul style="list-style-type: none"> ➤ Switch off the machine and restart after 5 minutes; ➤ Update the Software;

8.2.5 Leaking

Item	Showing on the Screen	Cause	Solutions
Leaking		Leaking inside of machine	<ul style="list-style-type: none"> ➤ Disassemble the cover of machine and find out the place leaking; ➤ Replace the leaking parts

9 Disassembly & Assembly

9.1 Tools



Screwdriver (T10)



Screwdriver (T20)



Millimeter



Flat Screwdriver (3.2mm)



Thermometer



Long nose pliers



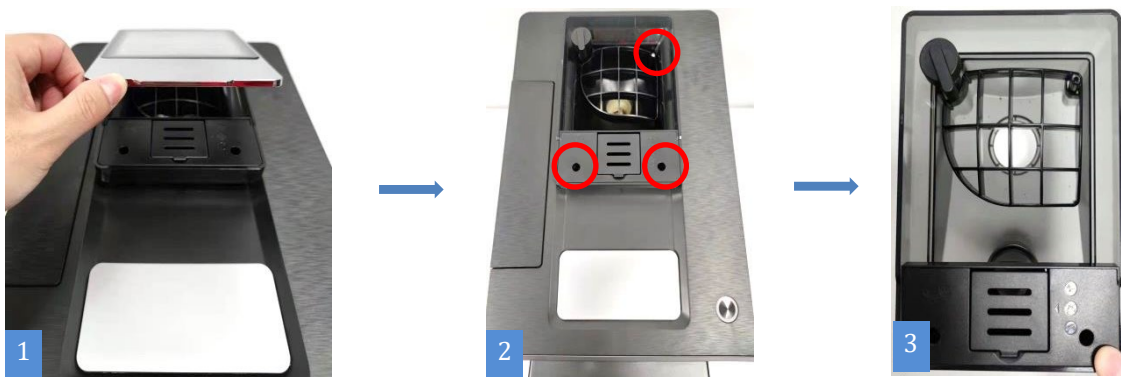
electronic scale

9.2 General Disassembly

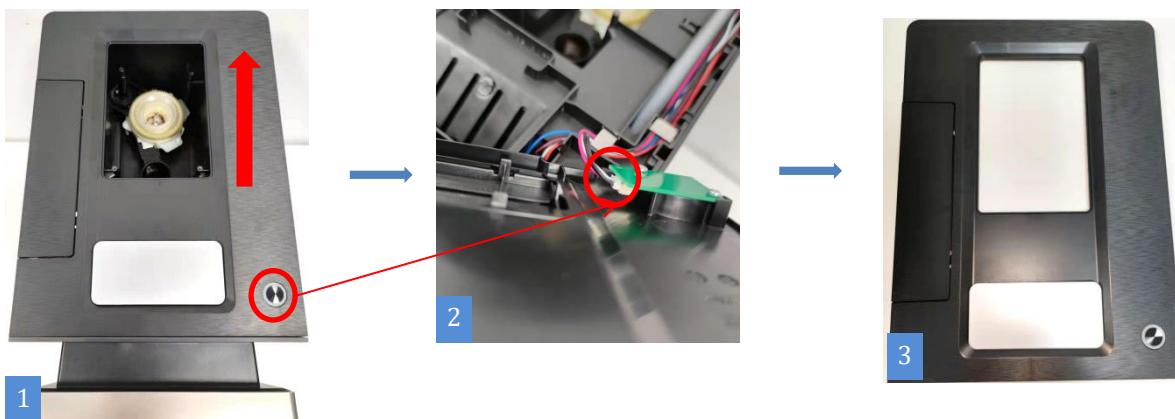
9.2.1 Disassemble Exterior Parts

9.2.1.1 Remove Upper Panel

Step 1: First, use a T10 screwdriver to unscrew (as shown in Figure 2) the three fixing screws of the coffee bean box at the position shown in the red circle, and then remove the coffee bean box



Step 2: (Picture 1) Push the top cover back and lift it up, unplug the cable plug at the position (picture 2), and remove the top cover to complete

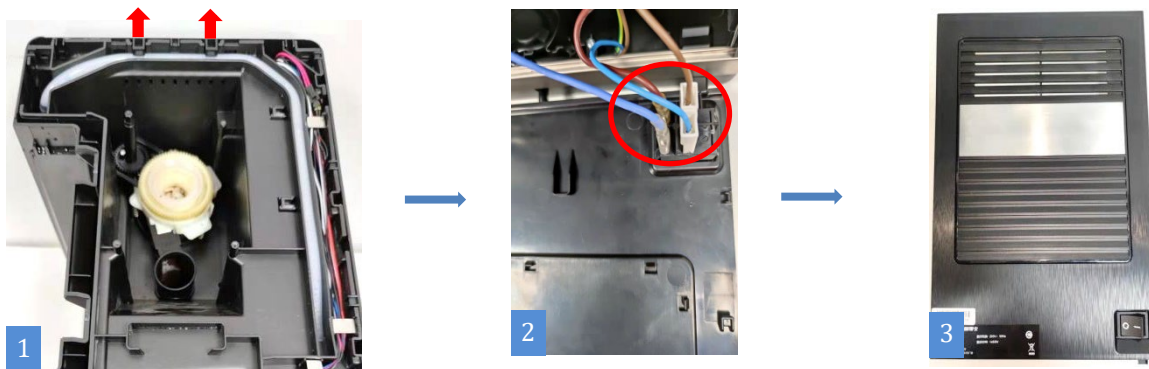


★ Attention:

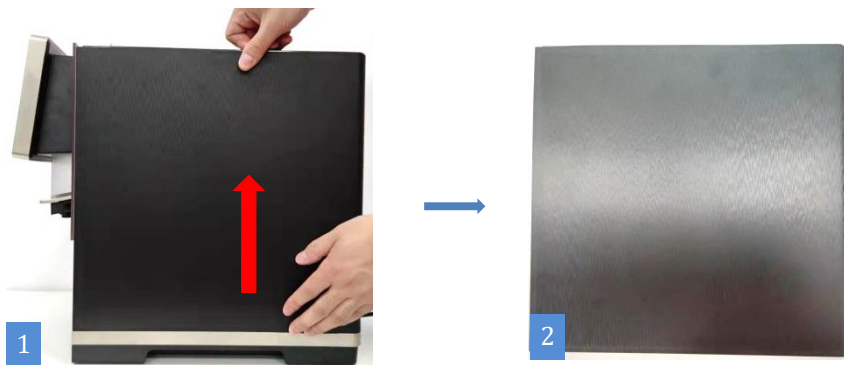
- 1、 Before removing the bean box, please empty the coffee beans in the bean box !
- 2、 Handle with care during disassembly to prevent scratches !

9.2.1.2 Remove the rear cover and side panels of the machine

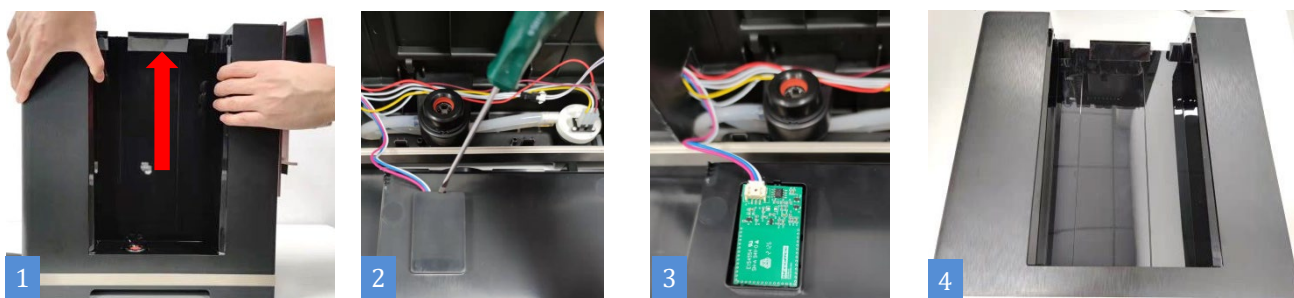
Step 1: Press the two protrusions at the arrow position (as shown in Figure 1) back and lift the back cover upwards, unplug the wiring plug at the circle position (as shown in Figure 2), and remove the rear cover to complete



Step 2: (Picture 1) First, push up the right side panel from bottom to top, and remove the right side panel to complete;



Step 3: (Picture 1) First push up the left side plate from bottom to top, then remove the water level inspection plate at the position (picture 2), and remove the left side plate to complete

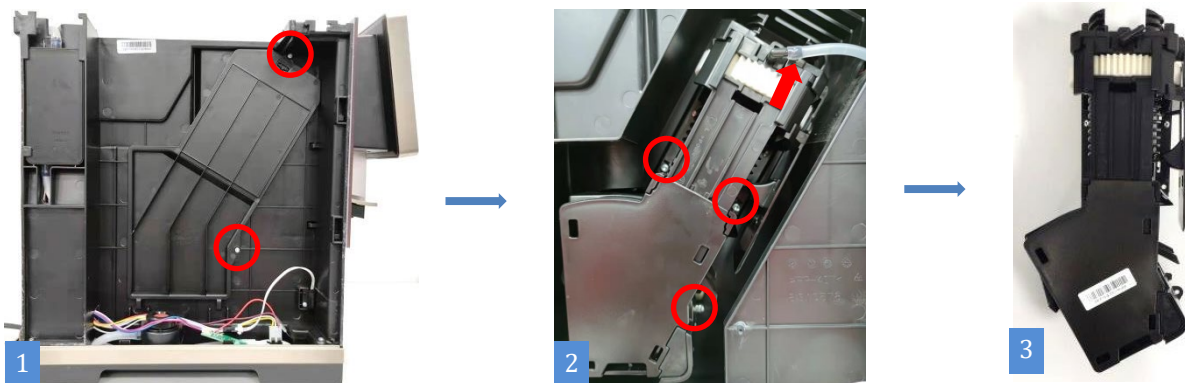


★ Attention:

- 1、Handle with care during disassembly to prevent scratches!

9.2.2 Remove the brewer

Step 1: Use a T10 screwdriver to unscrew (picture 1) the fixing screw at the position marked by the red circle, take out the baffle, pull out the hose at the position indicated by the arrow (picture 2), and then unscrew it with a T20 screwdriver (picture 2) The three fixing screws at the position marked by the red circle, grab the brewer and take it out, and the disassembly of the brewer is completed.

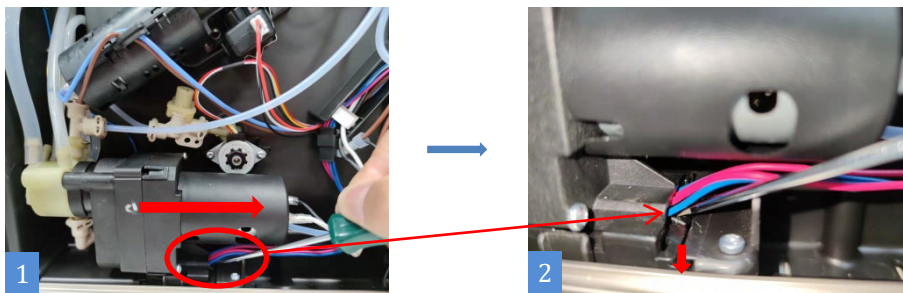


★ Attention:

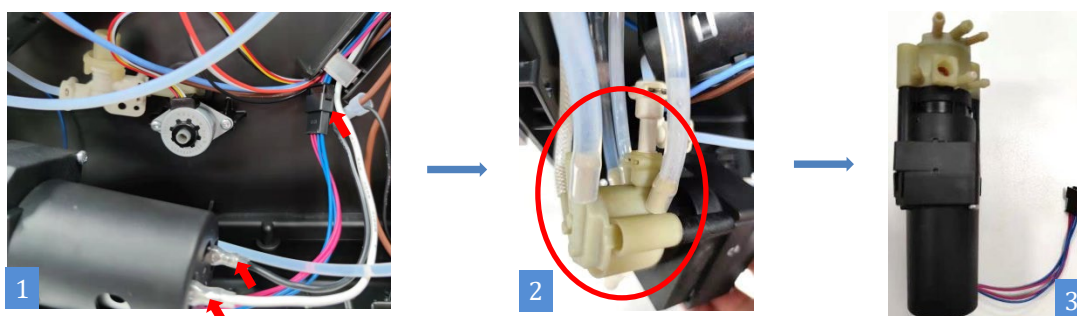
- 1、Please disassemble the machine after the machine has cooled down to prevent burns!
- 2、In the process of disassembly, you can use both hands to assist in taking it, beware of smashing!

9.2.3 Remove switch valve

Step 1: First (as shown in Figure 2) use a small flat-blade screwdriver to press the buckle at the position marked by the short arrow, and then push the switch valve backwards out of the fixed slot;



Step 2: Unplug (as shown in Figure 1) the three wiring plugs at the positions marked by the arrows; unplug the hoses and water pipes connected at the positions marked by the red circles (as shown in Figure 2), and finally take out the switch valve and disassemble the switch valve finished.

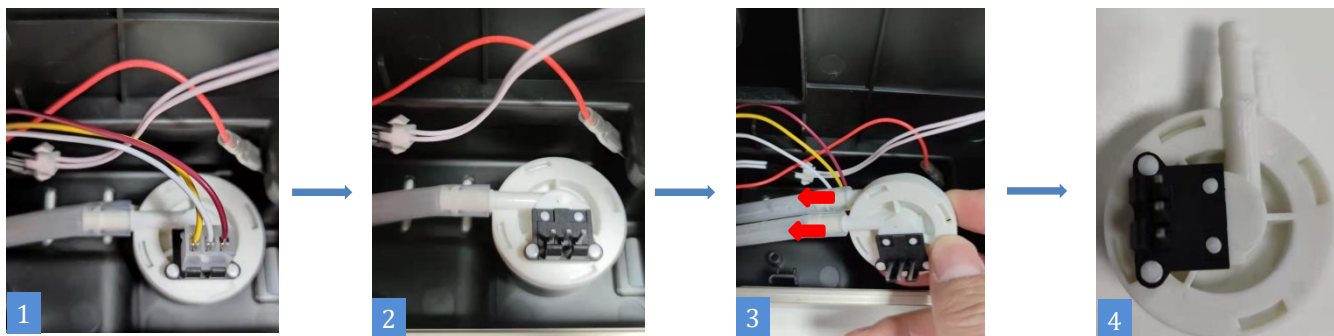


★ Attention:

- 1、 Please unplug the coffee machine before doing this !
- 2、 There may be residual water in the pipeline, please prepare a water container in advance !

9.2.4 Remove flowmeter

Steps: First unplug the wiring plug on the flowmeter, then pull out the flowmeter upwards (you can use a screwdriver to pry it up as shown in Figure 3), and finally unplug the connected water pipe to take out the flowmeter, and the flowmeter is disassembled.

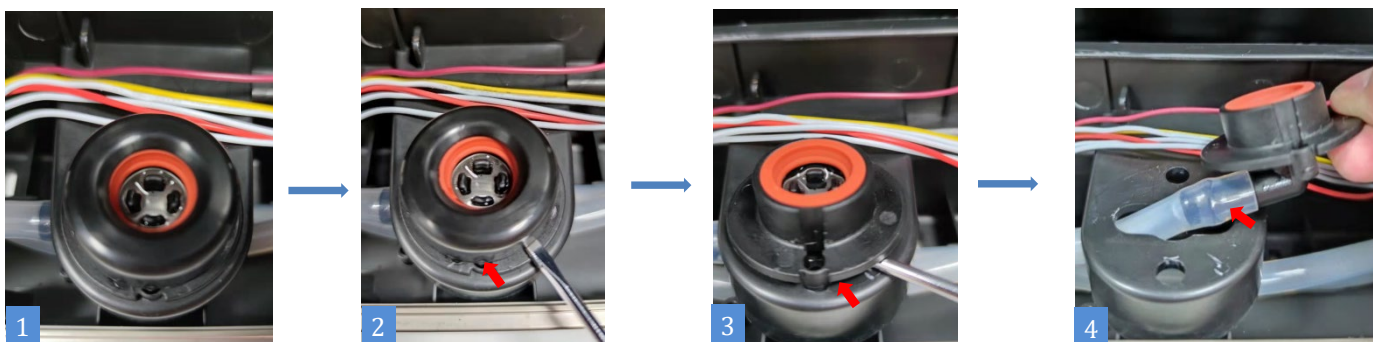


★ Attention:

- 1、Be careful during disassembly to avoid scratching your fingers !
- 2、There may be residual water in the pipeline, please prepare a water container in advance !

9.2.5 Remove water guide set

Steps: first pull up the water guide cover (you can pry it up with a screwdriver as appropriate), then pull up the water guide and unplug the connected water pipe, the disassembly of the water guide is completed

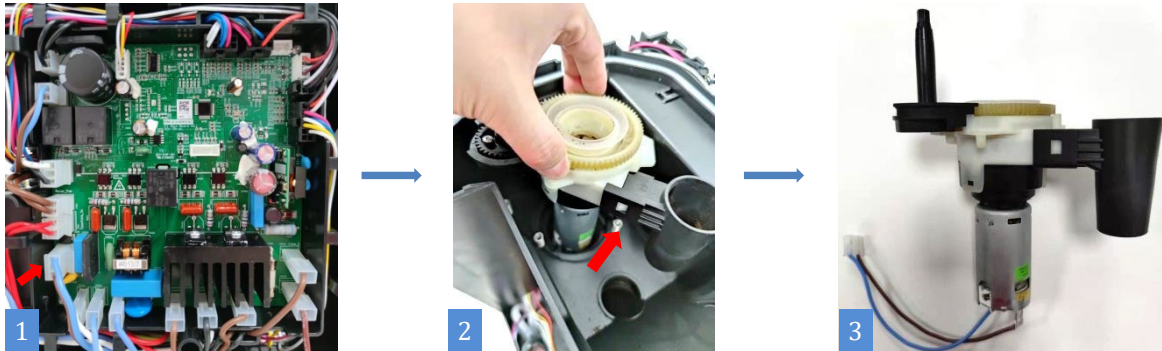


★ Attention:

- 1、Be careful during disassembly to avoid scratching your fingers !
- 2、There may be residual water in the pipeline, please prepare a water container in advance !

9.2.6 Remove grinder groupe

Steps: (as shown in Figure 1) Unplug the wiring plug at the position of the red arrow on the power board, lift the bean grinder up, and the bean grinder is disassembled

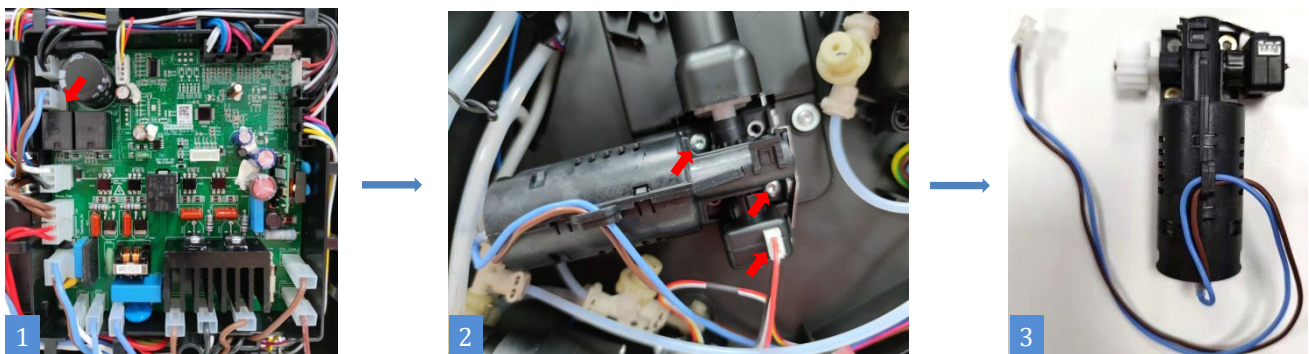


★ Attention:

- 1、 Please unplug the coffee machine before doing this !

9.2.7 Remove drive motor

Steps: Pull out the wiring plug at the position marked by the arrow (as shown in Figure 1 and 2), and remove the two fixing screws at the position (as shown in Figure 2) with a T20 screwdriver. The power transmission group is disassembled.

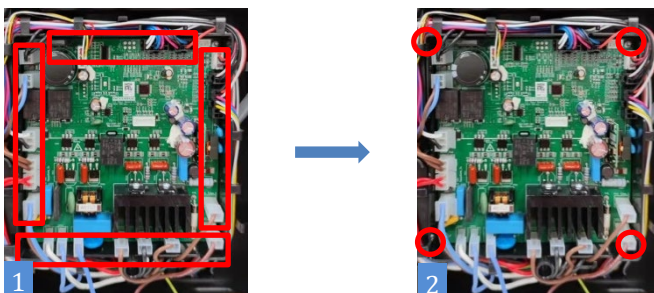


★ Attention:

- 1、 Please unplug the coffee machine before doing this !

9.2.8 Remove control board

Steps: (as shown in Figure 1) First unplug all the wiring plugs on the main control board, then (as shown in Figure 2) remove the four screws that fix the main control board with a T10 screwdriver, and finally remove the main control board.

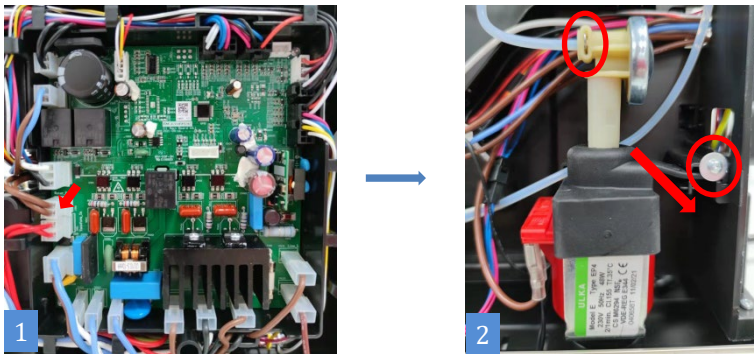


★ Attention:

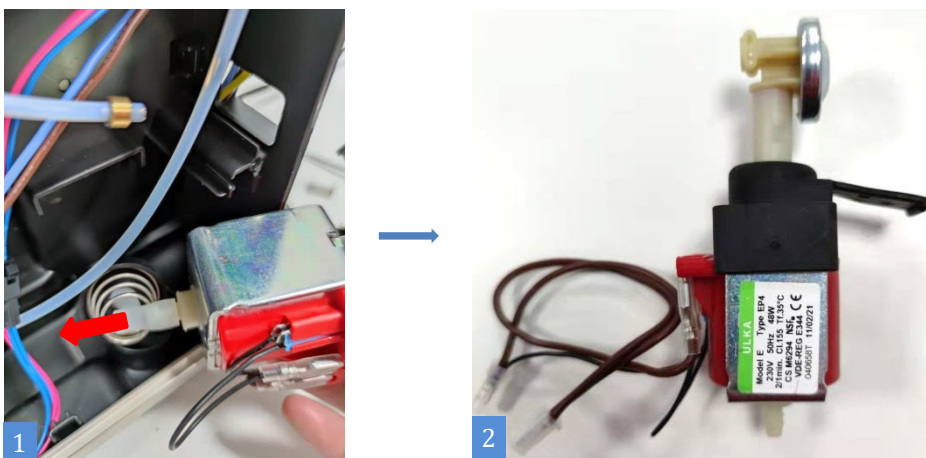
- 1、 Please unplug the coffee machine before doing this !
- 2、 When pulling out the wiring plug, please press the buckle before pulling out the plug to prevent the wiring terminal from being pulled off. !

9.2.9 Remove pump

Step 1: First unplug the plug shown by the arrow (picture 1), then remove the small spring clip shown in the red circle (picture2), pull out the water pipe, remove the fixing screw, and pull out in the direction indicated by the arrow water pump fixing piece;



Step 2: According to the position shown by the arrow (picture 1), pull out the silicone water pipe connected to the water pump, and finally take out the water pump set and complete the disassembly of the water pump set.

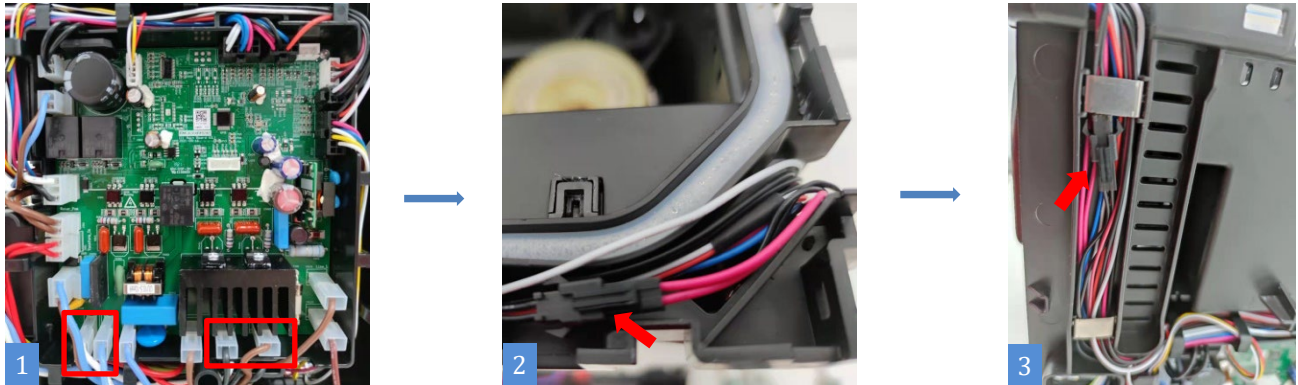


★ Attention:

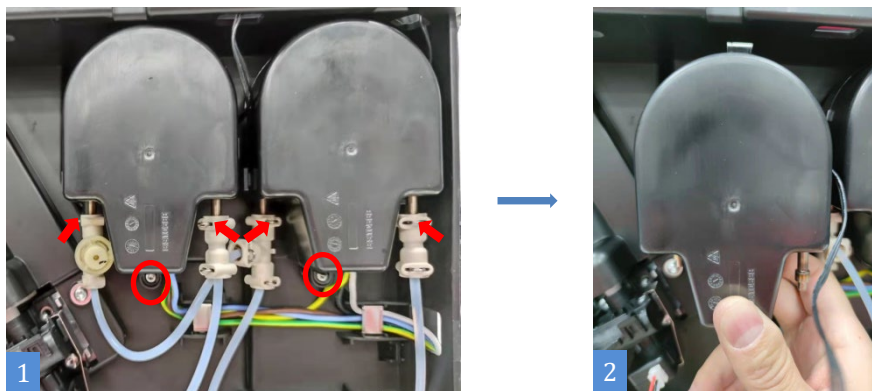
- 1、 Please unplug the coffee machine before doing this !
- 2、 There may be residual water in the pipeline, please prepare a water container in advance !

9.2.10 Remove thermo- block

Step 1: First, pull out the connection plug at the position marked by the red frame (as shown in Figure 1), and pull out the NTC connection plug of the electric heating plate at the position (as shown in Figure 2 and 3).



Step 2: Unplug the four water pipe connectors at the positions indicated by the arrows (as shown in Figure 1), and finally use a T10 screwdriver to unscrew the fixing screws at the positions shown in the red circle (as shown in Figure 1), and remove the electric heating plate set outwards. The disassembly is complete.

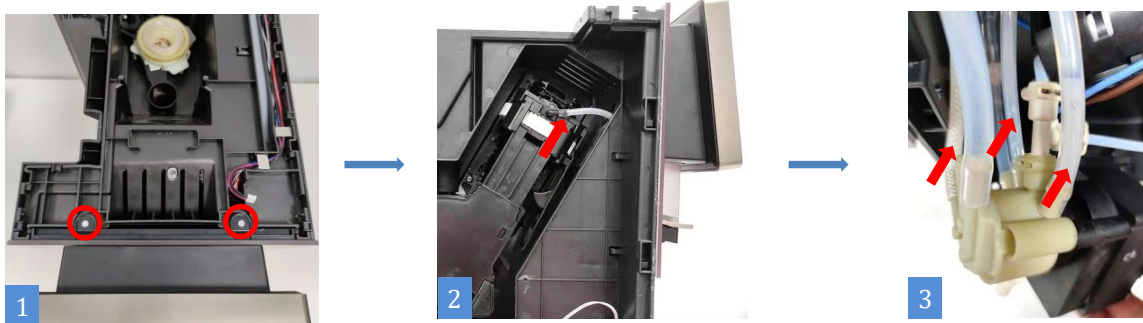


★ Attention:

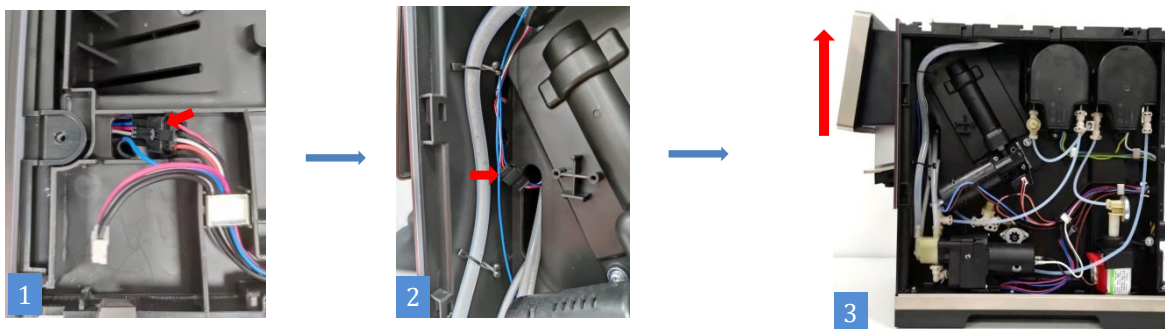
- 1、 Please unplug the coffee machine before doing this !
- 2、 There may be residual water in the pipeline, please prepare a water container in advance !
- 3、 Please disassemble the coffee machine after the coffee machine has cooled down completely to prevent burns. !

9.2.11 Remove front panel group

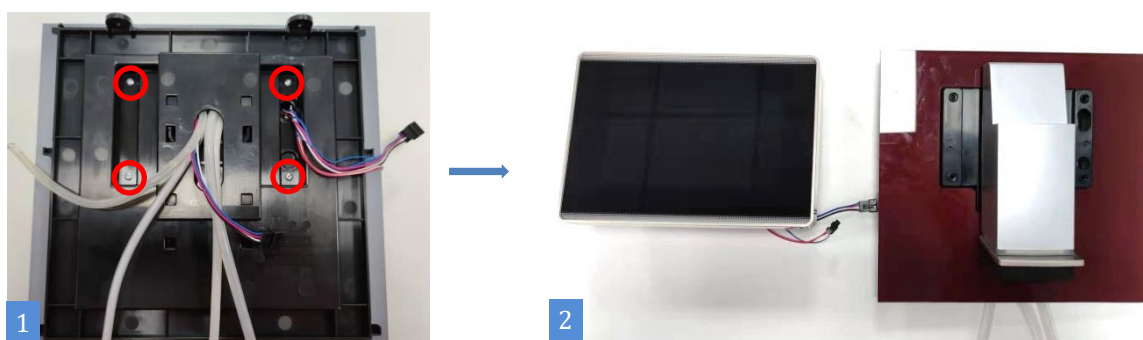
Step 1: First, use a T10 screwdriver to unscrew (as shown in Figure 1) the two fixing screws at the positions marked by the red circle, and then unplug the four water pipes marked by arrows (as shown in Figures 2 and 3)



Step 2: Unplug (as shown in Figure 1, 2) the wiring plug at the position indicated by the arrow, (as shown in Figure 3) lift up the entire front panel group, and the front panel group is disassembled;



Step 3: Use a T10 screwdriver to remove the four screws at the position (as shown in Figure 1) to separate the coffee outlet group from the display group.



★ Attention:

- 1、The display screen is made of glass, please handle it with care during disassembly to prevent the glass from breaking!

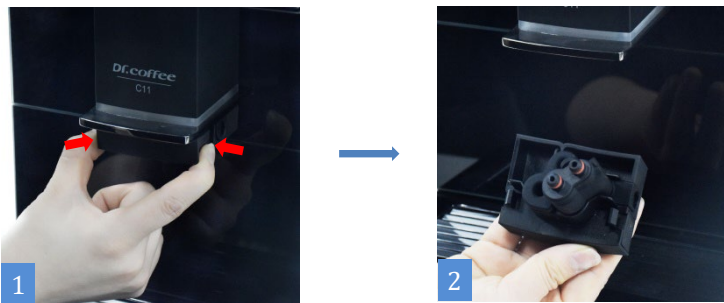
10 Maintenance method

10.1 Clean milk frother

Step 1: (Picture 1) Remove the milk tube;



Step 2: (Picture 1) Pinch the clips on both sides of the coffee outlet with your fingers, and then (Picture 2) forcefully pull down the coffee outlet group;



Step 3: Pull out the milk frother and disassemble it, take it to the tap and rinse it clean;



Step 4: Assemble the rinsed coffee outlet back into the machine as shown, and insert the milk tube



★ Attention:

- 1、Please disassemble the machine after the machine has cooled down to prevent burns!
- 2、When installing the milk frother silicone, double check that it is in place. Otherwise, it may also lead to inability to suck milk or make milk.

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