# Coffee Center Service Manual

(Version: V1.0)




Model compatible with this manual:

Coffee Center；

Due to product updates and upgrades, there may be discrepancies between images and the actual product. The actual product shall prevail.

# catalogue

**1 Safety Instructions ..... 4**
1.1 Safety Tips ..... 4
**2 Structural Introduction ..... 6**
2.1 External View ..... 6
2.2 The front view ..... 6
2.3 The back view ..... 6
2.4 Inside the coffee machine door ..... 7
2.5 Introduction to Internal Components ..... 8
**3 Schematic Diagram Introduction ..... 10**
3.1 Waterway Diagram ..... 10
3.2 Electrical Circuit Diagram ..... 10
3.3 HMI Board Schematic Diagram ..... 11
**4 Interface Introduction ..... 12**
4.1 Beverage Interface ..... 12
4.2 Language Selection ..... 12
4.3 Quick Menu Bar ..... 13
4.4 Brewer Rinse ..... 13
4.5 Powder Rinse ..... 13
4.6 One-Click Maintenance ..... 14
4.7 Service Menu ..... 14
4.8 Wipe Protect ..... 14
4.9 Information ..... 14
4.10 Power Off ..... 16
**5 Service Menu ..... 17**
5.1 Drink Settings ..... 18
5.1.1 Powder Setting ..... 18
5.1.2 Drinks position swap ..... 19
5.1.3 Delete drinks ..... 19
5.1.4 Drink Parameter Settings ..... 19
5.2 Maintenance ..... 25
5.2.1 Brewer Deep Clean ..... 25
5.2.2 Powder system deep cleaning ..... 25
5.2.3 Descaling ..... 26
5.2.4 Water Draining ..... 26
5.3 Machine Setting ..... 27
5.3.1 Maintenance Settings ..... 27
5.3.2 Time/Date ..... 28
5.3.3 Automatic Switch Machine ..... 28
5.3.4 Eco Mode ..... 29
5.3.5 Unit ..... 29
5.3.6 Password Settings ..... 30
5.3.7 Personal Settings ..... 30

5.3.8 Boiler temperature ..... 31
5.3.9 Network settings ..... 32
5.4 Project settings ..... 33
5.4.1 Grinding Calibration ..... 33
5.4.2 Powder Calibration ..... 34
5.4.3 Grinding index ..... 34
5.4.4 water supply ..... 35
5.4.5 Factory Settings ..... 35
5.4.6 Business Setting ..... 36
5.4.7 Parameter Import and Export ..... 37
5.4.8 Update ..... 38
5.4.9 Function switch ..... 38
5.4.10 Payment Settings ..... 40
**6 warn ..... 42**
6.1 A screen prompt warns ..... 42
6.1.1 Grounds Container Is Full Up. ..... 42
6.1.2 Drip Tray Is Full Up ..... 42
6.1.3 Water Tank Is Empty ..... 42
6.1.4 Bean Hopper Empty ..... 43
6.1.5 Bean Hopper Unfixed ..... 43
6.1.6 Door Unclosed. ..... 43
6.1.7 Left powder Hopper Unfixed. ..... 44
6.1.8 Left Powder Hopper Empty. ..... 44
6.1.9 Middle Powder Hopper Unfixed. ..... 44
6.1.10 Meddle Powder Hopper Empty. ..... 45
6.1.11 Right Powder Hopper Unfixed. ..... 45
6.1.12 Right Powder Hopper Empty. ..... 45
6.1.13 Brewer Unfixed. ..... 46
6.1.14 Hot water Boiler Overheated ..... 46
6.1.15 Coffee Boiler Overheated ..... 46
6.1.16 Hot water Boiler temp is Too Low. ..... 47
6.1.17 Coffee Boiler Tempe.Is Too Low. ..... 47
6.1.18 Systemic Lacks of Water ..... 47
6.1.19 Pressure Overloaded ..... 48
6.1.20 System water Filling Overtime ..... 48
6.1.21 Grinding calibration ..... 49
6.1.22 Brewer Check up ..... 49
6.1.23 Brewing Unit Deep Clean Required ..... 49
6.1.24 Powder system cleaning required ..... 50
6.1.25 Descaling Required. ..... 50
**7 Hitch ..... 51**
7.1 A fault with a screen prompt ..... 51
7.1.1 Coffee boiler water supply abnormal ..... 51
7.1.2 The brewing system is abnormal ..... 51

7.1.3 HMI communication exception ..... 51
7.1.4 The coffee boiler NTC is abnormal ..... 52
7.1.5 Coffee boiler heating timeout ..... 52
7.2 No screen warning fault ..... 53
7.2.1 Can't start the machine ..... 53
7.2.2 No coffee ..... 53
7.2.3 Crash ..... 53
7.2.4 Leak ..... 54
**8 Introduction to Disassembly and Assembly ..... 55**
8.1 Component Disassembly Steps ..... 56
8.1.1 Remove the exterior ..... 56
8.1.2 Dried bean powder box ..... 56
8.1.3 Remove the cover ..... 57
8.1.4 Open the left and right side covers ..... 57
8.2 Dissolve, brew, and activate the pressure storage valve ..... 58
8.3 Remove the transmission assembly ..... 58
8.4 Grinder ..... 58
8.5 Switch the power supply on/off ..... 59
8.6 Remove the stirring motor unit ..... 59
8.7 Remove the solenoid valve assembly ..... 59
8.8 Remove the coffee boiler assembly ..... 60
8.9 3L hot water boiler unit ..... 60
8.10 Remove the main control board ..... 61
8.11 Remove diaphragm pump set ..... 61
8.12 Remove the electromagnetic pump assembly ..... 62
8.13 Water intake valve assembly ..... 62
8.14 Flow Meter ..... 62
8.15 Remove coffee outlet ..... 63
8.16 Remove the HMI board ..... 63
**9 Precautions for Daily Use and Maintenance ..... 64**

# 1 Safety Instructions

## 1.1 Safety Tips

⚠ Improper use of a coffee machine can cause minor injuries.

Please make sure to follow these points:

- ❖ Read the instructions carefully before use.
- ❖ Do not use the coffee machine if it is not functioning properly or is damaged.
- ❖ Do not modify the built-in safety device under any circumstances.
- ❖ Do not come into contact with high-temperature machine components;
- ❖ Children aged 8 years and older, as well as individuals with physical, sensory, or intellectual disabilities or those lacking experience and cognitive abilities, may operate machinery only under continuous supervision after learning how to use the machinery safely and understanding the associated risks.
- ❖ Please ensure proper supervision of children and prevent them from operating machinery.
- ❖ Children must not perform cleaning or user maintenance;
- ❖ Install the coffee machine in a location where it can be monitored and maintained at all times.
- ❖ Self-service usage and operation must be supervised by trained personnel to ensure compliance with maintenance regulations and prompt resolution of any operational issues.
- ❖ The coffee bean bin can only hold coffee beans, while the powder bin is designed exclusively for instant coffee powder. The manual entry point allows only cleaning tablets to be added during cleaning procedures.

⚠ Improper use of electrical equipment can result in electric shock.

Please make sure to follow these points:

- ❖ Work on electrical equipment must be performed only by electrical professionals.
- ❖ This machine must be connected to a circuit equipped with fuse protection (we recommend wiring through a ground fault interrupter).
- ❖ Please comply with relevant low-voltage directives and national or local safety regulations;
- ❖ During connection, proper grounding must be ensured and electric shock must be prevented.
- ❖ The voltage must match the specifications indicated on the equipment nameplate.
- ❖ Do not touch live electrical components;
- ❖ Before performing maintenance work, make sure to turn off the main switch and disconnect the equipment from the power supply.
- ❖ The power cord must be replaced only by professional technical service personnel.

⚠ Drinks containing additives or residues may cause allergies.

Please make sure to follow these points:

- ❖ When using the self-service application, check the prompt board on the coffee machine for a list of potential allergenic additives that may be used.
- ❖ When using self-service applications, inquire about any additional products that may cause allergies and could be used by healthcare professionals.

Ingestion of cleaning agents poses a risk of poisoning.

Please make sure to follow these points:

- The detergent storage area should be kept out of reach of children and unauthorized personnel;
- Do not ingest detergents;
- Do not mix the detergent with other chemical agents or acidic substances.
- Under no circumstances should a detergent be added to the milk container.
- Under no circumstances should cleaning agents be added to drinking water tanks (internal/external).
- Detergents and decalcifiers should only be used for the specified purposes (see label);
- Do not eat or drink while using the detergent.
- When using cleaning agents, ensure good ventilation and exhaust;
- Wear protective gloves when using detergents;
- Wash your hands thoroughly immediately after using the detergent.

There is a risk of scalding in the areas where beverages, hot water, and steam are prepared. It is prohibited to place hands below the outlet during preparation or cleaning.

The outlet and brewing unit may be exposed to high temperatures. Only contact with the pre-designed handle is permitted. The brewing unit should be cleaned only after the coffee machine has cooled down.

There is a risk of crushing injury when coming into contact with any moving parts. Do not insert hands into the coffee bean hopper, powder hopper, or opening of the brewing device after the coffee machine has been activated.

**Harm to the machine**

Improper use of the coffee machine may damage or contaminate it.

Please make sure to follow these points:

- If the carbonate hardness in the water exceeds 5°dKH, install a scale filter; otherwise, calcification may damage the coffee machine.
- For safety reasons, always ensure to close the main water valve (for coffee machines with fixed water connections) after shutting down, and turn off the main power switch or unplug the power cord.
- Please comply with the relevant low-voltage directives and/or national and local safety regulations and systems in place.
- Do not turn on the device if water cannot be injected. Otherwise, the water heater will not fill with water and the pump will operate dry.
- Dr. coffee's company recommends installing a check valve in the water supply pipe during installation upon delivery to prevent water leakage caused by hose rupture.
- After prolonged inactivity (e.g., during company vacations), the coffee machine must be cleaned first before being restarted for use.
- Protect the coffee machine from weather conditions such as frost and humidity;
- The fault can only be diagnosed and resolved by professional technicians.
- Use original parts from Dr. Coffee's Company;
- For visible external damage or leakage, contact after-sales service immediately for replacement or repair.
- Do not rinse this machine with water or clean it with steam cleaning agents.
- Do not place the machine on surfaces that may be sprayed with water.
- The coffee bean bin is exclusively for coffee beans, while the powder bin is reserved solely for instant coffee powder. The manual entry point allows only cleaning tablets to be added during cleaning procedures.
- Do not use freeze-dried coffee, as it may cause adhesion to the brewing device.
- If the coffee machine and its accessories are transported at temperatures below 10°C, they must be left at room temperature for three hours after transportation before being powered on and activated. Failure to comply with this requirement may pose a short-circuit risk due to condensation or damage to electrical components.
- Always use the new hose kit provided with the machine (for drinking water/wastewater hoses); do not use old hoses.

# 2 Structural Introduction

## 2.1 External View

## 2.2 The front view



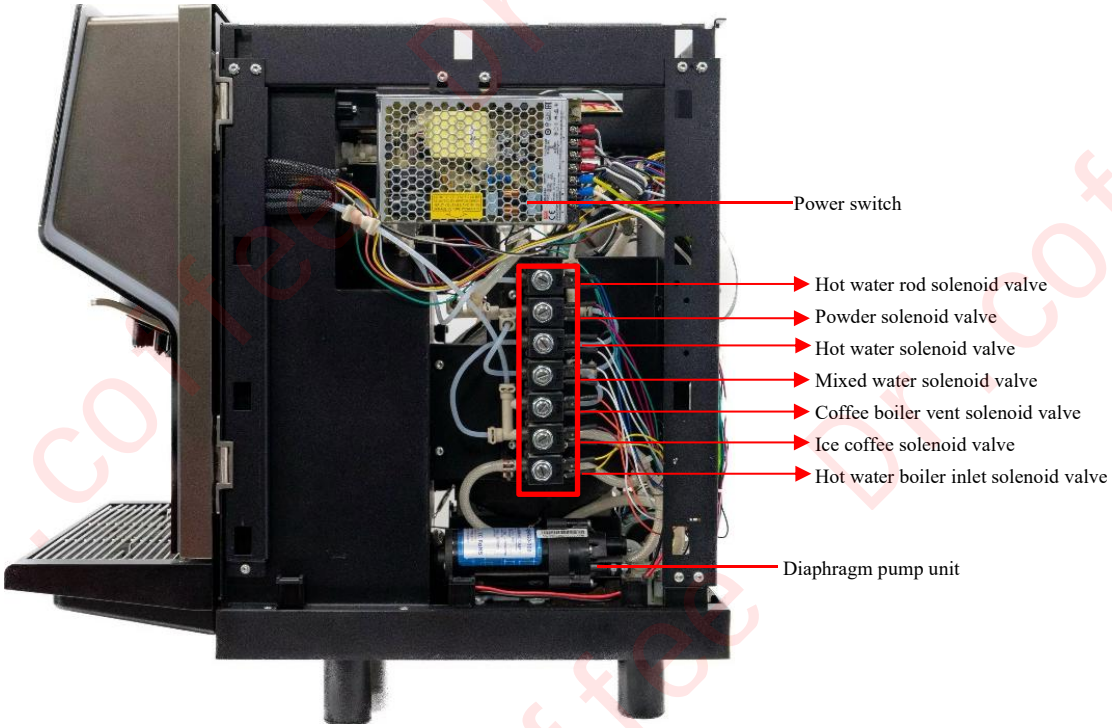

## 2.3 The back view

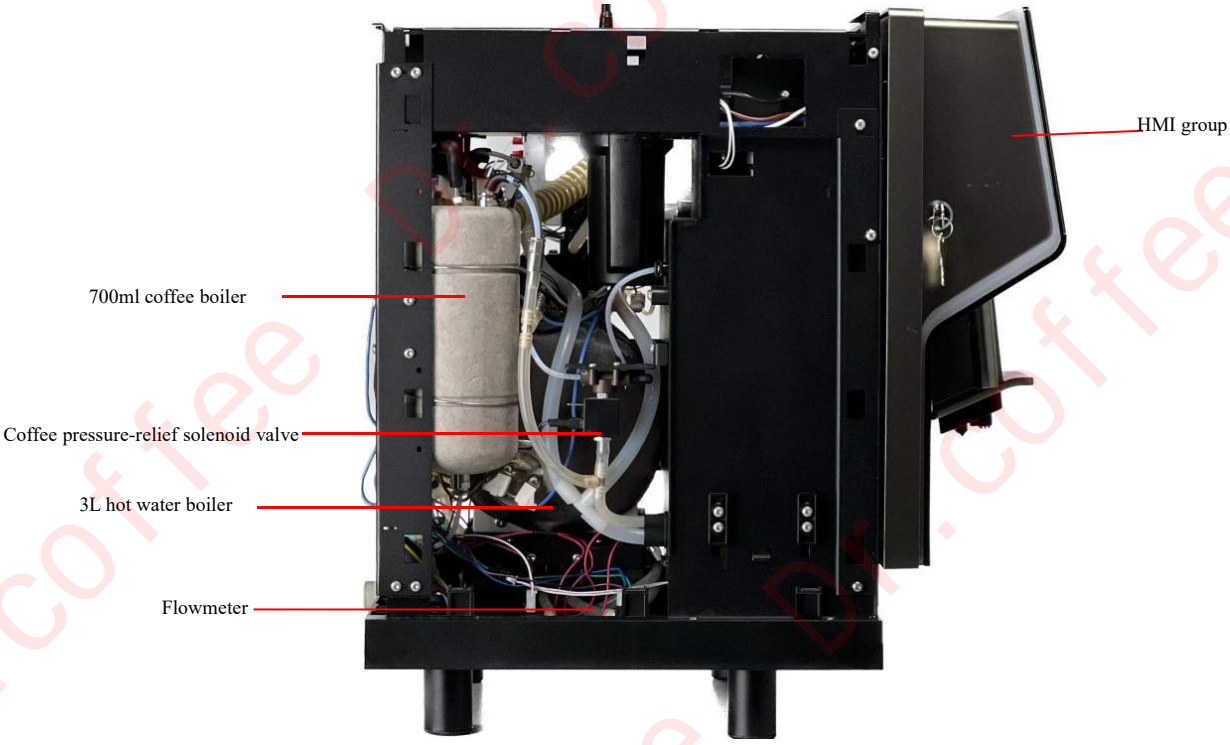


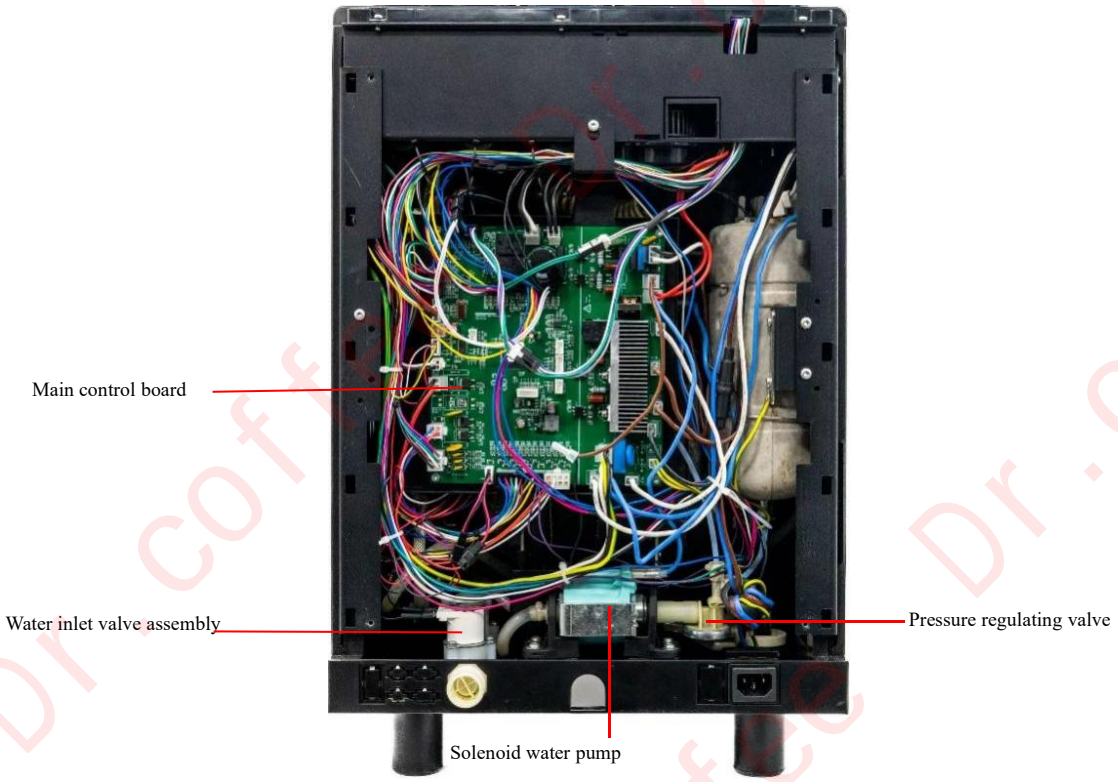
## 2.4 Inside the coffee machine door

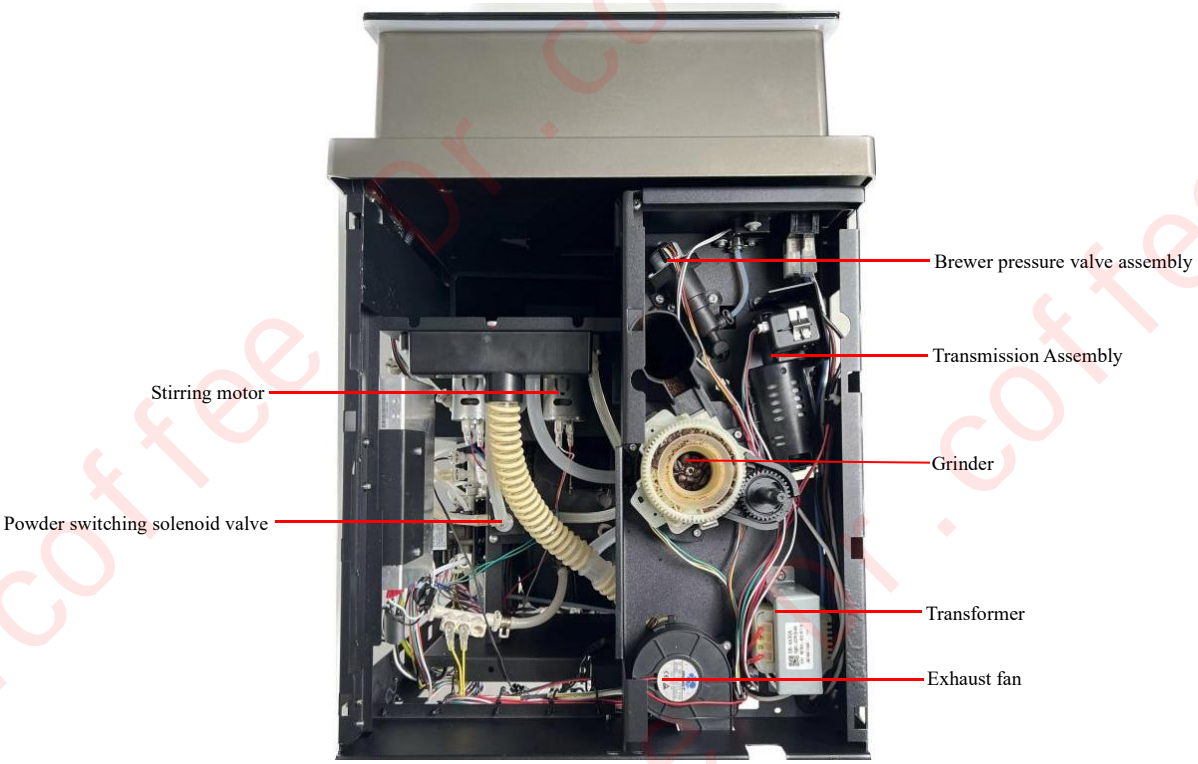


## 2.5 Introduction to Internal Components



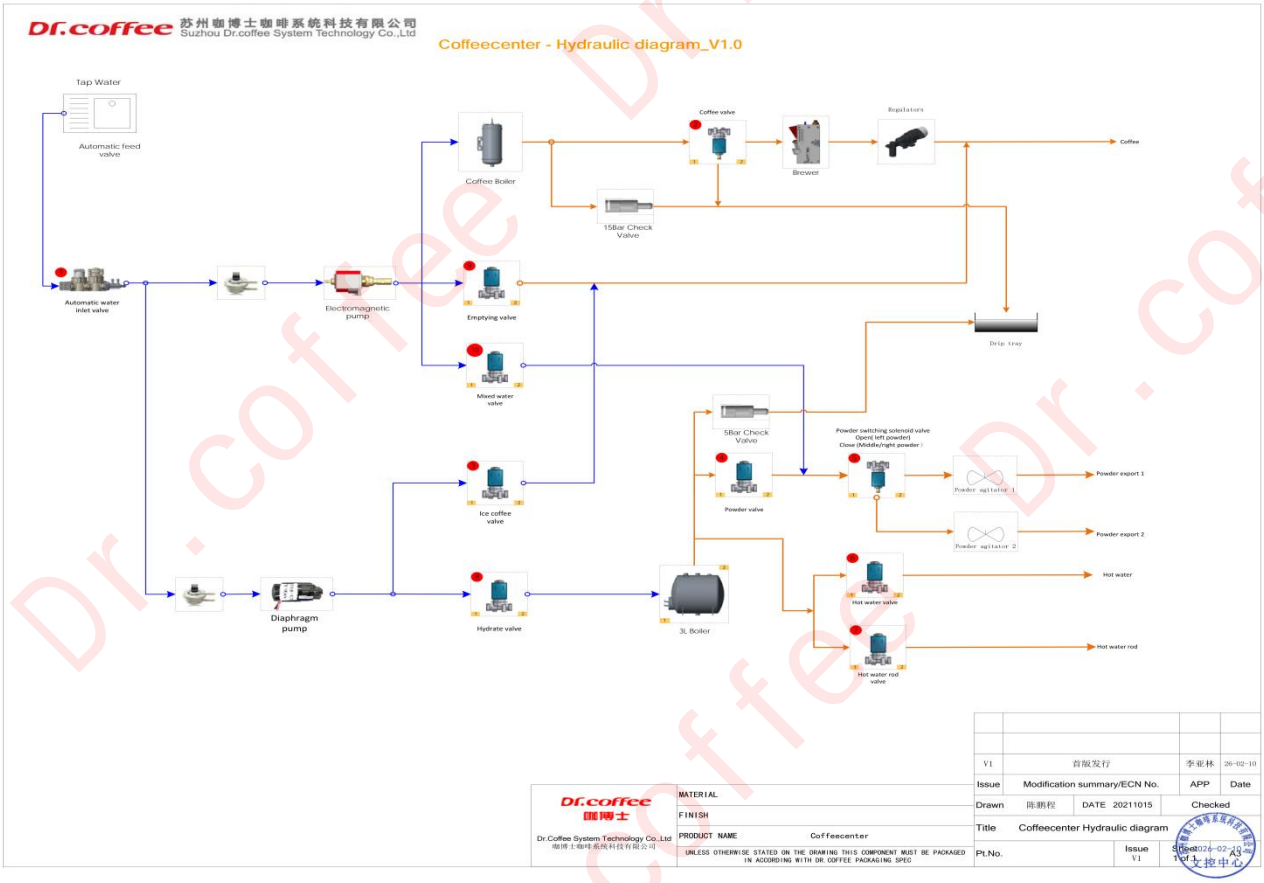




Main control board
Water inlet valve assembly
Pressure regulating valve
Solenoid water pump

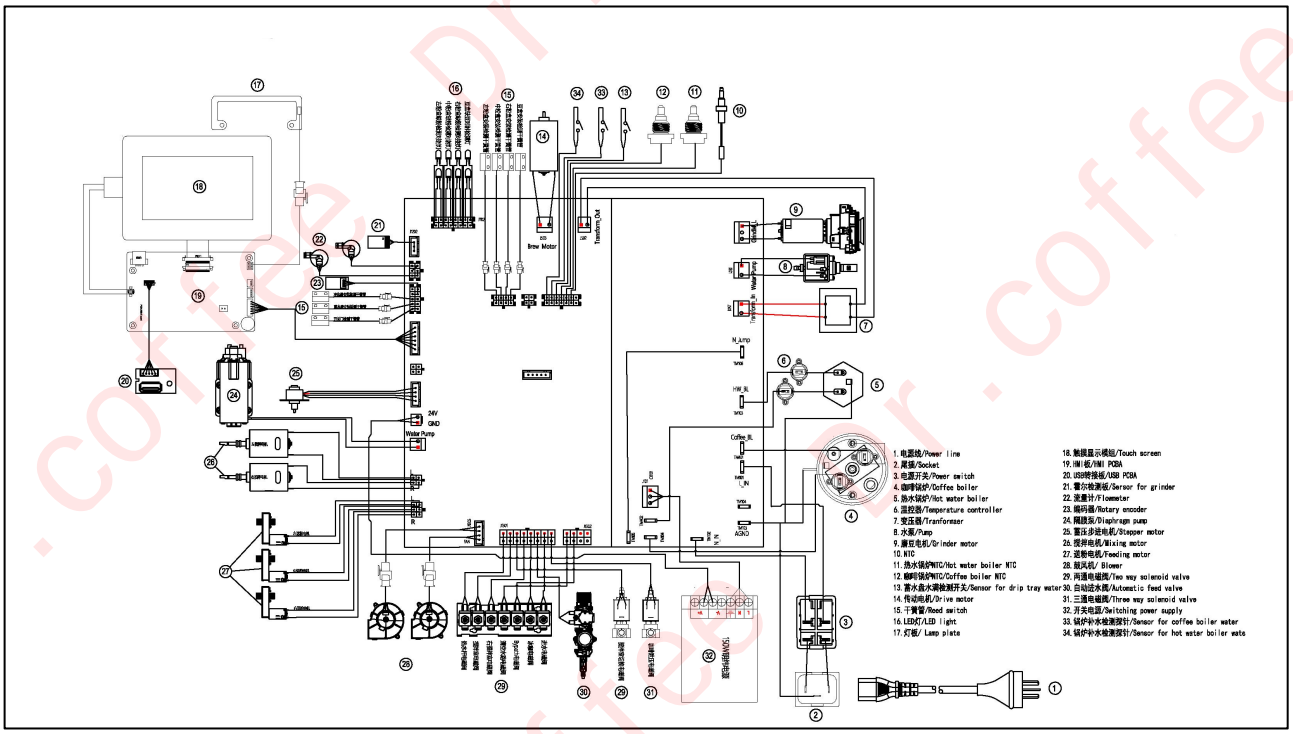

Brewer pressure valve assembly
Transmission Assembly
Stirring motor
Grinder
Powder switching solenoid valve
Transformer
Exhaust fan

# 3 Schematic Diagram Introduction

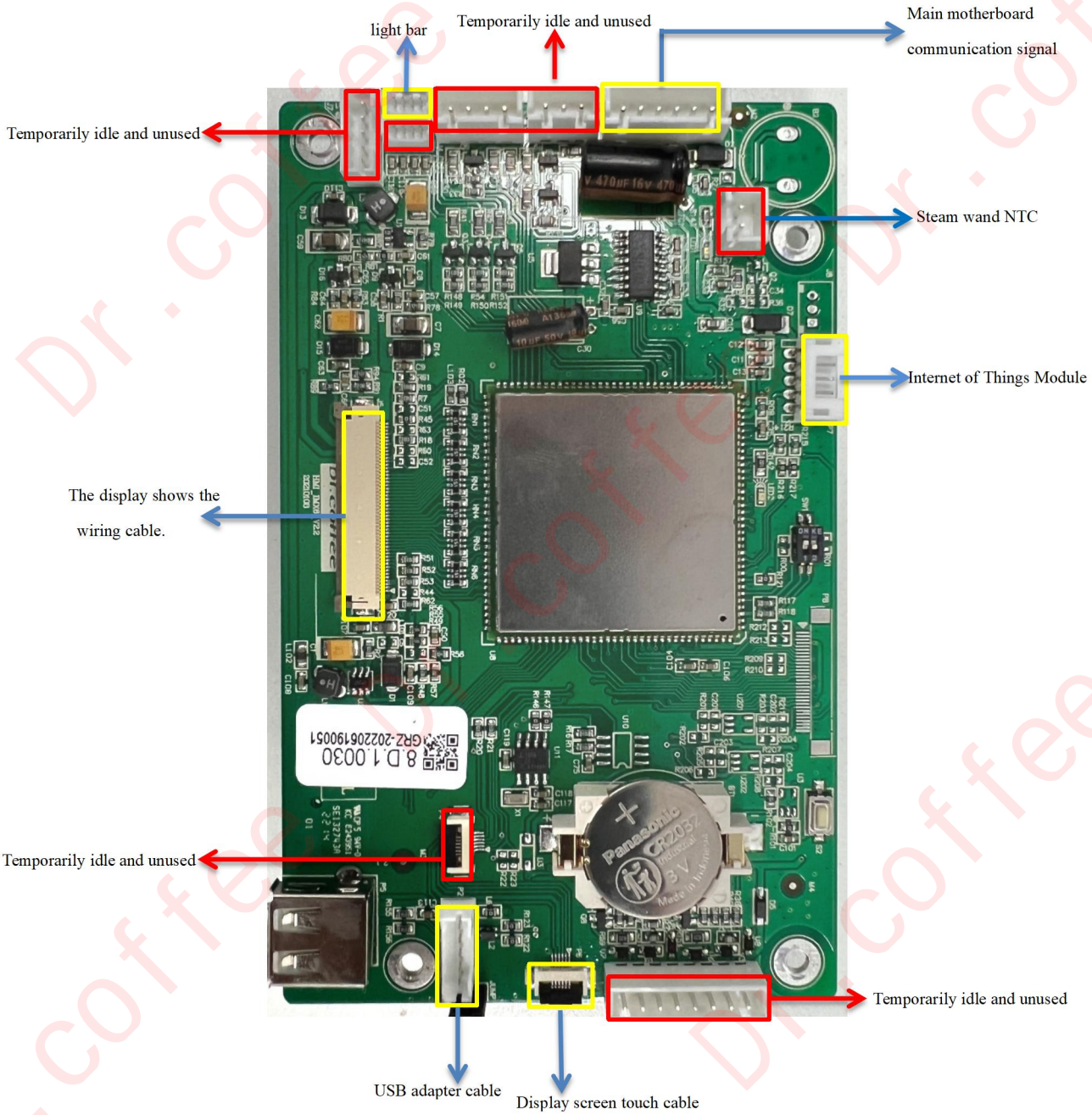
## 3.1 Waterway Diagram




## 3.2 Electrical Circuit Diagram



## 3.3 HMI Board Schematic Diagram



# 4 Interface Introduction

## 4.1 Beverage Interface




Interface Image

1. Click any beverage image on the interface to start preparation; (For detailed steps, refer to the machine user manual)

2. Select different beverage types at the bottom to display other beverage interfaces (when the beverage categorization feature is enabled).

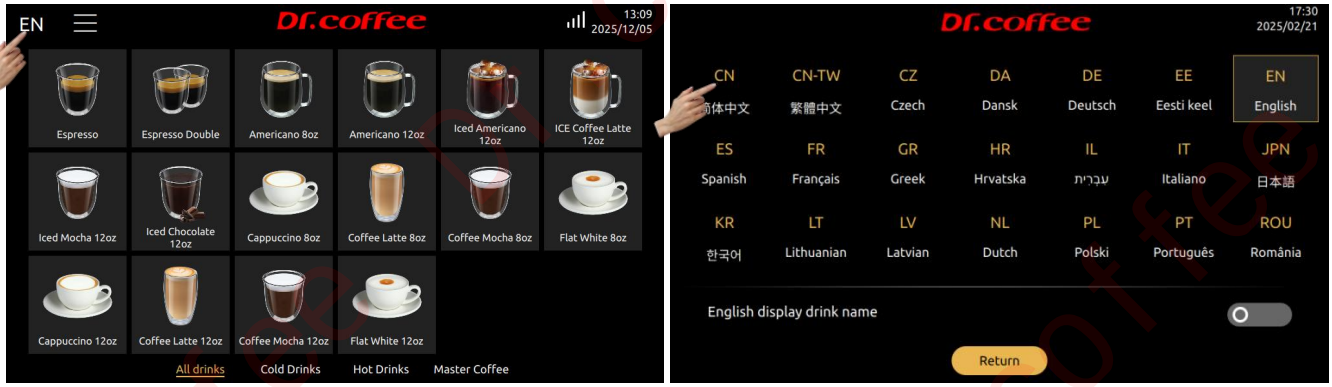
3. Signal indicator icon: displays in real-time the strength of the current machine's 4G or WiFi signal; (available only on machines with IoT functionality and equipped with a 4G or WiFi module)

4. Dates and times are displayed in real-time and can be modified in the service menu;

5. Below the beverage, the current price is displayed in real time. (This feature is available only on IoT-enabled machines when the English beverage name is disabled.)

6、 Click "" to start making hot water.

## 4.2 Language Selection



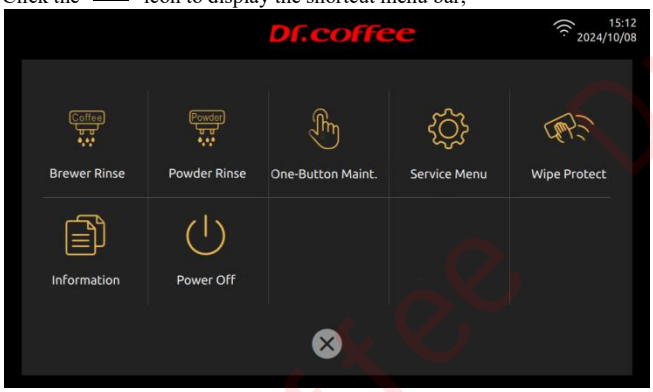

**language selection**

Click the language icon to display available languages. Click any language again to switch to that language.

Display beverage name in English: When enabled, the beverage name appears in English on the drink interface.

## 4.3 Quick Menu Bar

Click the "" icon to display the shortcut menu bar;




## 4.4 Brewer Rinse




After clicking "Quick Rinse of the Brewing System," the machine screen will prompt you to select either "Return" or "Confirm." If no selection is made within 10 seconds, the system will automatically default to the "Confirm" command and initiate the rinsing procedure. For detailed instructions, refer to the user manual.

## 4.5 Powder Rinse




After clicking "Quick Rinse of Powder System," the machine screen will prompt you to select either "Return" or "Confirm." If no selection is made within 10 seconds, the system will automatically default to the "Confirm" command and initiate the rinsing procedure. For detailed instructions, refer to the user manual.

## 4.6 One-Click Maintenance




After clicking "One-Click Maintenance," the machine screen will prompt you to select "Cancel" or "Confirm." If no choice is made within 10 seconds, the system will automatically default to the "Confirm" instruction and initiate the flushing procedure. For detailed operations, refer to the user manual.

## 4.7 Service Menu

After clicking "Service Menu," the machine screen will prompt you to enter your password. (For details, see the next chapter.)

## 4.8 Wipe Protect




After tapping "Wipe Protection," the drink image on the screen disappears and a 10-second countdown appears, allowing you to wipe and clean the screen.

## 4.9 Information

**Total Cups**




**Statistical source:** Click the drop-down arrow to select either "Production Cup Count" or "Test Cup Count" for the permanent cumulative cup count.

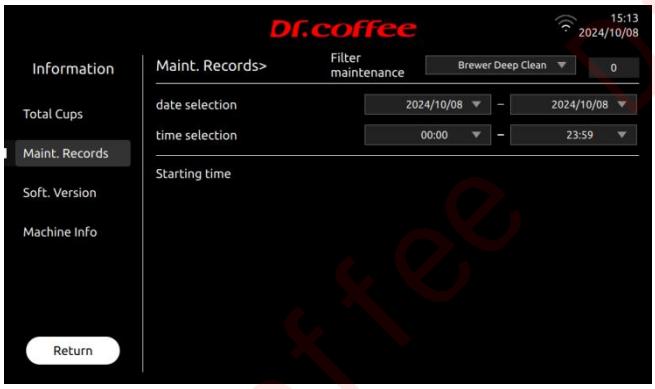
**Date selection:** Select the start and end dates for the query;

**Time selection:** Select the start and end times for the query;

**Total:** Shows the cumulative total number of cups produced for the selected statistical source over the specified period; (In this interface, you can also view the cumulative number of cups produced for each beverage type during the selected period.)

**Deleted beverages:** Shows the total number of deleted beverages.

**Maint.Records**




**Maint.Records:** Represents the permanently accumulated maintenance counts;

**Maintenance filtering:** Click the dropdown arrow to select maintenance intervals;

**Date selection:** Select the start and end dates for the query;

**Time selection: Select the start and end times for the query;**

**Soft.Version**




**Model:** This field displays the current machine model

**Mainboard version:** This column shows the version number of the current main control system program;

**HMI version:** This column shows the version number of the current display system program;

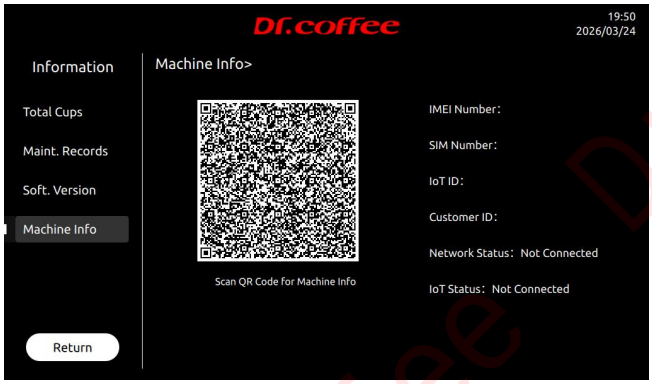
**Beverage version:** This column shows the current machine's beverage library version number;

**Param. Version:** This column shows the current machine parameter library version number;

**Daemon version:** This column shows the current intermediate layer version number of the machine;

**MDB plugin version:** This column shows the current machine MDB plugin version number;

**Machine Information**




**Machine information:** After scanning the QR code, you can see the following information;

**1. IMEI number:** indicates the serial number information of the current 4G Internet of Things module; (this column is blank only for models with IOT function, and this column is blank for other models)

**2. SIM card number:** indicates the current SIM card number information; (this column is blank only for models with iot function, otherwise this column is blank)

**3. IOT number:** indicates the current iot number information; (this column is blank only for models with iot function information, and blank for other models)

**4. Customer number:** indicates the dealer number information of the current machine; (This column is blank only for models with iot function, and this column is blank for other models)

**5. Network status:** indicates the current network status of the device. (This field is available only for devices with IOT functionality; other devices show 'not connected').

**6. IOT status:** indicates the current communication status between the machine and the background; (this column only has information for models with IOT function, and this column content is not connected for other models)

## 4.10 Power Off




After clicking "Shut Down," the machine screen will prompt you to choose "Return" or "Shut Down." If no selection is made within 10 seconds, the system will automatically assume the "Shut Down" command and proceed with the flushing process.

Click "Shut Down" to automatically flush the machine, then the screen will turn off and the device will enter shutdown mode; (Long press the screen for more than 5 seconds to wake up and restart the machine)

Click "Return" to automatically return to the previous interface.

# 5 Service Menu

How to access the service menu

Step 1: (as shown below) Click the "Service Menu" option in the menu bar;







Step 2: Enter the password and click "OK";

Service Menu Password Introduction: Passwords include numeric passwords and PINs; (PINs have the same third-level password permissions and the highest management privileges.)

Level 3 password: The factory-level password with the highest management privileges for the coffee machine; (Default initial password: 1809)

Open all menus: "Beverage Settings", "Machine Maintenance", "Machine Settings", and "Engineering Settings";

Secondary password: This is the engineer-level password granting management privileges for the coffee machine; the default initial password is 1709.

Only the following menus are available: "Beverage Settings", "Machine Maintenance", and "Machine Settings".

Primary password: The user-level password with access permissions for operating the coffee machine; (Default initial password: 1609)

Only the following menu is available: "Beverage Settings";

PIN Code: This is a 4-digit password generated through calculations using the random 4-digit PIN displayed on the device. For example, if the PIN is 9875, the corresponding password would be as follows:

The first digit of the PIN is determined by taking the last digit of the sum of the first and last digits of the PIN (for example, 9 + 5 = 14). If the sum of the first and last digits results in a single-digit number, that digit should be entered.

The middle two digits of the PIN are identical; thus, the PIN is 87.

The last digit of the PIN is the last digit of the sum of the middle two digits of the PIN (for example, 8 + 7 = 15). If the sum of the middle two digits results in a single-digit number, that digit should be entered.

The PIN code at this time is 4875.

Step 3: (as shown below) The interface after entering the service menu;



## 5.1 Drink Settings

Beverage Settings: Click the beverage image to modify the parameters of any beverage.




### 5.1.1 Powder Setting

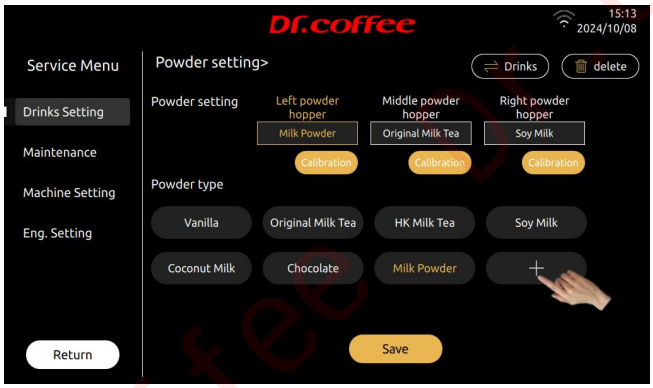






Click the "Powder" icon to enter the powder settings interface;

After clicking the "delete" icon, you can select to delete the powder type.




**Powder Setting**

The left powder box, middle powder box, and right powder box represent the left, middle, and right powder boxes of the powder feeder, respectively.

Click the powder box to select the corresponding powder.

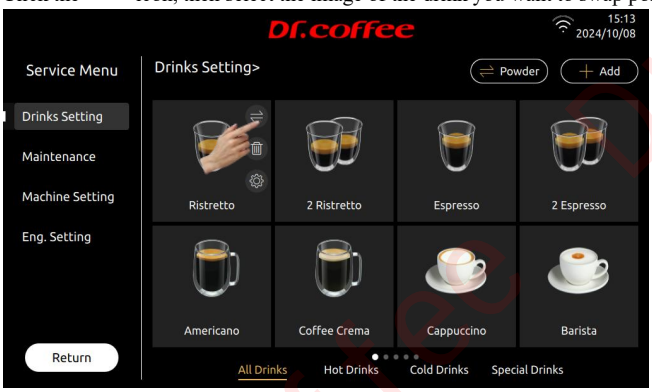
Calibration: Click "Calibration" to enter the powder calibration interface. For detailed instructions, refer to the Powder Calibration section under Engineering Settings in this manual.

**Powder type**

Select the powder type. Click " + " to add the powder name.

### 5.1.2 Drinks position swap

Click the "⇌" icon, then select the image of the drink you want to swap positions with, and the two drinks will be swapped.




### 5.1.3 Delete drinks

After clicking the "🗑" icon, the "Confirm deletion of this drink?" interface will appear.

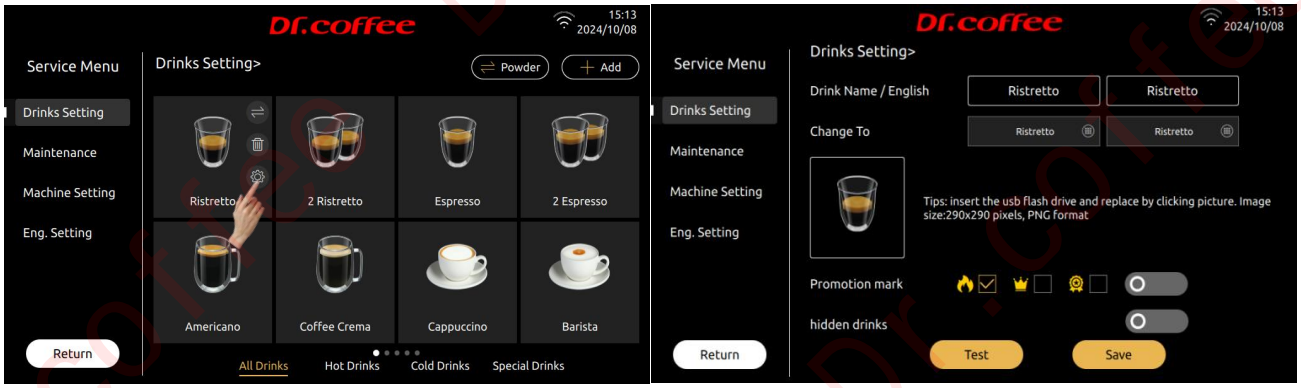
Cancel: Click "Cancel" to avoid deletion.

Confirm: Click "Confirm" to remove this beverage from the menu.




### 5.1.4 Drink Parameter Settings

Click the "⚙" icon to enter the drink parameter settings interface




#### 5.1.4.1 Drinks Name/English

This column displays the current beverage name;

#### 5.1.4.2 Delete

After clicking the "" icon, the "Confirm deletion of this drink?" interface will appear.

#### 5.1.4.3 Change To

Click this column to modify the current beverage name.

#### 5.1.4.4 Photo replacement

Step 1: Click "original drink image", the system will display the optional images;

(If you insert a U disk, the pictures in the U disk will also be displayed).

Step 2: Click the picture you want to replace, and you can change the drink picture.

Click save to complete, and pull out the U disk.

❖ **Requirements for USB drive:**

- ➢ *U disk capacity: less than or equal to 32GB;*
- ➢ *USB interface: USB 1.0 or USB 2.0;*
- ➢ *U disk format: FAT or FAT32;*
- ➢ *The image must be copied to the root directory of the U disk.*

❖ **The requirements for beverage images are as follows:**

1. *Image naming requirements: Only letters or numbers; (Do not use Chinese names, otherwise the coffee machine system will not recognize the image)*
2. *Image size requirement: 390x355 pixels;*
3. *Image format requirement: png;*
4. *Image size requirement: less than 1 MB;*

#### 5.1.4.5 Promotion Mark

Click the "" icon to enable or hide the promotion marking function. (Green: enabled; gray: disabled)

When this feature is enabled, you can select the drink in this cup to display a promotion logo.

#### 5.1.4.6 Hidden drink

Click the "" icon to enable or hide the drink function. (Green: enabled; gray: disabled)

When this feature is enabled, the locked drink will not be displayed in the standby drink interface;

#### 5.1.4.7 Small cup

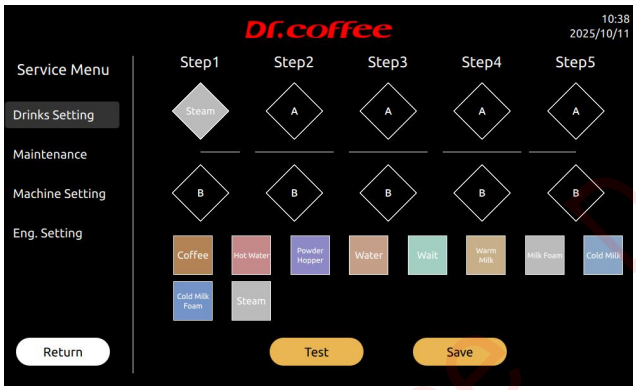
Click the "" icon to enable or disable the small cup option. When disabled, the small cup option will not be available when making drinks; (Green: enabled; Gray: disabled)

#### 5.1.4.8 Medium cup

Click the "" icon to enable or disable the middle cup option. When disabled, the middle cup option will not be available when making drinks. (Green: enabled; Gray: disabled)

#### 5.1.4.9 Big cup

Click the "" icon to enable or disable the large cup option. When disabled, the large cup option will not be available when making drinks; (Green: enabled; Gray: disabled)

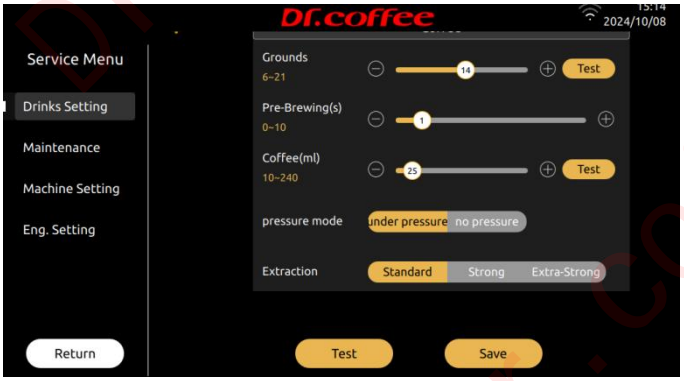



### 5.1.4.10 Cup type selection

In this section, click the dropdown options to select beverage parameters for different cup sizes.
Save to take effect.
Selection range: small cup, medium cup, large cup.

### 5.1.4.11 Cycle index

Set the number of consecutive cycles for this beverage. Range: 1 to 5.




### 5.1.4.12 Grounds

Set the grinding amount of coffee beans in grams. Unit: grams. Range: 6 – 21.
The coffee machine requires grinding calibration before calculation; any discrepancy shall be based on the actual measurement.
Test: Click the extract button to measure the weight of the coffee grounds in the residue container. This weight represents the actual amount of coffee grounds produced for this drink.

### 5.1.4.13 Pre-Brewing(s)

Set the pre-soaking time for coffee powder when preparing this beverage, in seconds.
Set range: 0 to 10.

### 5.1.4.14 Coffee (ml)

Set the amount of coffee dispensed by this beverage, in milliliters. Range: Refer to the on-screen input interface for guidance; limits vary by beverage.
Water intake: Click the water intake button and measure the weight of the water. This weight represents the proportion of water in the actual amount of coffee served in this drink.

#### 5.1.4.15 pressure mode

Specify whether to set the brewing pressure for this beverage when making coffee.

Setting range: With pressure, without pressure.

#### 5.1.4.16 Extraction

Specifies the extraction method category for this beverage when brewing coffee. Options: Standard, Strong, Deep.

Conventional: This mode indicates that the water pump operates at full frequency during coffee brewing, following the standard extraction method.

Concentration enhancement: This refers to the intermittent operation of the water pump during coffee brewing. Compared to conventional methods, it prolongs the extraction time while maintaining the same cup output volume.

Depth: This refers to the intermittent operation of the water pump during coffee brewing. Compared to the strong brew method, it prolongs the extraction time while maintaining the same cup output volume.

#### 5.1.4.17 Total Water （ml）

The total water output corresponding to the powder amount selected for beverage preparation, measured in milliliters.

Setting range: Refer to the screen's numerical input interface, where the value limits for different beverages vary.

Water intake: Shows the total actual water volume dispensed from this drink cup. (Click the Water intake button)

#### 5.1.4.18 Powder weight (g)

ndicates the amount of powder from the powder box to use for this beverage, measured in grams.

Setting range: Refer to the screen's numerical input interface, where the value limits for different beverages vary.

Powder amount: Shows the actual grams of powder dispensed in this drink. (Click the Powder amount button)

#### 5.1.4.19 Front water outlet(ml)

Represents the amount of water that flowed out before mixing the powder.

Setting range: Refer to the screen's numerical input interface, where the value limits for different beverages vary.

#### 5.1.4.20 Rear outlet(ml)

Refers to the amount of water flowing out after mixing the powder.

Setting range: Refer to the screen's numerical input interface, where the value limits for different beverages vary.

#### 5.1.4.21 Powder output speed (%)

Set the powder dispensing speed for this beverage from the powder box. A higher value indicates faster dispensing speed.

#### 5.1.4.22 water temperature （℃）

Set the water temperature for this beverage powder. Range: Refer to the on-screen input interface for specific values; limits vary by beverage type

#### 5.1.4.23 Powder mixing speed (%)

Said set this drink corresponding powder box of mixing speed, the faster the setting value, the greater the said mixed..

#### 5.1.4.24 Select powder

Specify the types of powder ingredients available for this beverage.

Precautions for setting powder parameter settings:

1. The sum of the upstream and downstream water flow rates must not exceed the total water flow rate setting (if the combined flow rates exceed the total capacity, insufficient water will fail to mix with the powder, resulting in no powder discharge).
2. Powder weight setting: If the powder weight is set too high but the total water volume is insufficient, only a mixture of intermediate water and powder will be produced, and the excess weight will not result in powder discharge (for example: if the cocoa powder weight is set to 70 g and requires 10 seconds to discharge, with an intermediate water volume of 100 ml requiring 7.5 seconds to discharge, then after the 7.5-second mixing phase, no further powder discharge occurs, and the actual powder output is 70/10 × 7.5 = 52.5 g).
3. The water volume removed from both the front and rear outlets constitutes the water volume mixed with the powder.
4. If the remaining water volume after subtracting the water discharged from the front section and the rear section is less than 20 mL, the powder feeding screw will likely fail to complete one full rotation, resulting in only minimal powder discharge or no discharge at all.
5. If the combined water flow from the front and rear outlets exceeds the total water volume, the excess flow from the rear outlet will cease when reaching the total volume, thereby terminating the beverage preparation process.
6. Changing the powder dispensing speed alters the required dispensing time. (For 100% milk powder with a dispensing speed set at 15 g, it takes 80 mL and 6 seconds; if the speed is reduced to 50% while keeping other parameters unchanged, the actual powder output will be half of the original amount—7.5 g. To achieve 15 g of milk powder at 50% dispensing speed, adjust the water volume to 160 mL and allow 12 seconds for powder dispensing.)

Powder extraction function: Measures the actual powder output when the default mixing water volume is sufficient (in the beverage settings interface, click the powder extraction button; the powder delivery screw of the selected powder box then operates to dispense powder weighing the specified grams, helping verify whether there's a discrepancy between the set value and actual output to determine if powder calibration is needed).

#### 5.1.4.25 hot-water （ml）

Set the amount of hot water dispensed by this beverage, in milliliters. Range: Refer to the on-screen input interface for specific limits, as different beverages have varying restrictions.

#### 5.1.4.26 normal temperature water （ml）

Set the room temperature water dispense amount for this beverage, in milliliters. Range: Refer to on-screen input interface for guidance; allowed range varies by beverage.

#### 5.1.4.27 Output parameters

Set the order of steps when making this drink. (Drag color blocks with different names to the corresponding position to complete the setup. If you cannot place an item in a certain position, it means this combination is not supported.)

Step 1: Specifies the first option to create in the creation process. (If two options are selected in this step, both will be created simultaneously.)

Step 2: Specify the options for the second step in the creation process. (If you select two options in this step, both will be created simultaneously.)

Step 3: Specify the options for the third step in the creation process. (If you select two options in this step, both will be created simultaneously.)

Step 4: Specify the options for the fourth step in the creation process. (If you select two options in this step, both will be created simultaneously.)

Step 5: Specify the options for the fifth step in the creation process. (If you select two options in this step, both will be created simultaneously.)

Test：After modifying any parameter of this drink, click the Test button to prepare a drink using the current interface's display values.

Preserve：After modifying all parameters of this drink, click Save to save.

Return：Click the Back button to return to the previous menu.

### 5.1.4.28 New beverage

Click the "Add" icon on the screen to enter the drink addition interface.




Method 1: Follow the screen prompts to configure the parameters from the required options, define the beverage serving sequence, and save the settings; (refer to the "Beverage Parameter Settings" section for details).

Method 2: Click "Import", select existing drink parameters, and modify them after generating a new drink—quick and convenient.




❖ Note: It is recommended to set and save the parameters for "Small Cup," "Medium Cup," and "Large Cup" under the "Select Cup Type" option. (Otherwise, incomplete beverage parameters may prevent proper beverage preparation.)

## 5.2 Maintenance



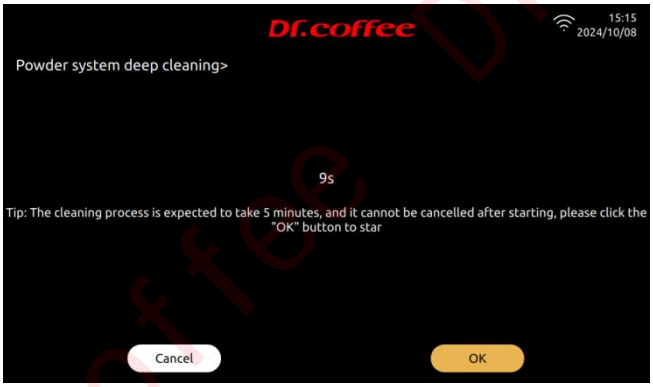

### 5.2.1 Brewer Deep Clean




Use the Dr.coffee exclusive cleaning tablets to perform a deep cleaning of the brewing system. After clicking "Deep Cleaning of the Brewing System," the machine screen will display the cleaning steps.

For detailed steps, refer to the machine user manual.

### 5.2.2 Powder system deep cleaning




Remove the powder mixer assembly for flushing and cleaning, then perform a thorough cleaning of the powder system. After clicking "Thorough Cleaning of Powder System," the machine screen will display the cleaning steps.

For detailed steps, refer to the machine user manual.

### 5.2.3 Descaling




Use the Dr.coffee exclusive descaling powder to remove scale and maintain your coffee machine. After clicking "Descaling," the machine screen will guide you through the descaling steps.

For detailed steps, refer to the machine user manual.

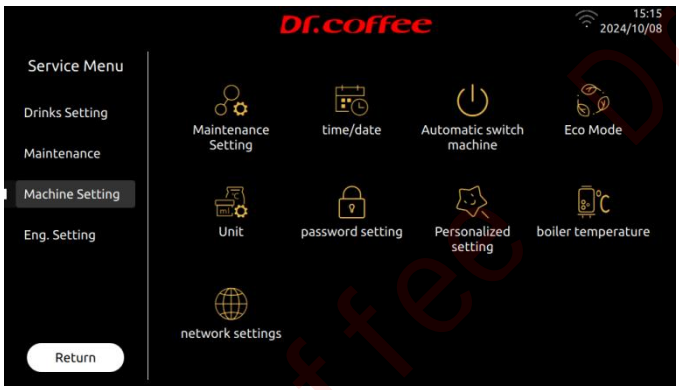
### 5.2.4 Water Draining




This step removes residual water from the coffee machine's internal tubing to prevent freezing and rupture when the machine is transported to a cold environment. After clicking "Clear Water Path," the screen will guide you through the cleaning procedure.

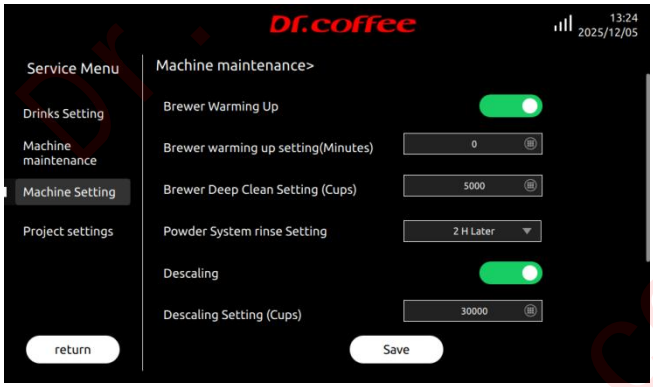
For detailed steps, refer to the machine user manual.

## 5.3 Machine Setting




### 5.3.1 Maintenance Settings

Maintenance Settings: Set the condition values for various machine maintenance intervals. The changes take effect after clicking Save.




**Brewer Warming Up**

Click the "" icon to enable or disable the warm-up feature (green: enabled; gray: disabled).

Set whether the coffee machine requires a preheat function and specify the conditions for enabling it.

**Brewer warming up setting(Minutes)**

Range: 0 – 120 minutes. Set to "20 minutes later" means the coffee machine will activate the preheating function if left unattended for 20 minutes.

Detailed explanation of the preheating function: After 20 minutes, you can prepare any coffee beverage. A prompt will appear asking, "Do you want to preheat the brewing system?" Click "Yes," and the coffee machine will automatically rinse the system with hot water to complete the preheating process.

**Brewer Deep Clean Setting(Cups)**

Set the number of coffee-containing drinks the machine will prepare. The machine will then automatically prompt you to perform a deep cleaning of the brewing system using tablets, measured in cups. Set range: Refer to the instructions in the screen input field; specifications vary by model.

For example, setting it to "1000" means that after the coffee machine prepares 1,000 cups of coffee-based beverages, it will automatically prompt for a deep cleaning of the brewing system using tablets.

**Powder System rinse Setting**

Set the conditions for rapid flushing of the powder mixer. Selection range: Refer to the screen prompt bar; varies by model.

Set to "2 hours later" means the coffee machine will start a 2-hour countdown after preparing a cup of ground coffee, and automatically perform a quick rinse of the grinding system upon completion.

**Descaling**

Click the "" icon to enable or disable the descaling function (green: enabled; gray: disabled).

**Descaling Settings (Cups)**

Set the number of drinks the coffee machine will prepare. The machine will then automatically prompt you to use descaling powder for cleaning, measured in cups. Setting range: Refer to the input field on the screen; specifications vary by model.

For example, setting it to "30000" means that after the coffee machine has prepared 30,000 cups of coffee, it will automatically prompt you to use a descaling powder for cleaning.

## 5.3.2 Time/Date

**Time/Date:** Set the date and time for the coffee machine system. Click Save to apply.




**Time zone**

Set the time zone for the coffee machine system. Setting range: Global time zone options.

**12/24-hour system**

Set the time format for the coffee machine system. Options: 12-hour system, 24-hour system.

**date**

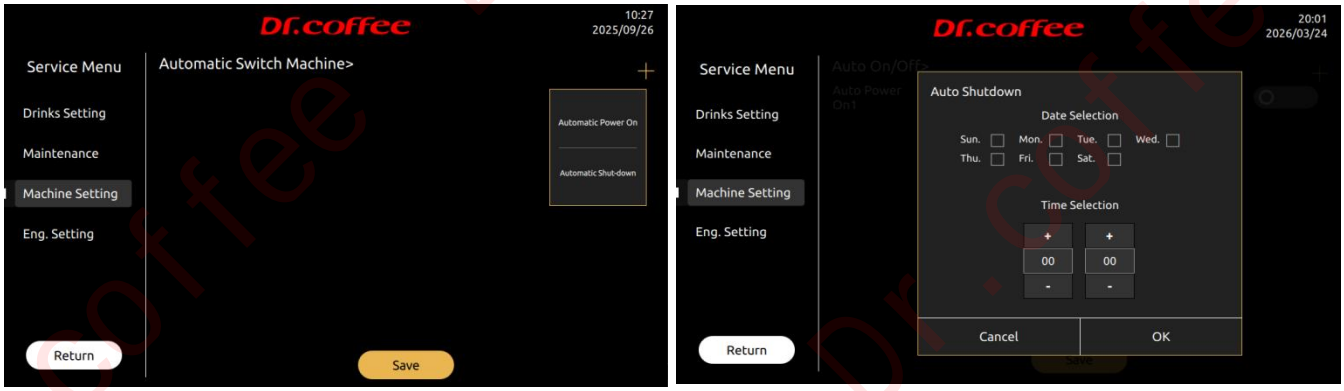
Set the system date for the coffee machine. Range: year, month, day.

**time**

Set the system time for the coffee machine. Range: hours, minutes.

## 5.3.3 Automatic Switch Machine

**Automatic shutdown:** Set the time for automatic opening and closing of the coffee machine. Save to take effect.




Set automatic power on and off: click the "+" button in the upper right, the sword will automatically start or shut down;

Date selection: Click the drop-down option to select the date to be turned on or turned off. Selection range: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday, every day;

Time selection: Click the drop-down option to select the time to be executed. Selection range: 00:00 ~ 23:59;

Click "Save" or "Cancel

### 5.3.4 Eco Mode

**Energy-saving mode:** You can select and activate any energy-saving mode. Click Save to apply.




**Eco Mode 1**

Definition: After the machine remains unattended for one continuous hour, the temperature of both the hot water boiler and coffee boiler will drop to the lower of the two setpoint temperatures and remain at that constant level.

**Eco Mode 2**

Definition: After the machine remains unattended for one continuous hour, the temperatures of both the hot water boiler and coffee boiler will simultaneously drop to approximately 60° C and remain at this constant temperature.

### 5.3.5 Unit

**Unit selection:** You can choose different units of measurement as needed. The selection takes effect after clicking Save.




**volume unit**

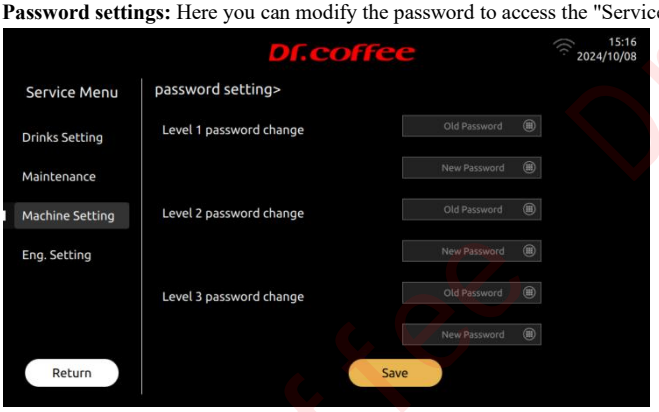
Represents the setting, the unit for measuring the coffee machine's system capacity. Options: milliliters, ounces.

**Temperature Unit**

The unit for displaying settings and the system temperature of the coffee machine. Options: Celsius or Fahrenheit.

### 5.3.6 Password Settings

**Password settings:** Here you can modify the password to access the "Service Menu". Click Save to apply.




**Old password:** Enter the old password in this field;

**New password:** Enter the new password in this field.

**New password confirmation:** Enter the new password again in this field and save.

**Introduction to password level classification:**

Level 3 password: The factory-level password with the highest management privileges for the coffee machine; (Default initial password: 1809)

Open all menus: "Beverage Settings", "Machine Maintenance", "Machine Settings", and "Engineering Settings";

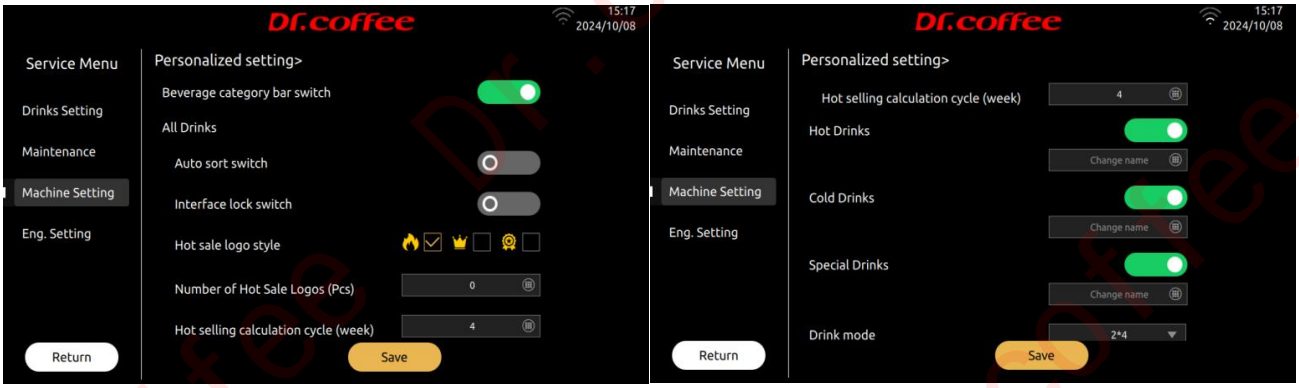
Secondary password: This is the engineer-level password granting management privileges for the coffee machine; the default initial password is 1709.

Only the following menus are available: "Beverage Settings", "Machine Maintenance", and "Machine Settings".

Primary password: The user-level password with access permissions for operating the coffee machine; (Default initial password: 1609)

Open menu only: "Beverage Settings"

### 5.3.7 Personal Settings




**Beverage category switch:** When enabled, drinks are displayed by category; when disabled, all drinks are shown together.

**All Drinks:**

**Auto-sort switch:** Click the "" icon to enable or disable the auto-sort feature.

(Green: indicates the device is on; gray: indicates the device is off)

**Interface Lock Switch:** Click the "" icon to enable or disable the interface lock feature.

(Green: indicates the device is on; gray: indicates the device is off)

**Hot sale logo style:** Hot beverages, Crown beverages, Gold Medal beverages;

**Number of Hot sale logos(Pcs):** Range: 0 – 10, Unit: pieces

**Hot selling calculation cycle(week):** 1-12, Unit: Week

**Hot Drinks**

Change name: You can modify the drink category name

**Cold Drink**

Change name: You can modify the drink category name

**Special Drinks**

**Change name:** You can modify the drink category name

**Drink mode:** Change the interface display format for beverages. Options: 1*4, 2*4, 3*6, 3*7.

**Production mode selection:** Click the dropdown options to choose the page display mode category when preparing coffee.

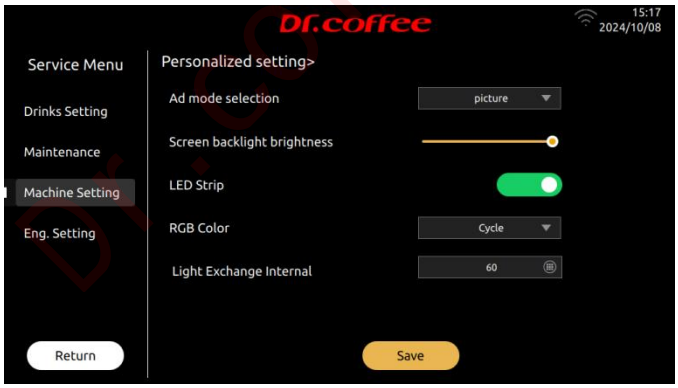
**Selection range: a**djustable mode before production, non-adjustable mode before production.

**Non-adjustable parameters before preparation:** During preparation, you can click cancel at any time; the parameters of the current drink cannot be modified.

**Adjustable settings before preparation:** During preparation, you can click to cancel at any time and adjust the parameters of the current drink.

**Second confirmation:** Tap the drink icon, then tap "Start Preparation" again.

Start preparing the beverage. You cannot adjust the current beverage parameters during preparation.




**Ad mode selection:** Select the category of ad format; Selection range: Image.

Image: During production, the screen automatically loops through image advertisements.

**Screen backlight brightness:**Slide the progress bar to adjust the screen backlight brightness.;

**LED Strip:** Click the "" icon to turn the lighting on or off.

(Green: indicates the device is on; gray: indicates the device is off)

**RGB color:** Select the light color

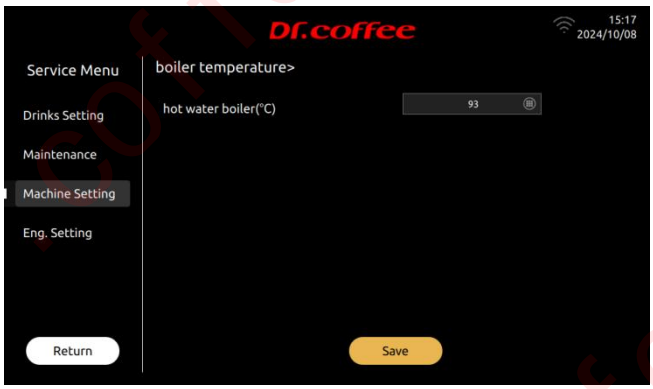
The selection range includes: No, Cycle, Green, Blue, Purple, Light Green, Cyan, Light Blue;

**Light Exchange Internal:** Select the interval for light color switching, in seconds

The selection range is between 1 and 120 seconds.

### 5.3.8 Boiler temperature

**Boiler temperature adjustment:** Set the hot water boiler temperature here. The change takes effect after clicking Save.



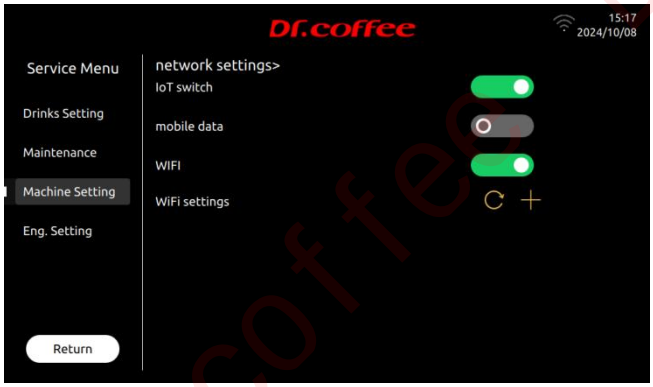

**Hot-water boiler （℃）**

Set the temperature control threshold for the hot water boiler. Range: 85° C to 95° C. Default value: 85° C

For example, setting the temperature to 93 ° C means that the hot water boiler will immediately stop heating once the NTC sensor detects a temperature of 93° C; subsequently, heating will resume when the temperature drops below 93° C during operation.

### 5.3.9 Network settings

**Network Settings:** In this section, you can enable or disable network functions.




**IoT Switch:** Click the "" icon to turn IoT on or off (green indicates on, gray indicates off).

**Mobile data:** Click the "" icon to turn mobile data on or off (green indicates on, gray indicates off).

**WiFi:** Click the "" icon to turn WiFi on or off (green indicates on, gray indicates off).

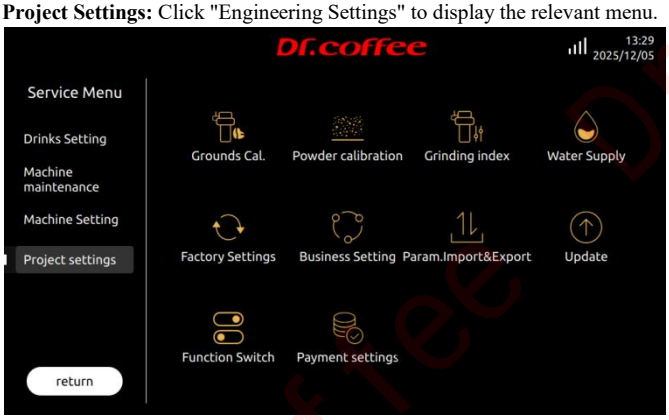
**Optional network:** In real-time, the interface displays WiFi hotspots detected by the device, sorted automatically by signal strength, with both successful and failed connections shown accordingly.

Note 1: WiFi functionality is available only on devices equipped with a WiFi module.

Note 2: Mobile data and WiFi cannot be enabled simultaneously. (If mobile data is enabled, WiFi will be automatically disabled; if WiFi is enabled, mobile data will be automatically disabled.)

## 5.4 Project settings

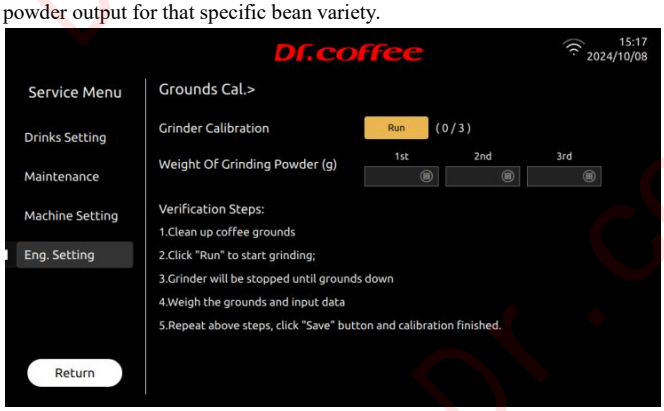
**Project Settings:** Click "Engineering Settings" to display the relevant menu.




### 5.4.1 Grinding Calibration

**Grinding Calibration:** This step allows you to calibrate the grinding machine's grinding capacity. The changes take effect after clicking Save.

Regarding grinding calibration: When coffee machines leave the factory, their grinding capacity is calibrated using test beans. However, when using your own coffee beans, the grinder's powder output speed may vary, causing the actual output to deviate from the factory-calibrated standard. Therefore, it is recommended to perform a grinding calibration using your coffee beans before using the machine, allowing it to establish the standard powder output for that specific bean variety.




**Calibration Steps**

Step 1: Empty the residue box, dry it thoroughly, weigh and peel it on the scale, then return it to the machine.

Step 2: Select the coffee grinder to be calibrated, press the "Start" button, and the ground coffee powder will automatically fall into the waste bin.

Step 3: Remove the grounds container and weigh the coffee powder inside. (※ Note: The powder from the first two grindings is used to fill the grinder; discard this powder. Begin weighing only the powder from the third grind.)

Step 4: Enter the powder weight into the corresponding option box labeled "Grinding Weight" on the machine interface.

Step 5: After repeating the above steps three times, the bean grinder is calibrated.

Step 6: The "Save" button will appear on the interface; clicking it completes the calibration.

### 5.4.2 Powder Calibration

**Powder calibration:** This step allows you to calibrate the powder discharge rate of the powder silo. The changes take effect after clicking Save.

Regarding powder calibration: Coffee machines are calibrated with test powder upon delivery. However, since the powder type and density may vary when using your own powder, the powder output may differ. Therefore, it is recommended to perform a powder calibration using your powder before using the machine. (When changing the powder type, be sure to recalibrate the powder quantity.)




**Calibration steps:**

Step 1: Remove the mixing room assembly;

Step 2: Empty the residue box, dry it thoroughly, weigh and peel it on the scale, then return it to the machine.

Step 3: Select the powder feeder to be calibrated, then click the "Start" button; the powder will automatically fall into the grounds container.

Step 4: Remove the residue container and weigh the powder inside.

Step 5: Enter the powder weight into the corresponding option box under "Powder Weight" in the machine interface.

Step 6: After repeating the above steps three times, the powder box calibration is complete.

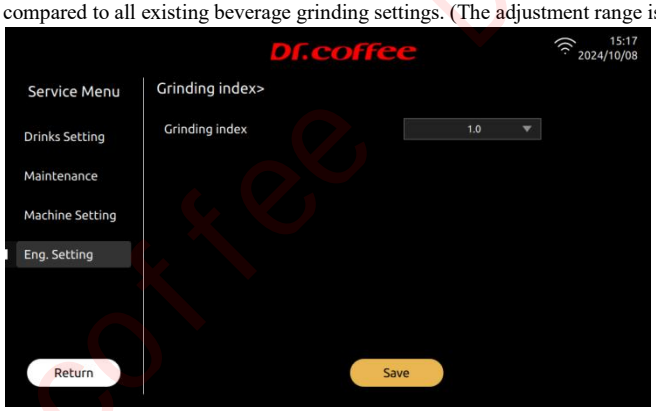
Step 7: The interface will display a "Save" button; clicking it completes the calibration.

Using the same method, calibrate the other two powder mills as well.

### 5.4.3 Grinding index

**Grinding index:** You can adjust the grinding coefficient in this field. The changes will take effect after clicking Save.

About the grinding coefficient: The grinding coefficient refers to a multiplier, indicating how many times the grinding amount increases or decreases compared to all existing beverage grinding settings. (The adjustment range is between 0.7 and 1.3 times, with the default value being 1.0.)



### 5.4.4 water supply

**Water supply:** Set the water volume calibration for the coffee machine. Click Save to apply.




**Water supply method:** External water supply.

**Water Volume Calibration**

Select the water output rate for the desired calibrated beverage, then click the "Start" button to dispense water from the corresponding beverage outlet. Available options include: regular coffee, espresso, deep coffee, hot water, room temperature water, powdered hot water at-70° C, powdered hot water at-75° C, powdered hot water at-80° C, and powdered hot water at-85° C.

Click the "Start" button to release water

**Water volume calibration (ml)**

Enter the actual outlet capacity and click the "Save" button.

**Water flow calibration method:** (By establishing a ratio between the actual water flow and the expected output flow, the error in the coffee machine's water output is minimized)

Step 1: Click "Start"; the initial data will not be recorded.

Step 2: Use a water collection container with a capacity of approximately 200 ml, weigh it on a digital balance to remove the skin, and place it at the designated calibration water outlet.

Step 3: Select the beverage to be calibrated, click the "Start" button, and dispense water into the container.

Step 4: Wait until the liquid discharge is completely finished;

Step 5: Enter the water volume measurement into the corresponding option box under "Water Volume Calibration (ml)" on the machine interface.

Step 6: Click the "Save" button to complete the calibration.

### 5.4.5 Factory Settings

**Factory settings:** Restore the coffee machine's parameters to their default factory values. Click Save; the changes will take effect after restarting the coffee machine.




**Drinks Reset**

Click the corresponding button of "" to restore the parameters to factory status..

**Eng.Setting Reset**

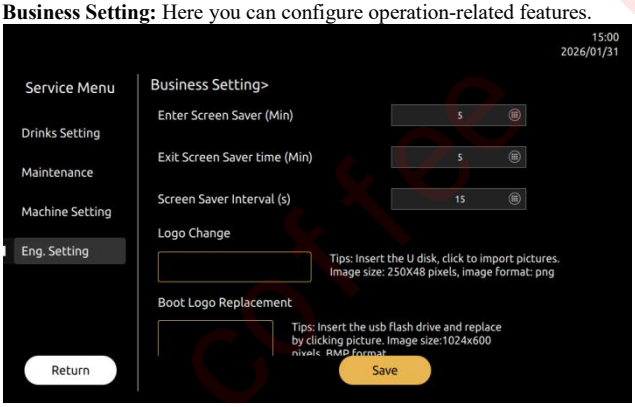
Click the button labeled "Reset" to restore the parameters to their factory defaults.

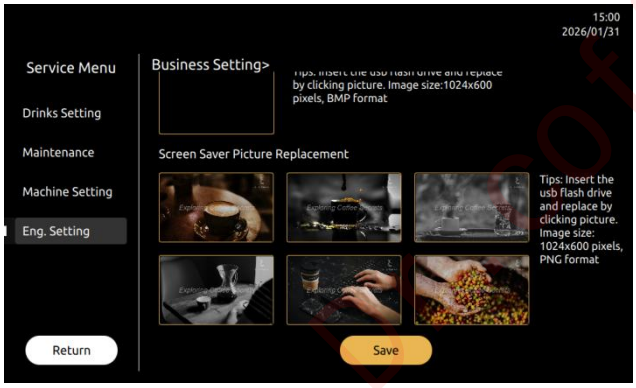
**Factory Reset**

Click the button labeled "Reset" to restore the parameters to their factory settings.

### 5.4.6 Business Setting

**Business Setting:** Here you can configure operation-related features.




**Enter screensaver (min)**

Set the time to enter screen saver mode, in minutes. Range: 1 to 10 minutes.

For example, set "5" minutes to automatically enter screen saver mode when the device remains unattended for 5 consecutive minutes.

**Exit screensaver time(min)**

Set the time to exit the screensaver. The unit is minutes. Range: 1 to 10 minutes.

For example, set "5" minutes to automatically exit the screensaver mode if the device remains unused for 5 consecutive minutes.

**Screen saver interval (s)**

Set the interval between displaying each screensaver image, in seconds. Range: 1 to 60 seconds.

For example, setting "15" seconds means the machine will refresh the wallpaper every 15 seconds while in screen saver mode.

**LOGO change**

Step 1: Click 'Original LOGO Image' to view the system's preset options.

If you insert a USB drive, all images on it will be displayed.

Step 2: Click the image to replace the LOGO.

Save and remove the USB drive.

❖ **USB drive requirements:**

- USB drive capacity: less than or equal to 32 GB;
- USB interface: USB 1.0 or USB 2.0;
- USB drive format: FAT or FAT32;
- The image must be copied to the root directory of the USB drive.

❖ **The logo image requirements are as follows:**

1. *Image naming requirements: Only letters or numbers; (Do not use Chinese names, otherwise the coffee machine system cannot recognize the image)*
2. *Image size requirement: 250x48 pixels;*
3. *Image format: PNG;*
4. *Image size requirement: less than 100KB;*

**Startup Picture Settings**

Step 1: Click 'Original Boot Image' to view the system's preset options.

If you insert a USB drive, all images on it will be displayed.

Step 2: Click the image you want to change to update your startup screen.

Save and remove the USB drive.

❖ **USB drive requirements:**

- USB drive capacity: less than or equal to 32 GB;
- USB interface: USB 1.0 or USB 2.0;
- USB drive format: FAT or FAT32;

❖ **The startup image must meet the following requirements:**

1. *Image naming requirements: Only letters or numbers; (Do not use Chinese names, otherwise the coffee machine system cannot recognize the image)*
2. *Image size requirement: 1024x600 pixels;*
3. *Image format: bmp;*
4. *Image bit depth: 24 bits*
5. *Image size requirement: less than 2MB*

- The image must be copied to the root directory of the USB drive.

**Make picture replacement**

Image: The screen automatically loops image ads during production.

Step 1: Click 'Original Ad Image' to view the system's preset images.

If you insert a USB drive, all images on it will be displayed.

Step 2: Click the image to replace the ad.

Save and remove the USB drive.

❖ **USB drive requirements:**

- USB drive capacity: less than or equal to 32 GB;
- USB interface: USB 1.0 or USB 2.0;
- USB drive format: FAT or FAT32;
- **The image must be copied to the root directory of the USB drive.**

❖ **The requirements for the advertisement image are as follows:**

1. *Image naming requirements: Only letters or numbers; (Do not use Chinese names, otherwise the coffee machine system cannot recognize the image)*
2. *Image size requirement: 764x500 pixels;*
3. *Image format: PNG;*
4. *Image size requirement: less than 2MB*

**Screen saver picture replacement**

Step 1: Click 'Original Screen Saver Image' to view the system's preset options.

If you insert a USB drive, all images on it will be displayed.

Step 2: Click the image you want to change to update your screensaver.

Save and remove the USB drive.

❖ **USB drive requirements:**

- USB drive capacity: less than or equal to 32 GB;
- USB interface: USB 1.0 or USB 2.0;
- USB drive format: FAT or FAT32;
- The image must be copied to the root directory of the USB drive.

❖ **The requirements for the screensaver image are as follows:**

1. *Image naming requirements: Only letters or numbers; (Do not use Chinese names, otherwise the coffee machine system cannot recognize the image)*
2. *Image size requirement: 1024x600 pixels;*
3. *Image format: PNG;*
4. *Image size requirement: less than 2MB*

## 5.4.7 Parameter Import and Export




In this step, follow the on-screen instructions: insert the USB drive and then select to import or export the corresponding beverage parameters, machine settings, or all parameters.

**Parameter export steps:** Insert the USB drive into the machine's USB port, then click the "Export" icon; the machine will automatically export the corresponding parameters to the USB drive.

**Parameter import procedure:** Insert the USB drive into the machine's USB port, then click the "Export" icon; the machine will automatically import the corresponding parameters into the USB drive.

### 5.4.8 Update




This feature displays the current machine's version information in real time.

Click USB Drive to update; you can upgrade the program via the USB drive.

Step 1: Open the USB drive and create a folder named 'update_ipk' in its root directory.

Step 2: Copy the new system package (.ipk format) into a folder named update_ipk.

Step 3: Insert the USB drive into the machine's USB port. (In cases where the coffee machine cannot access the system menu, turn off the power, insert the prepared system upgrade USB drive, then turn it back on. The system will automatically enter upgrade mode. Click the "USB Drive Upgrade" option on the screen to initiate the upgrade.)

USB drive requirements:

USB drive capacity: less than or equal to 32 GB;

Click "USB Drive Update" to automatically load the system software package from the USB drive and perform the upgrade.

Step 4: Once the progress bar completes, the interface will display a successful upgrade notification. Remove the USB drive, power off the coffee machine, and restart it.

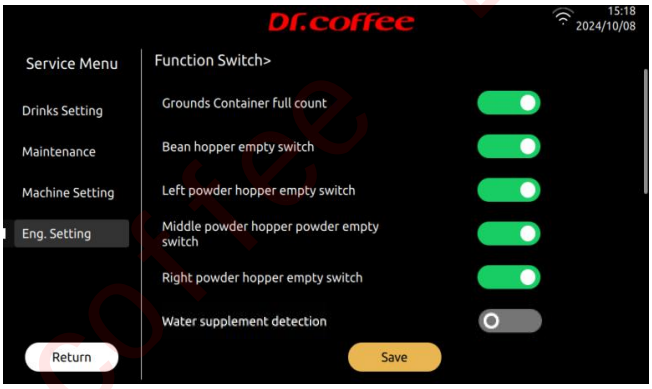
*USB interface: USB 1.0 or USB 2.0;*

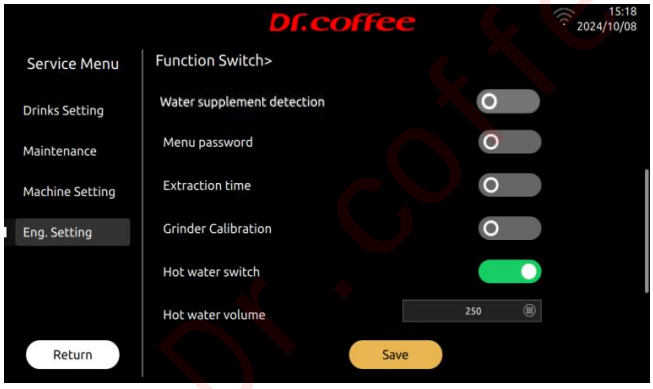
*USB drive format: FAT or FAT32;*

*The system program package in IPK format must be copied into a folder named update_ipk.*

### 5.4.9 Function switch

**Function switch:** Turn on or off the relevant function in the menu. It takes effect after clicking Save.




**Grounds Container Full count**

Click the "" icon to enable or disable the grounds full warning feature. By default, it is enabled (green indicates enabled; gray indicates disabled).

**After activation:** When the machine's cumulative production of coffee-containing beverages reaches the warning threshold, a "Residue Box Full" prompt will appear. After confirming the emptying operation, the system will restart counting.

**After shutdown:** The machine will never display the "grounds container full" message. Please ensure to manually check and empty the grounds

container promptly.

**Bean hopper empty switch**

Click the "" icon to enable or disable the bean hopper missing bean warning feature. By default, it is enabled (green indicates enabled; gray indicates disabled).

After activation: When the machine detects that the coffee bean container is empty, it will display a "Coffee bean container empty" message.

After disabling: When the machine detects that the coffee bean container is empty, no "Bean Container Empty" message will appear.

**Left powder hopper empty switch**

Click the "" icon to enable or disable the powder shortage warning for the left powder box. By default, it is enabled (green indicates enabled; gray indicates disabled).

After activation: When the machine detects that the left powder cartridge is empty, it will display a "Left powder cartridge is empty" message.

After disabling: When the machine detects that the left powder cartridge is empty, no "Left powder cartridge is empty" message will appear.

**Middle powder hopper powder empty switch**

Click the "" icon to enable or disable the medium powder box low powder warning feature; Default: enabled (green indicates enabled, gray indicates disabled).

After activation: When the machine detects that the middle powder cartridge is empty, it displays a "Middle powder cartridge is empty" message.

After disabling: When the machine detects that the middle powder cartridge is empty, no "Middle powder cartridge lacks powder" message will appear.

**Right powder hopper empty switch**

Click the "" icon to enable or disable the powder shortage warning for the right powder box. By default, it is enabled (green indicates enabled; gray indicates disabled).

After activation: When the machine detects no powder in the right powder cartridge, it displays the "Right powder cartridge is empty" message.

After disabling: When the machine detects no powder in the right powder cartridge, no "Right powder cartridge is empty" message will appear.

**water supplement detection**

When enabled, the water level probe detects water replenishment; when disabled, the flow meter detects water replenishment.

Click the "" icon to enable or disable the hydration detection feature. By default, it is enabled (green indicates enabled; gray indicates disabled).

**Menu Password**

Click the "" icon to turn it on or off. Enter your password to access the shortcut menu.

After enabling the feature, enter the shortcut menu and input your password to access the service menu without re-entering it (the password is provided at the beginning of this chapter; detailed instructions for accessing the service menu are available)

**Extraction time**

Click the "" icon to enable or disable the extraction time display feature. By default, it is enabled (green indicates enabled; gray indicates disabled).

When enabled: The coffee extraction time is displayed while the machine is preparing drinks.

After closing: The coffee extraction time is not displayed when the machine is making beverages.

**Grinder Calibration**

Click the "" icon to enable or disable the bean grinder verification warning feature; the default is disabled: (green indicates enabled, gray indicates disabled)

After activation: When the machine's cumulative grinding count reaches 2,000 cups, the screen will display "Grinder needs calibration." Upon completion of calibration, the next notification will appear when the cumulative grinding count reaches 7,000 cups; the subsequent notification will appear when it reaches 17,000 cups, followed by notifications at 27,000,37,000,47,000, and so on.

After disabling this feature, the machine will never display the "Grinder needs calibration" message. Please ensure regular manual calibration.

**Hot water switch**

Click the "" icon to turn the hot water function on or off; the default is on: (green indicates on, gray indicates off)

When enabled: The machine will use the hot water rod, which delivers hot water normally.

After closing: The machine will permanently stop using the hot water rod. When turned on, the hot water rod remains unused, and the icon on the interface will disappear.

Hot water volume

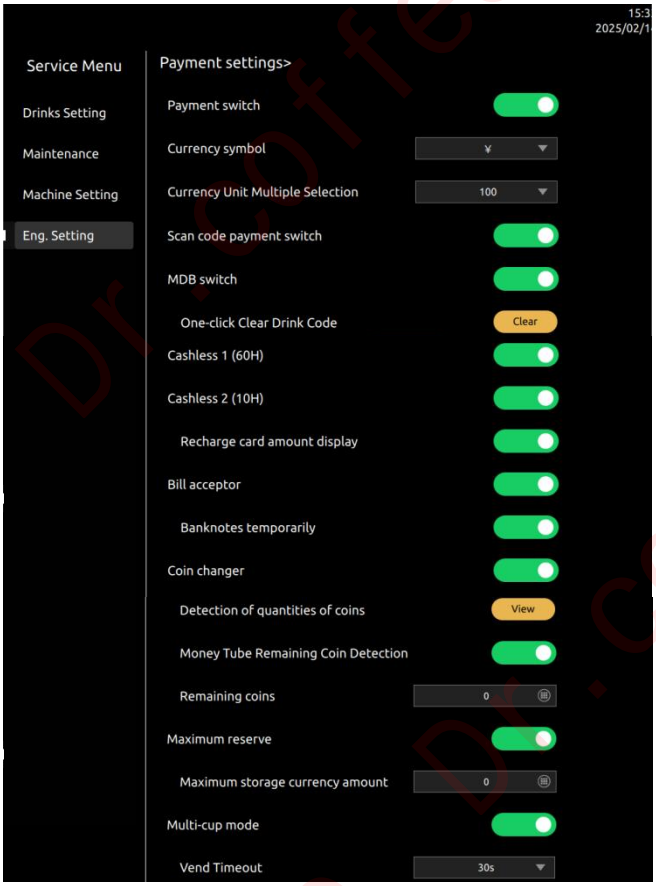
Set the hot water flow rate of the heating rod. Range: 0 – 480. Unit: milliliters.

### 5.4.10 Payment Settings

**Payment switch:** This is where you can turn payment Settings on or off. You need to turn on the network switch in machine Settings.

Click the "" icon to enable or disable the payment function; (green: enabled, gray: disabled)

When this feature is enabled, the price will be displayed below the name of the drink in the standby drink interface. (This content is only available on machines with IoT or MDB functions).




**Currency symbol:** Currency you want to use in the Payment system(It shows the price in the drink settings.).

**Currency unit Multiple selection:** This function can select 100 times or 1 time.

If the minimum value of a currency is 0.01, select 100 (e.g., the minimum denomination of USD is 0.01 USD).

If the minimum value is 1, select 1 (e.g., the minimum denomination of JPY is 1 yen).

**Scan code payment switch:** Click the "" icon to open or close the scan code payment function，（Switch for the QR-code Payment system Bind to Dr.coffee server, not supported overseas yet）(green: indicates that it is open, gray: indicates that it is closed)

**MDB Switch:** Click the "" icon to enable or disable the MDB payment function;（Switch for the Vendon Box Payment system）(green: enabled, gray: disabled)

**One-clik clean Drink Code：** To clear up all default drink code in the drink setting pages.

**Cashless 1 (60H):** Click the "" icon to enable or disable the cashless payment switch; (green: enabled, gray: disabled)

60H: for credit cards

**Cashless 2 (10H):** Click the "" icon to enable or disable the cashless payment switch; (green: enabled; gray: disabled)

10H: for recharge cards

**Recharge card amount display:** Display the balance of the recharge card (recharge card only)

**Bill acceptor:**Click the "" icon to open or close the use of paper money machine; (green: indicates that it is open, gray: indicates that it is closed)

This feature enables the use of a paper money machine.

**Bank notes temporarily：** Click the "" icon to open or close the paper money temporarily stored function; (green: indicates that it is open, gray: indicates that it is closed)

**Coin changer:** Click the "" icon to open or close the use of coin machine; (green: indicates that it is open, gray: indicates that it is closed)

This feature enables the use of coin machines.

**Detection of quantities of coins:**Click to display the quantity of each denomination (pop-up window)

**Money tube remaionong coin detection:** Click the "" icon to enable or disable the money management balance detection; (green: enabled, gray: disabled)

**Remaining coins：** After turning it on: the top menu will display the number of coins that are insufficient in the change tube. If you write 5, when there are less than 5 coins in any of the change tubes, the top menu will prompt that the full amount of change may not be given.

**Maximum reserve:** Click the "" icon to enable or disable the maximum coin storage setting; (green: enabled, gray: disabled)

Maximum storage currency amount: For example, if you set it to 10, you will be prohibited from further coin insertion after the amount exceeds 10.

**Multi-cup mode:** Click the "" icon to open or close the multi-cup mode; (green: indicates the open state, gray: indicates the closed state)

**Vend Timeout:** After turning it on, the change will not be given immediately for each settlement.According to the set time, the change will be given after the time is reached. You can click to make it continuously

# 6 warn

## 6.1 A screen prompt warns

### 6.1.1 Grounds Container Is Full Up.

| Display message | cause | Rx |
|---|---|---|
|  | a) Since the last emptying of the grounds container, the cumulative number of coffee pucks inside has reached 80. | ➢ Open the coffee machine door, remove the filter tray, and empty it. |

### 6.1.2 Drip Tray Is Full Up

| Display message | cause | Rx |
|---|---|---|
|  | a) The wastewater tank is full;<br>b) The metal terminal for water level detection in the reservoir is contaminated. | ➢ Remove the drip tray and empty the wastewater;<br>➢ Clean the testing terminals and dry them; |

### 6.1.3 Water Tank Is Empty

| Display message | cause | Rx |
|---|---|---|
|  | a) The drip tray is not properly installed;<br>b) The water storage pan sensor is damaged;<br>c) The sensing magnet of the water storage pan is missing or damaged; | ➢ reinstall the drip tray;<br>➢ Replace the new drip tray sensor;<br>➢ Replace the sensor magnet in the new drip tray; |

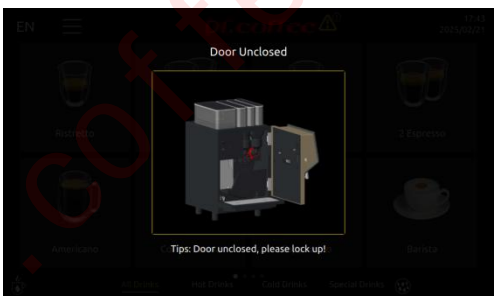
### 6.1.4 Bean Hopper Empty

| Display message | cause | Rx |
|---|---|---|
|  | a) The coffee beans in the pod have run out.<br>b) The coffee beans in the pod contain excessive oil stains, causing them to clump together.<br>c) The coffee bean sensor is damaged. | ➢ Add an appropriate amount of coffee beans to the bean hopper;<br>➢ Rinse the coffee beans in the pod container until they become loose;<br>➢ Replace the new sensor; |

### 6.1.5 Bean Hopper Unfixed

| Display message | cause | Rx |
|---|---|---|
|  | a) The bean hopper is not properly installed;<br>b) The bean hopper sensor is damaged.<br>c) The sensor magnet in the bean hopper is missing or damaged. | ➢ reinstall the bean hopper;<br>➢ Replace the new sensor;<br>➢ Replace the new induction magnet; |

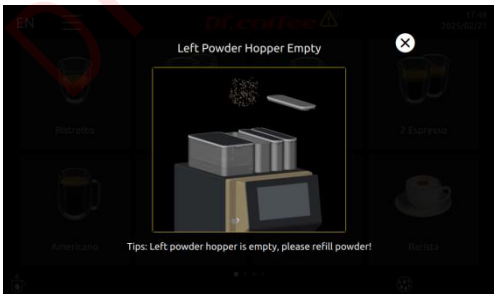
### 6.1.6 Door Unclosed.

| Display message | cause | Rx |
|---|---|---|
|  | a) The door of the coffee machine was open and not closed.<br>b) The door of the coffee machine is not closed properly;<br>c) The coffee machine door sensor is damaged.<br>d) The sensor magnet on the coffee machine door is missing or damaged; | ➢ Close the door of the coffee machine properly and lock it securely;<br>➢ Replace the new coffee machine door sensor;<br>➢ Replace the sensor magnet in the new coffee machine door; |

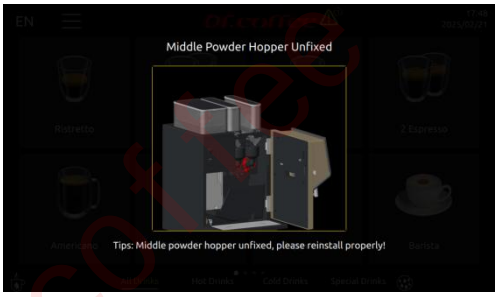
### 6.1.7 Left powder Hopper Unfixed.

| Display message | cause | Rx |
|---|---|---|
|  | a) The powder box is not properly installed;<br>b) The powder box sensor is damaged.<br>c) The induction magnet in the powder box is missing or damaged; | ➢ reinstall the powder cartridge;<br>➢ Replace the new sensor;<br>➢ Replace the new induction magnet; |

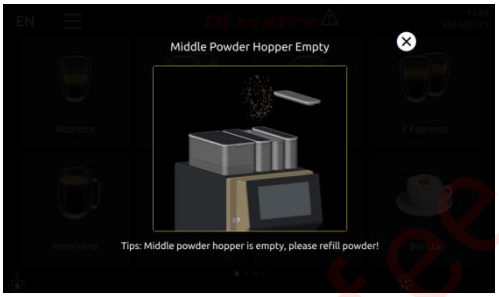
### 6.1.8 Left Powder Hopper Empty.

| Display message | cause | Rx |
|---|---|---|
|  | a) The powder in the left powder box has run out.<br>b) The powder in the powder box clumps together;<br>c) The powder sensor is damaged; | ➢ Add an appropriate amount of powder to the left powder box;<br>➢ Stir the powder in the powder box until it becomes loose powder;<br>➢ Replace the new sensor; |

### 6.1.9 Middle Powder Hopper Unfixed.

| Display message | cause | Rx |
|---|---|---|
|  | a) The powder box is not properly installed;<br>b) The powder box sensor is damaged.<br>c) The induction magnet in the powder box is missing or damaged; | ➢ reinstall the powder cartridge;<br>➢ Replace the new sensor;<br>➢ Replace the new induction magnet; |

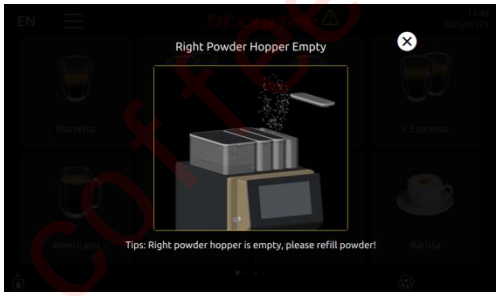
### 6.1.10 Meddle Powder Hopper Empty.

| Display message | cause | Rx |
|---|---|---|
|  | a) The powder in the medium powder box has been used up.<br>b) The powder in the powder box clumps together;<br>c) The powder sensor is damaged; | ➢ Add an appropriate amount of powder to the powder container;<br>➢ Stir the powder in the powder box until it becomes loose powder;<br>➢ Replace the new sensor; |

### 6.1.11 Right Powder Hopper Unfixed.

| Display message | cause | Rx |
|---|---|---|
|  | a) The powder box is not properly installed;<br>b) The powder box sensor is damaged.<br>c) The induction magnet in the powder box is missing or damaged; | ➢ reinstall the powder cartridge;<br>➢ Replace the new sensor;<br>➢ Replace the new induction magnet; |

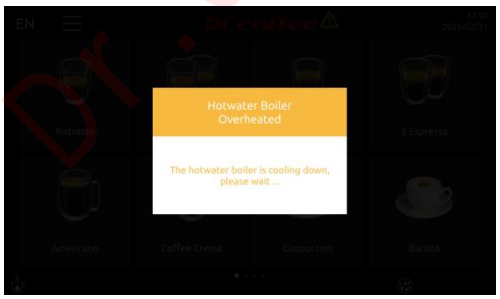
### 6.1.12 Right Powder Hopper Empty.

| Display message | cause | Rx |
|---|---|---|
|  | a) The powder in the right powder box has run out.<br>b) The powder in the powder box clumps together;<br>c) The powder sensor is damaged; | ➢ Add an appropriate amount of powder to the right powder box;<br>➢ Stir the powder in the powder box until it becomes loose powder;<br>➢ Replace the new sensor; |

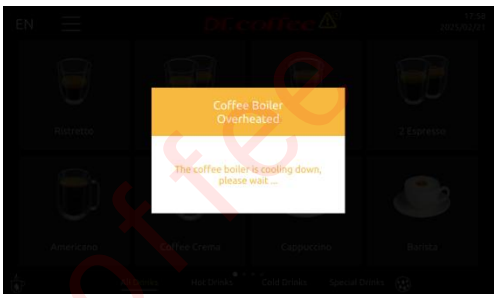
### 6.1.13 Brewer Unfixed.

| Display message | cause | Rx |
|---|---|---|
|  | a) The infuser is not installed;<br>b) The brewer is not properly installed;<br>c) The brewer sensor is damaged;<br>d) The sensor magnet in the brewer is missing or damaged; | ➢ Install the brewer in its proper position;<br>➢ Replace the new brewer sensor;<br>➢ Replace the sensor magnet in the new brewer; |

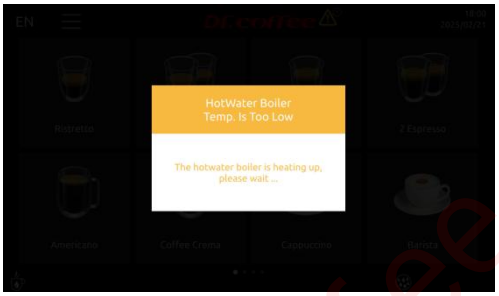
### 6.1.14 Hot water Boiler Overheated

| Display message | cause | Rx |
|---|---|---|
|  | a) When the hot water boiler temperature reaches 150 ° C, it indicates an excessively high temperature. | ➢ Follow the on-screen instructions: "The hot water boiler is cooling naturally. Please wait..."<br>➢ During the cooling period, no beverages may be prepared. |

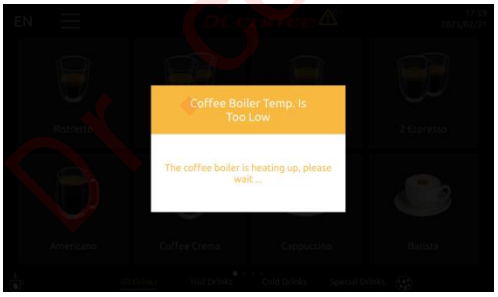
### 6.1.15 Coffee Boiler Overheated

| Display message | cause | Rx |
|---|---|---|
|  | a) When the coffee boiler temperature reaches 150 ° C, it indicates an excessively high temperature. | ➢ Follow the on-screen instructions: "The coffee boiler is cooling naturally. Please wait..."<br>➢ During the cooling period, no beverages may be prepared. |

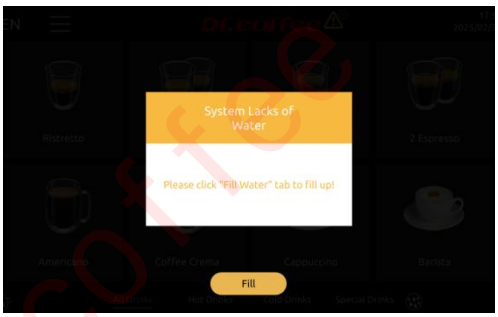
### 6.1.16 Hot water Boiler temp is Too Low.

| Display message | cause | Rx |
|---|---|---|
|  | a) When the hot water boiler temperature is detected to be below the system's preset threshold, a low-temperature alert is displayed. | ➢ Follow the on-screen instructions: "The hot water boiler is heating. Please wait..."<br>➢ No beverages may be prepared during the heating period. |

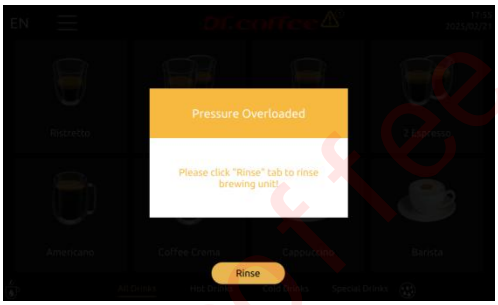
### 6.1.17 Coffee Boiler Tempe.Is Too Low.

| Display message | cause | Rx |
|---|---|---|
|  | a) When the coffee boiler temperature is detected below the system's preset threshold, a low-temperature alert is displayed. | ➢ Follow the on-screen instructions: "The coffee boiler is heating up. Please wait..."<br>➢ No beverages may be prepared during the heating period. |

### 6.1.18 Systemic Lacks of Water

| Display message | cause | Rx |
|---|---|---|
|  | a) The external water supply has been cut off or is insufficient;<br>b) The external water inlet pipe fitting is loose or the sealing ring is not installed;<br>c) The filter screen at the external water inlet is clogged;<br>d) The filter screen of the brewer is clogged;<br>e) The water pump is damaged;<br>f) The flowmeter is damaged; | ➢ After checking the water source, click the "Water Replenishment" button. Once the correct water supply method is selected, the system will automatically initiate water replenishment.<br>➢ Check the water inlet pipe fitting or seal ring, and reinstall it properly;<br>➢ Clean the filter screen;<br>➢ Clean the filter screen of the tablet washing and brewing device, or remove it for cleaning;<br>➢ Replace the new water pump;<br>➢ Replace the flow meter;<br>➢ Turn off the machine's power and restart it; |

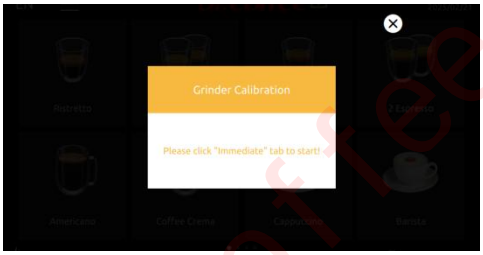
### 6.1.19 Pressure Overloaded

| Display message | cause | Rx |
|---|---|---|
|  | a) The filter screen or pipeline of the infuser is clogged;<br>b) The ground coffee powder is too fine;<br>c) The amount of ground powder is excessive, exceeding the brewer's capacity limit.<br>d) During coffee brewing, the water pump draws in air, resulting in increased pressure. | ➢ Click the "Rinse" button to quickly rinse the coffee machine;<br>➢ Adjust the grinding setting of the coffee machine toward the higher digit values; this indicates a coarser grind — the larger the number, the coarser the grind.<br>➢ Perform grinding calibration;<br>➢ Check whether the external water supply has run out or if the external water pipe is loose and leaking. |

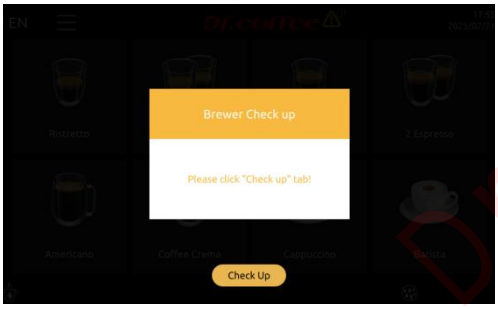
### 6.1.20 System water Filling Overtime

| Display message | cause | Rx |
|---|---|---|
|  | a) The external water supply has been cut off or is insufficient;<br>b) The external water inlet pipe fitting is loose or the sealing ring is not installed;<br>c) The filter screen at the external water inlet is clogged;<br>d) The filter screen of the brewer is clogged;<br>e) The water pump is damaged;<br>f) The flowmeter is damaged; | ➢ After checking the water source, click the "Water Replenishment" button. Once the correct water supply method is selected, the system will automatically initiate water replenishment.<br>➢ Check the water inlet pipe fitting or seal ring, and reinstall it properly;<br>➢ Clean the filter screen;<br>➢ Clean the filter screen of the tablet washing and brewing device, or remove it for cleaning;<br>➢ Replace the new water pump;<br>➢ Replace the flow meter;<br>➢ Turn off the machine's power and restart it; |

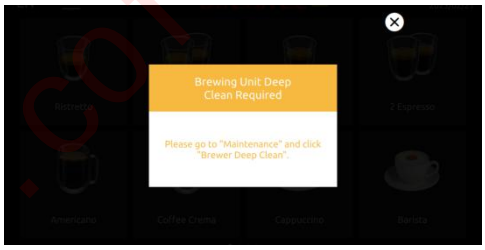
### 6.1.21 Grinding calibration

| Display message | cause | Rx |
|---|---|---|
|  | a) Once the cumulative production of coffee beverages reaches a certain quantity, the grinder will indicate that calibration is required.<br>b) From its initial installation, the machine has produced a cumulative total of 2,000 cups, 7,000 cups, 17,000 cups, 27,000 cups, and so on. For every additional 10,000 cups produced, the machine will prompt for calibration.<br>c) If you close it in the service menu, no prompt will appear. | ➢ Follow the on-screen prompts to access the service menu bar, locate the corresponding function menu, and perform the grinder calibration!<br>➢ For specific operating procedures, refer to the maintenance manual. |

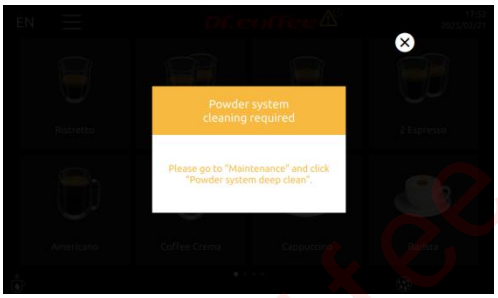
### 6.1.22 Brewer Check up

| Display message | cause | Rx |
|---|---|---|
|  | a) The infuser is rotated in the wrong position;<br>b) The brewer is damaged;<br>c) The infusion maker's transmission assembly is damaged; | ➢ Click the "Self-Check" button to perform an automatic reset self-check;<br>➢ Replace the new brewer;<br>➢ Replace the new transmission assembly; |

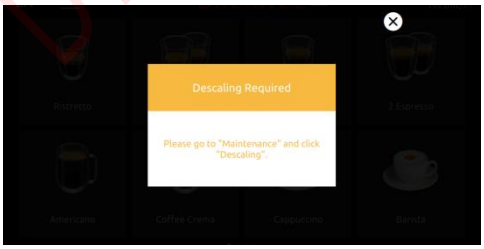
### 6.1.23 Brewing Unit Deep Clean Required

| Display message | cause | Rx |
|---|---|---|
|  | a) When the coffee machine reaches its preset cumulative cup output, it prompts for a thorough cleaning of the brewing system.<br>b) In the service menu, you can adjust the minimum number of cups required for setting prompts. | ➢ Follow the on-screen instructions to access the service menu, select the corresponding function menu, and perform a thorough cleaning of the brewing system.<br>➢ For specific operating procedures, refer to the product manual or maintenance guide. |

### 6.1.24 Powder system cleaning required

| Display message | cause | Rx |
|---|---|---|
|  | a) When the coffee machine reaches its preset cumulative cup output, it prompts for a thorough cleaning of the brewing system.<br>b) In the service menu, you can adjust the minimum number of cups required for setting prompts. | ➢ Follow the on-screen instructions to access the service menu, select the corresponding function menu, and perform a thorough cleaning of the powder system!<br>➢ For specific operating procedures, refer to the product manual or maintenance guide. |

### 6.1.25 Descaling Required.

| Display message | cause | Rx |
|---|---|---|
|  | a) When the coffee machine has produced a cumulative number of cups or reached the set time, it will prompt you to perform a descaling cycle.<br>b) In the service menu, you can adjust the number of cups or the time threshold for setting prompts. | ➢ Follow the on-screen prompts to enter the service menu, locate the corresponding function menu, and perform descaling!<br>➢ For specific operating procedures, refer to the product manual or maintenance guide. |

# 7 Hitch

## 7.1 A fault with a screen prompt

### 7.1.1 Coffee boiler water supply abnormal

| Display screen prompt | Cause | Solutions |
|---|---|---|
|  | a) When the system is prompted to lack water, after three "water replenishment" attempts, if the water replenishment is not successful, it will prompt "abnormal water supply of coffee boiler"; | ➢ After checking the normal water supply, try to turn off the machine power and restart;<br>➢ Check the inlet pipe joint or seal ring and reinstall it in place;<br>➢ Clean the filter;<br>➢ Replace with a new flowmeter;<br>➢ Replace with a new pump; |

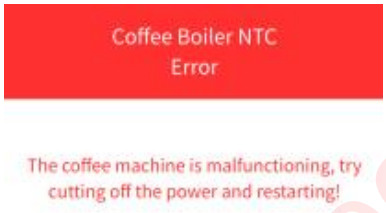
### 7.1.2 The brewing system is abnormal

| Display screen prompt | Cause | Solutions |
|---|---|---|
|  | a) The milk frother is stuck with a foreign body;<br>b) The drive assembly of the milk frother is damaged;<br>c) Damaged milk frother;<br>d) BLDC driver board is damaged; | ➢ Try to turn off the machine power and restart;<br>➢ Remove the brewer for inspection and cleaning;<br>➢ Change the drive assembly of the new brewer;<br>➢ Replace with a new brewer;<br>➢ The new BLDC driver board was damaged; |

### 7.1.3 HMI communication exception

| Display screen prompt | Cause | Solutions |
|---|---|---|
|  | a) The communication line between the motherboard and the display module is broken or damaged;<br>b) The program version of the main control system and display system is not matched;<br>c) HMI board is damaged;<br>d) Main control board damaged; | ➢ Check the wiring harness plug and reinsert it;<br>➢ Upgrade the main control and display system;<br>➢ Replace with a new HMI board;<br>➢ Replace with a new main control board; |

### 7.1.4 The coffee boiler NTC is abnormal

| Display screen prompt | Cause | Solutions |
|---|---|---|
|  | a) The NTC temperature sensor of the coffee boiler is disconnected or broken;<br>b) The NTC temperature sensor of the coffee boiler is damaged;<br>c) The temperature of the coffee boiler exceeds 180℃; | ➢ Check the connection cable and reinstall or replace it;<br>➢ Replace with a new NTC temperature sensor;<br>➢ Close the machine power supply and wait about 30 minutes, then restart;<br>➢ Change the coffee boiler; |

### 7.1.5 Coffee boiler heating timeout

| Display screen prompt | Cause | Solutions |
|---|---|---|
|  | a) The water temperature of the coffee boiler exceeds the protection value of the thermostat, resulting in the tripping of the thermostat;<br>b) The NTC temperature sensor of the coffee boiler is damaged;<br>c) Coffee boiler damage; | ➢ Close the power supply of the machine, remove the appearance of the machine, and manually press the thermostat to reset;<br>➢ Replace with a new NTC temperature sensor;<br>➢ Change the coffee boiler; |

## 7.2 No screen warning fault

### 7.2.1 Can't start the machine

| Display screen prompt | Cause | Solutions |
|---|---|---|
| **not have** | a) The machine is not connected to the power supply;<br>b) The power supply voltage is too low;<br>c) The machine has not been started;<br>d) Switching power supply board damaged;<br>e) The main power fuse is blown; | ➢ Please check whether the machine is connected to power;<br>➢ Connect the power supply with the voltage required by the coffee machine;<br>➢ Check whether the power switch of the machine is on;<br>➢ Replace with a new switching power supply board;<br>➢ Replacement of new fuse; |

### 7.2.2 No coffee

| Display screen prompt | Cause | Solutions |
|---|---|---|
| **not have** | a) The ground coffee is too fine;<br>b) Excessive amount of powder produced by grinding;<br>c) Clogging of the filter screen of the milk frother;<br>d) The rinse unit is leaking or damaged; | ➢ Adjust the grinding degree of the grinder to coarse;<br>➢ Perform grinding calibration;<br>➢ Remove the brewer to clean the filter screen;<br>➢ Deep cleaning of the brewing system;<br>➢ Repair or replace a new brewer; |

### 7.2.3 Crash

| Display screen prompt | Cause | Solutions |
|---|---|---|
| **not have** | a) The system unexpectedly stops running; | ➢ Turn off the machine power, wait about 5 seconds, then restart the machine;<br>➢ Upgrade the coffee machine system program; |

### 7.2.4 Leak

| Display screen prompt | Cause | Solutions |
|---|---|---|
| **not have** | a) External water inlet interface leakage;<br>b) Water leakage in the machine; | ➢ Check the seal of the external inlet;<br>➢ Remove the appearance of the machine and check the specific location of water leakage;<br>➢ Replace the parts where the water leakage occurs; |

# 8 Introduction to Disassembly and Assembly

## Tool



Plum Blossom Hexagonal Screwdriver (T10)



Plum Blossom Hexagonal Screwdriver (T20)




multimeter



One-wire screwdriver (3.2 mm diameter)



thermometer



long flat nose pliers




electronic balance

## 8.1 Component Disassembly Steps

### 8.1.1 Remove the exterior

Remove the rear cover

Steps: First, remove the two screws at the position shown in Figure 1. Then, as shown in Figure 2, push the rear cover plate upward from the bottom and remove it. This completes the removal of the rear cover plate.




★ Precautions ：

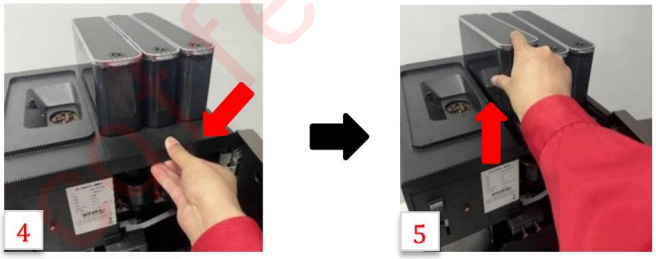
1. Handle the components gently during disassembly to avoid scratching the exterior!

### 8.1.2 Dried bean powder box

Steps: First, lift the bean hopper cover upward as shown in Figure 1; then rotate the handle to the right as shown in Figure 2, and finally lift the cover to remove the bean hopper.




Step 2: First, pull out the powder box cover as shown in Figure 4, then lift the powder box upward sequentially as shown in Figure 5 to complete the disassembly.

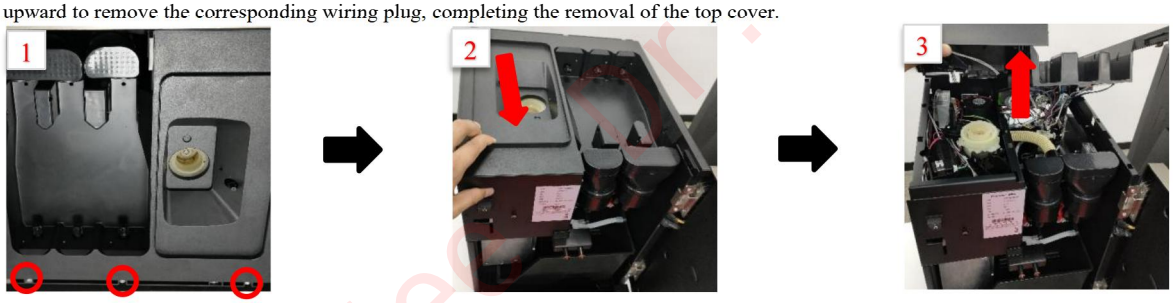



★ Precautions ：

1. Exercise caution during disassembly to avoid scratching the exterior!

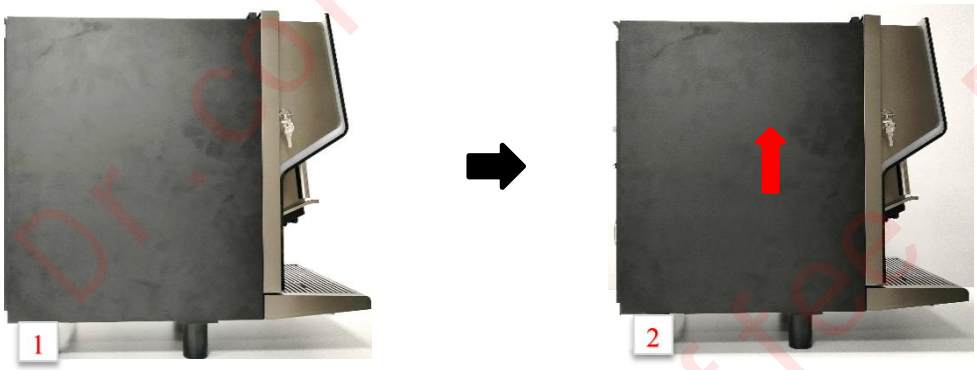
### 8.1.3 Remove the cover

Step 1: First, loosen the three screws at the red circle-marked position (Figure 1). Then, as shown in Figure 2, pull the top cover forward and lift it upward to remove the corresponding wiring plug, completing the removal of the top cover.




### 8.1.4 Open the left and right side covers

Step 1: (As shown in Figure 2) Push the side cover plate upward from the bottom and remove it to complete the disassembly of the left panel.




Step 2: (As shown in Figure 2) Push the side cover plate upward from the bottom and remove it to complete the disassembly of the right panel.

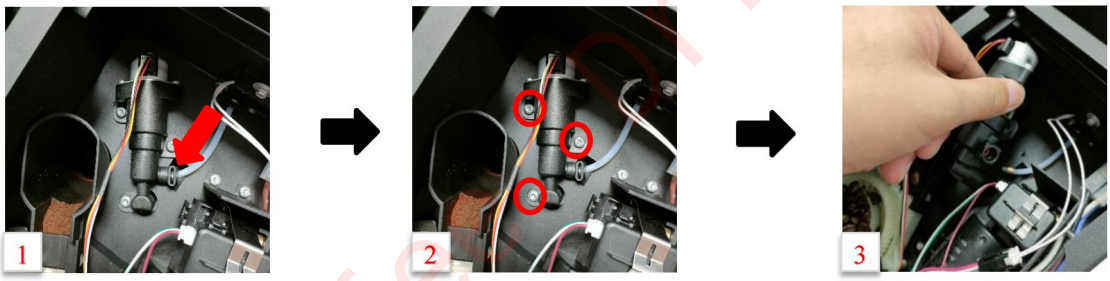



★ Precautions ：

1、Be careful during the disassembly process to avoid scratching the exterior!

## 8.2 Dissolve, brew, and activate the pressure storage valve

Steps: First, remove the small spring clamp at the connector position (Figure 1) to detach the water pipe. Then, unscrew the three fixing screws (Figure 2) and remove the stepper motor's wiring plug. Finally, pull the pressure relief valve assembly upward (Figure 3) to complete its disassembly.




★ Precautions ：

1. Exercise extreme caution during disassembly to avoid finger abrasions!

## 8.3 Remove the transmission assembly

Steps: First, loosen the four screws marked in Figure 1 and remove the transmission assembly. Then, as shown in Figure 2, detach the two screws securing the transmission assembly, unplug the corresponding wiring connectors on the main control board, and complete the disassembly of the transmission assembly.




★ Precautions ：

1. Exercise extreme caution during disassembly to avoid finger abrasions!

## 8.4 Grinder

Steps: First, as shown in Figure 1, locate and disconnect the bean grinder's connecting cable from the main control board; then remove the Hall sensor cable as illustrated in Figure 2; next, unplug the bean grinding motor's wiring connector as depicted in Figure 3; finally, extract the entire bean grinding unit to complete the disassembly.



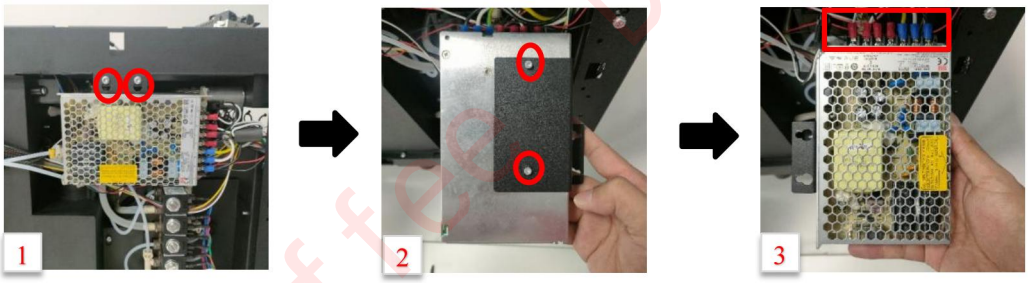

★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!

2. Before removing the bean grinding unit, please remove all remaining coffee beans and powder from the grinder!

## 8.5 Switch the power supply on/off

Steps: First, loosen the two bracket fixing screws as shown in Figure 1. Then, lift the switch-mode power supply from bottom to top as shown in Figure 2. Finally, remove the power supply and detach the fixing screws and terminal blocks as shown in Figure 3. The disassembly of the switch-mode power supply is complete.

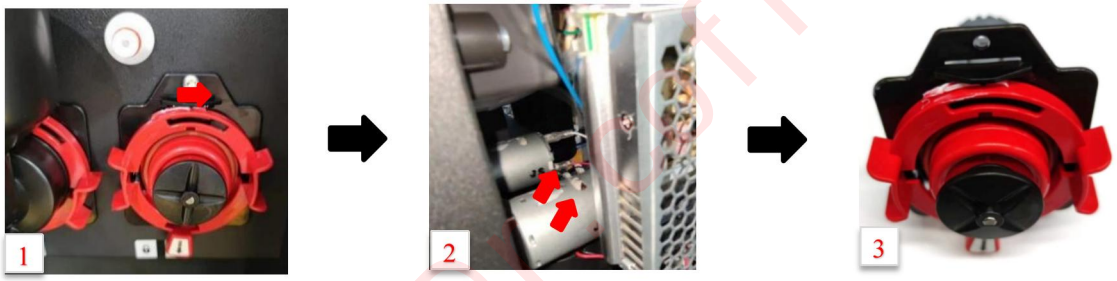



★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!
2. Please remember the correct positions of the wiring terminals and avoid incorrect connections, as this may damage the power supply unit!

## 8.6 Remove the stirring motor unit

Step: The Coffee Center features two stirring motor units. The disassembly procedure is identical: first remove the fixing screws at the arrow-marked position (Figure 1), then disconnect the power cord of the stirring motor at the indicated location (Figure 2), and finally extract the stirring motor unit. The stirring motor unit has been removed.

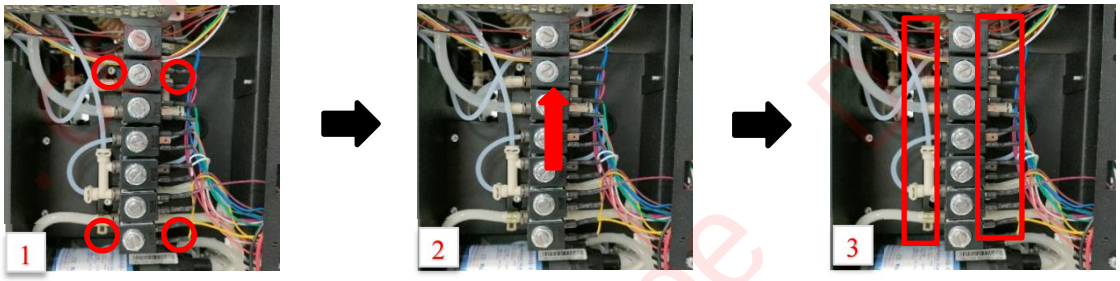



★ Precautions ：

1. Exercise extreme caution during disassembly to avoid finger abrasions!

## 8.7 Remove the solenoid valve assembly

Steps: First, loosen the four screws at the position shown in Figure 1. Then, as shown in Figure 2, push the solenoid valve assembly upward from the bottom and pull it outward. Finally, as illustrated in Figure 3, remove the corresponding water pipe plugs and wiring plugs from each solenoid valve to complete the disassembly of the solenoid valve assembly.

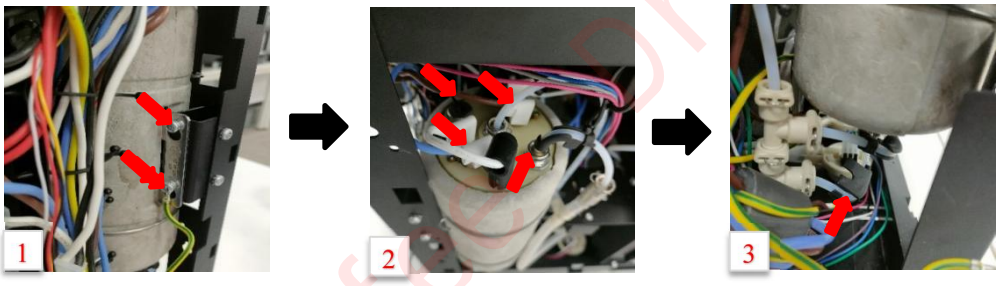



★ Precautions ：

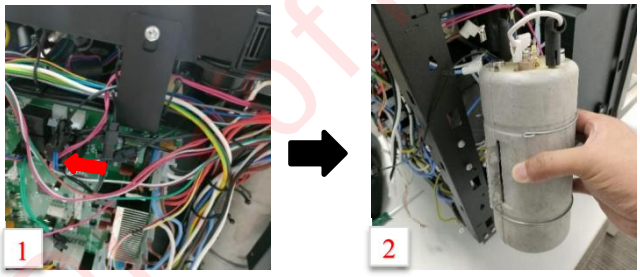
1. When tightening the four fixing screws, simply loosen them; there is no need to fully unscrew them!

## 8.8 Remove the coffee boiler assembly

Steps: 1. First, loosen the fixing screws of the boiler as shown in Figure 1; then (as shown in Figure 2), remove the power cord plug and the water outlet pipe connector; (as shown in Figure 3), disconnect the water inlet pipe below the boiler and drain all water from inside the boiler.




Step 2 (see Figure 1): Remove the boiler NTC plug to complete the disassembly of the boiler unit.

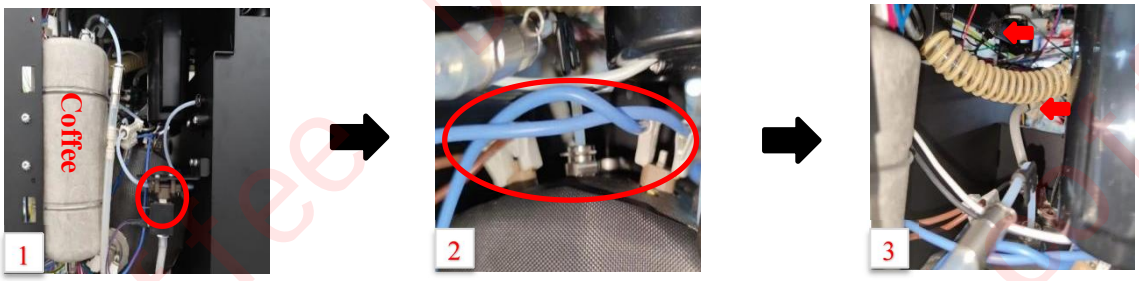



★ Precautions ：

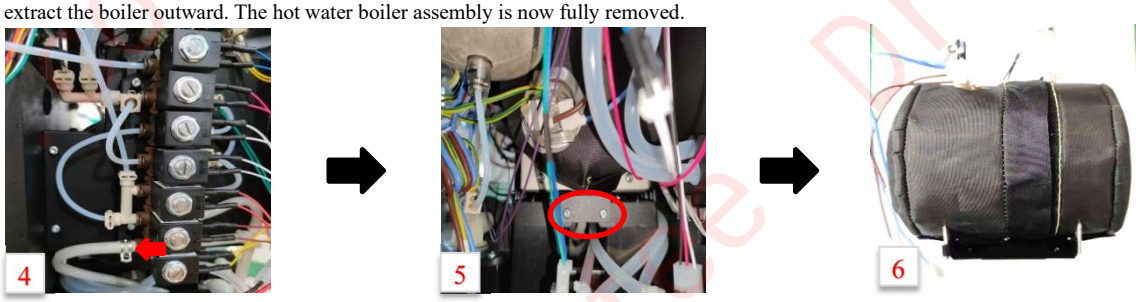
1. Please unplug the coffee machine's power cord before performing this operation!
2. Please ensure the machine is completely cooled before removing it to avoid burns!
3. The boiler is filled with water; please prepare a container for receiving the water in advance!

## 8.9 3L hot water boiler unit

Steps: To avoid interfering with the disassembly of the hot water boiler, first remove the coffee boiler and the coffee inlet pressure relief solenoid valve at the position shown in Figure 1. Then disconnect the boiler power cord, NTC connector, and outlet water pipe at the positions shown in Figures 2 and 3.




Steps: Remove the boiler feed pipe at the arrow position (Figure 4), remove the two boiler base fixing screws at the location shown in Figure 5, and extract the boiler outward. The hot water boiler assembly is now fully removed.

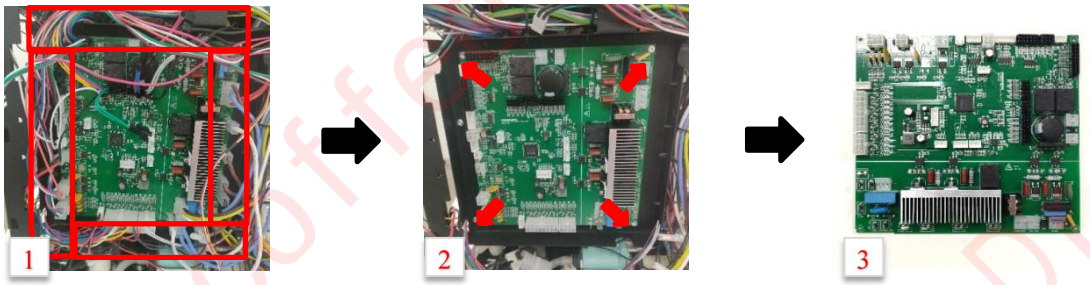


★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!
2. Please ensure the machine is completely cooled before removing it to avoid burns!
3. The boiler is filled with water; please prepare a container for receiving the water in advance!

## 8.10 Remove the main control board

Steps: First (as shown in Figure 1), remove all wiring connectors from the motherboard. Then (as shown in Figure 2), loosen the five screws that secure the motherboard in place. Finally, remove the main control board to complete the disassembly.

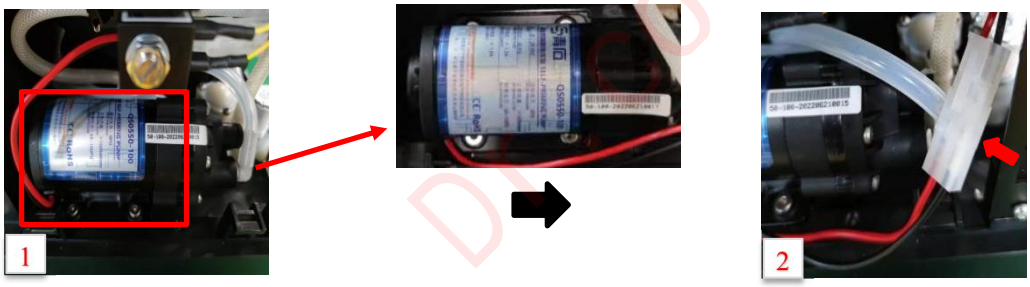



★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!
2. When removing the connector plug, press the snap-fit mechanism first before pulling out the plug to prevent damaging the terminal blocks.

## 8.11 Remove diaphragm pump set

Steps: Remove the four fixing screws of the water pump at the specified location (Figure 1), and unplug the water pump power cord at the arrow-marked position (Figure 2).




Step: Remove the inlet and outlet pipes of the water pump at the specified location (as shown in Figure 3); the pump is now removed.




★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!

## 8.12 Remove the electromagnetic pump assembly

Steps: Remove the inlet and outlet water pipes and power cord connectors of the pump at the position shown in Figure 1, then detach the four fixing screws to complete the disassembly of the electromagnetic pump unit.

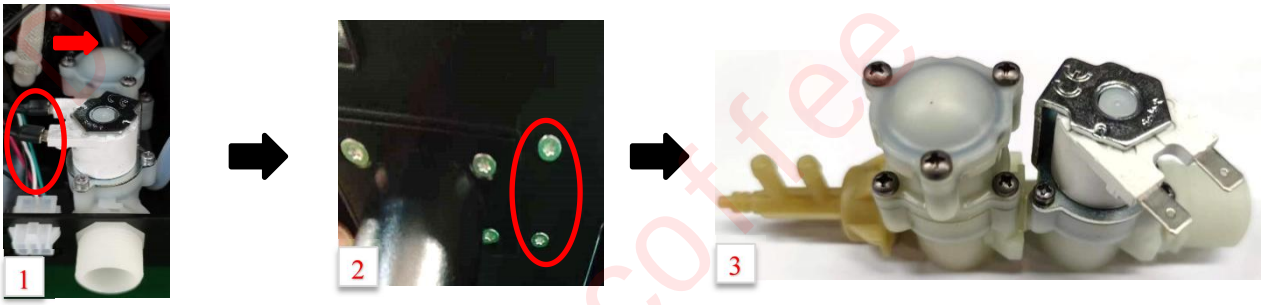



★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!

## 8.13 Water intake valve assembly

Steps: First, disconnect the solenoid valve wiring and the water outlet pipe at the position shown in Figure 1. Then, remove the two fixing screws at the bottom of the inlet valve assembly as illustrated in Figure 2. Finally, extract the entire inlet valve assembly; the assembly is now removed.

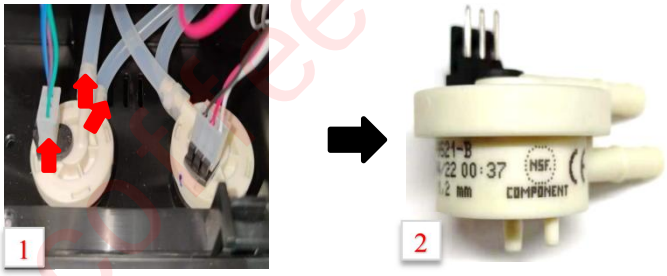



★ Precautions ：

1. Please unplug the coffee machine's power cord before performing this operation!

## 8.14 Flow Meter

Step: The Coffee Center contains two flow meters. The disassembly procedure is the same: first, disconnect the signal cable and inlet/outlet pipes of the flow meter at position (Figure 1); then pull the flow meter upward to complete its removal.

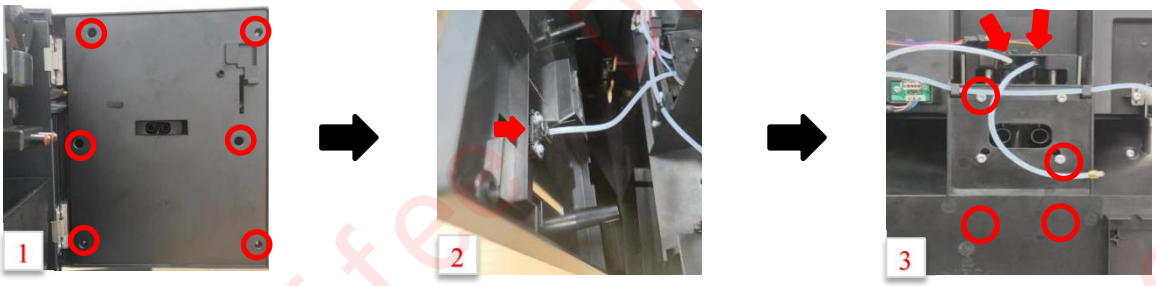



★ Precautions ：

1、Unplug the coffee machine from the power supply before performing this operation!

## 8.15 Remove coffee outlet

Steps: Remove the 6 fixing screws on the coffee door back panel (as shown in Figure 1); disconnect the coffee pipeline at the arrow position (as shown in Figure 2); remove the coffee outlet light wiring connector and hot water pipe connector at the arrow position (as shown in Figure 3); then loosen the 4 fixing screws of the coffee outlet sliding assembly.




Step: (as shown in Figure 4) Remove the coffee outlet sliding assembly downward. The coffee outlet sliding assembly is now removed.




★ Precautions ：

1、Be cautious during the disassembly process to avoid finger abrasions!

## 8.16 Remove the HMI board

Steps: Remove the 8 fixing screws on the back panel (as shown in Figure 1); unplug the HMI board cable connector at the position shown in Figure 2; disconnect the touchscreen cable connector at the arrow-marked location shown in Figure 3; and remove the 4 fixing screws.




Step: HMI board removal completed.



★ Precautions ：

1. Exercise extreme caution during disassembly to avoid finger abrasions!

# 9 Precautions for Daily Use and Maintenance

1. Do not add water inside the coffee bean storage bin.
2. While the coffee machine is in operation, do not forcibly open the door to remove components such as the filter tray or brewing unit.
3. Only purified water at room temperature may be added to the water tank. Do not add hot water or ice water.
4. Moderate or medium-dark roasting with coffee beans of low oil content is recommended, while deep roasting, carbon roasting, or coffee beans with high oil content are not advised.
5. When the beverage spills out, do not place your hand near the outlet of the coffee machine to avoid burns.
6. When cleaning the machine, avoid using brushes or cleaning agents to prevent damage to the coffee machine's exterior. Instead, wipe it with a soft cloth dampened with water.
7. When loading beans into the storage bin, ensure the level does not exceed the MAX line. If no MAX line is present, fill it to 80% capacity.
8. During coffee preparation, do not disconnect the power supply while the machine is undergoing self-check and reset or during automatic cleaning.
9. Adjust the coffee outlet height appropriately according to the cup height to prevent spills of coffee and other beverages.
10. When shutting down, follow the correct procedure: First, press the power-off button on the screen. The coffee machine will automatically initiate a rinse cycle. After the rinse completes and the screen turns off, press the power switch to cut off the power supply. Never unplug the power cord directly.
11. After the machine is powered off and out of use each day, empty all coffee grounds from the machine and clean it thoroughly.
12. Do not use the machine after the external water supply is cut off.

Dr.coffee 咖博士

**Suzhou Dr.Coffee System Technology Co., LTD**

Address: No.55 Taishan Road, Suzhou High-tech Zone,

Jiangsu Province, China

Zip code: 215163

Hotline: 400-897-7711

Website: www.dr-coffee.com