

TECHNICAL MANUAL

Esprecious *(from version 3.0)* **and** **FreshMilk** *(from version 3.0)*



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The information in this document is based on data that was available at the time the design, the material characteristics and the operating methods were published, meaning that this document is subject to change.

For this reason, the instructions are merely a guideline for the installation, maintenance and repair of the machine shown on the front cover.

This document applies to the standard version of this machine.

The manufacturer therefore declines all liability for any damage arising from specifications that deviate from the standard version of the machine delivered to you.

This document has been compiled with the utmost care. However, the manufacturer cannot be held liable for any errors it contains or the consequences thereof.

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1. General

- ▶ *Always read the safety instructions (to avoid possible damage, these safety instructions must be read, understood and followed).*
 - » 700.403.347 for Standard
- ▶ *Manuals are subject to change, scan the QR code to retrieve current information.*



2. Installation requirements

To enable a smooth and simple installation of the Esprecious please ensure the customer has the following prepared:

- Ensure the electrical supply is situated within 1 meter of the machines proposed location.
- Ensure the power supply is correct for the ordered machine:
- Esprecious
 - » Standard : 1x 230V, 2250W, 10amp (or higher)
- Ensure that the machine fits the proposed location.
- The water supply must be cold potable (drinking) water terminating in a shut off valve with a male 3/4" connection. This must be within 1 meter of the machines proposed location.
- The water pressure must be between 1 - 10 bar.
NOTE: Water pressure must be measured as standing pressure AFTER any fitted water filtration.
- The machine must be immediately available to the engineer within a reasonable distance of the proposed install site.

What the engineer can do:

- Upon arrival the fully trained engineer will complete the following;
 - Unpack the machine and inspect for transit damage.
 - Install the machine in the proposed location.
 - Connect the power and water supply to the machine.
 - Connect a water filtration system if ordered.
 - Commission the machine and complete a function test ensuring full operation.
 - Set the machine up to a standard recipe if no pre set recipe has been specified in advance.
 - Make adjustments to beverages taste and size (based on the person on site presented as the management representative).
 - Setup the recommended dosage of the soluble ingredient of each drink.
 - Check if the water volume dosage is correct, if not, a calibration must be performed.
 - Train staff on machine maintenance, cleaning and operation.
 - Leave the area tidy .
- ▶ *Always follow the local and national safety regulations and standards for electrical devices during installation.*
 - ▶ *Read the safety book carefully. The safety book is provided with the machine or can be downloaded from the Bravilor Bonamat site*

Ingredients you may need:

- Ingredients should be selected based on taste profiles and site requirements.
We do however provide the following direction:
 - » Roasted whole coffee beans.
 - » Cacao and/or topping (or other soluble ingredient)*
 - » UHT- milk (Esprecious 11L and Esprecious 21L only)
 - * Only use instant ingredients that are suitable for vending machines (contains a flowing agent).
 - * Use the recommended dosage as indicated on the packaging.
- ▶ *Always follow the local and national safety regulations and standards for electrical devices during installation.*
 - ▶ *The contents of the safety booklet supplied with the machine must be known to both the installer and the customer.*
 - ▶ *The operator instructions can be downloaded from the Bravilor Bonamat site.*

3. Spare parts replacement Esprecious

► **Precautionary measures**

- » Always unplug the machine to turn off the power before opening it.
Note: Beware of electric shock as the machine's capacitors take some time to fully discharge.
- » Turn off the water tap and disconnect the water supply hose.
- » The service area can have sharp edges, wear gloves and long sleeves.
- » When the Esprecious is drained, hot water comes out of the drain hose, therefore take protective measures.

Necessities:

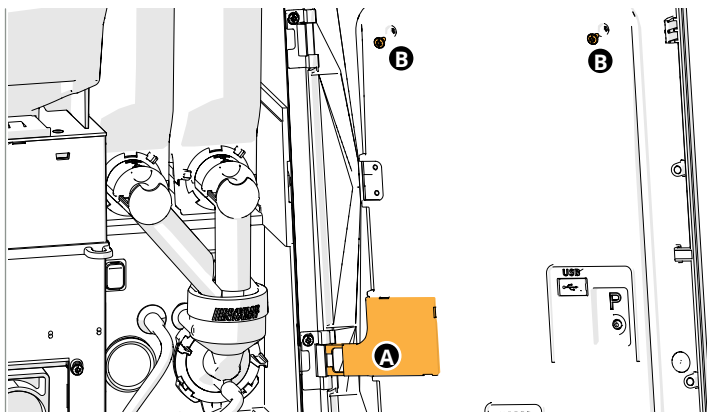
- Philips screwdriver
- screwdrivers torx 10 and 15
- small adjustable wrench
- open-end wrench / socket wrench: M3 and M4
- curved nose pliers
- combination-pliers

Reassembly remarks:

- see the exploded views for the service part numbers
- see the electric diagram (700.406.806) for the wiring connections and bus cable system
- see the hose schematics for the hose connections

- *The Esprecious 11, 12 and 22 has an additional bypass, allowing an Americano to be made. This option is not possible with the Esprecious 11L and 21L as here the milk hose replaces this bypass (the beverage spout only has the capability to connect 3 hoses)*
- *The (cleaning) animations can be found on the Esprecious (L) website. These animations can also be found on our You-tube channel:
<https://www.youtube.com/user/BravilorBonamatBV/playlists>*

3.1 Remove the front panel



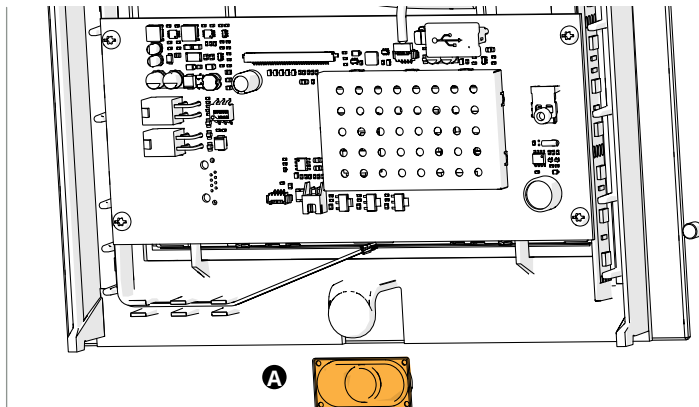
Step 1

- open the door
- disconnect the wiring cover **A**
- disconnect the wiring
- hold the touch screen and remove the 2 screws **B** on the inside of the door
- pull the service panel towards you

- *The HMI board is delivered without software, you need to download the software yourself on an USB stick from our website. When installing a new HMI board or updating the software on an Esprecious you need to be sure that you use the correct software, this because we have different software versions available.*

- go to www.bravilor.com and log in with your login name and password
- select "Espresso machines" and then the corresponding Esprecious model
- download the software on the USB stick
- mount the new service panel
- insert the USB stick with the software in the machine (SD-slot in the door)
- set the time and date
- enter the serial number (see ID-plate – *****)
- the software is now loaded from the USB stick (this may take several minutes)
- the machine will start up with the installation program
- remove the USB stick
- run the complete installation program
- the machine is now ready for use again

3.2 Remove the speaker



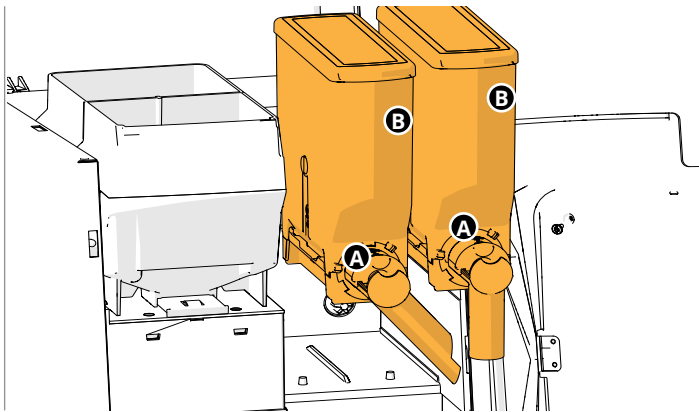
Step 1

- remove the service panel as in [Step 1](#) of [section 3.1](#)

Step 2

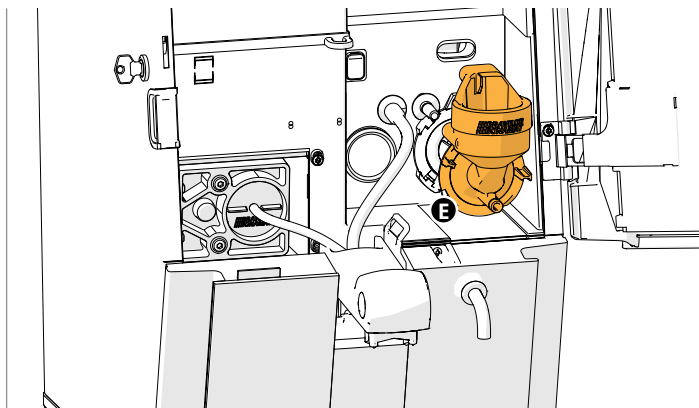
- disconnect the wiring
- pull the speaker towards you **A**

3.3 Remove the mixer motor



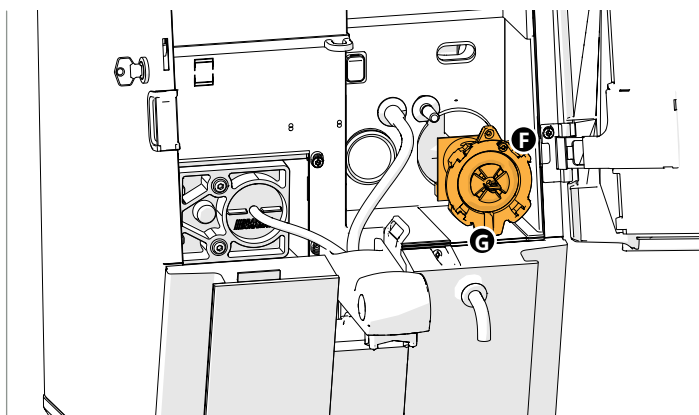
Step 1

- open the door and lid
- close the “yellow” slider of the canister outlets **A**
- take the instant canisters out of the machine **B**



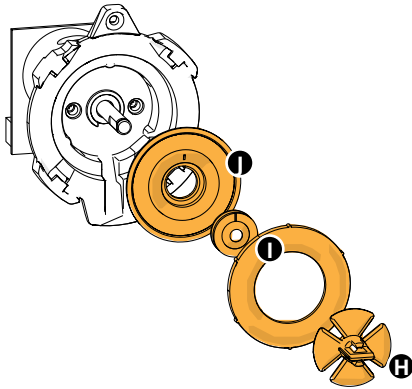
Step 3

- disconnect the hose from the mix unit
- turn the fixation ring **E** counter-clockwise
- remove the mix unit



Step 4

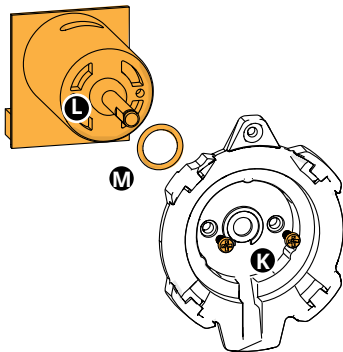
- remove the screw **F** of the mixer motor plate
 - detach the mixer motor plate **G** and carefully pull it towards you
 - disconnect the connector from the mixer motor
- When mounting, make sure that the bus cabling is correctly connected red to red and white to white, see the wiring diagram.



Step 5

- remove the mixer **H**
- remove both seals **I** and seal holder **I**

► Consider to exchange the seals.

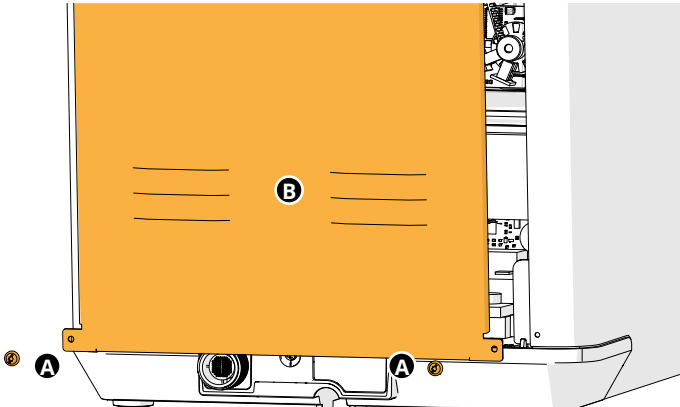


Step 6

- remove the 2 screws **K**
- remove the mixer motor **L**

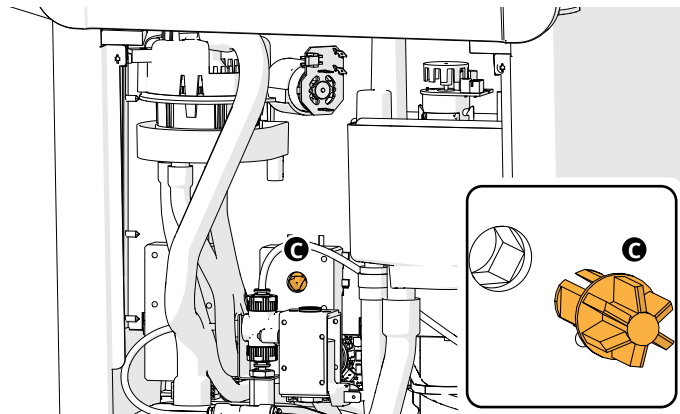
► Consider to exchange the O-ring **M**

3.4 Remove the canister motor



Step 1

- remove the 2 screws **A** of the back panel
- remove the back panel **B**

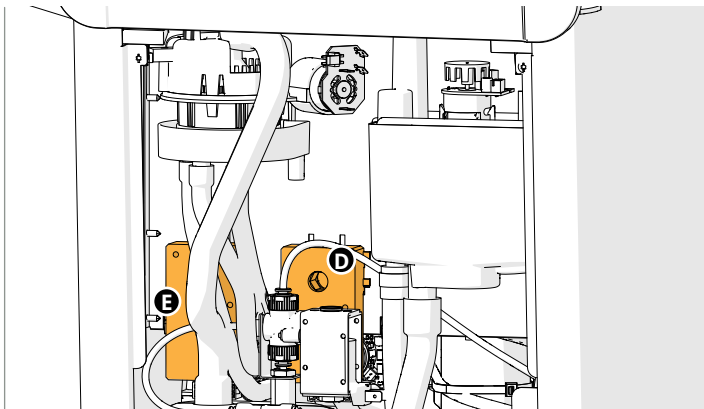


Step 2

- take out the canisters as in [Step 1](#) of [section 3.3](#)

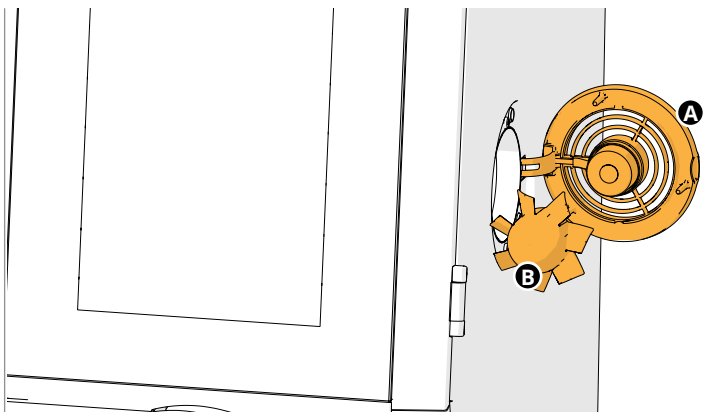
Step 3

- push the drive shaft **C** forward out of the gearbox

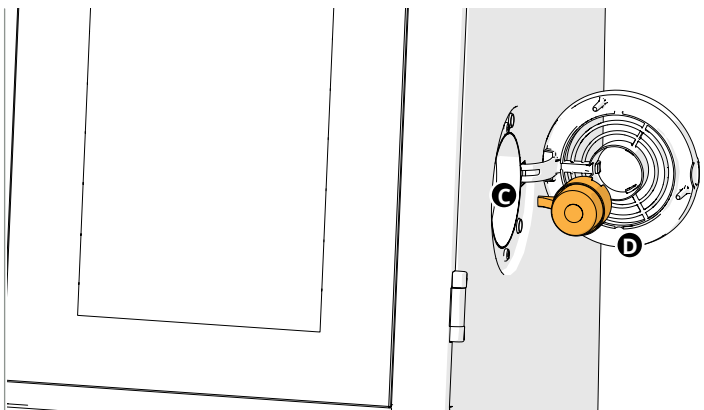
**Step 4**

- unhook the canister motors (up a little and towards you)
- disconnect the wiring
 - ▶ Remove the right motor **D** first to create space, if the left motor **E** needs to be replaced.
 - ▶ When reassembling, make sure that the bus cabling is correctly connected (red to red and white to white), see the wiring diagram.

3.5 Remove the fan motor

**Step 1**

- open the fan grid **A**
- remove the fan rotor **B**

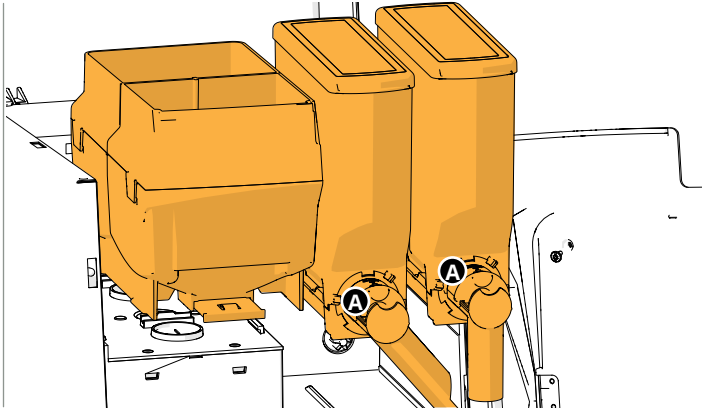
**Step 2**

- remove the back panel as in [Step 1](#) of [section 3.4](#)

Step 3

- disconnect the connector in the wiring
- lead the wiring with the connector through the opening **C** to the outside
- remove the fan motor **D**

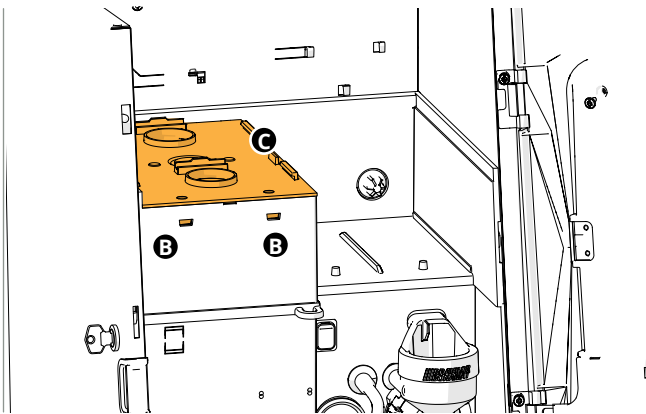
3.6 Remove the complete grinder



- Use a vacuum cleaner to remove all existing coffee beans.
- Wear gloves to protect your hands.
- Always replace both disks at the same time.
- When reassembling the machine, ensure that the grinding discs do not touch before switching on the machine.

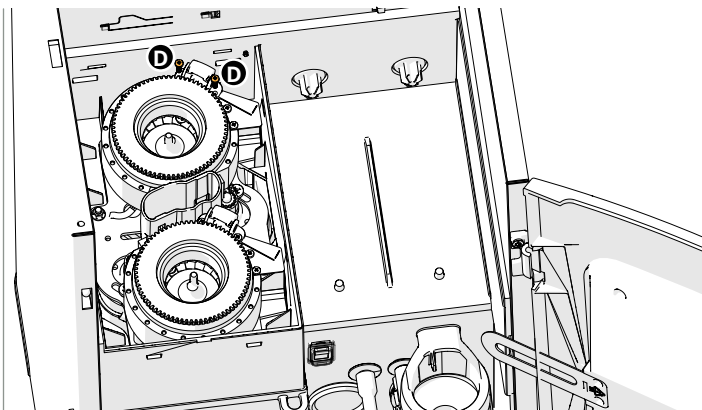
Step 1

- open the door and lid
- close the "yellow" slider of the canister outlets **A**
- take out all the canisters



Step 2

- press the snap fingers **B** and lift the lid
- remove the protective lid **C**



Step 3

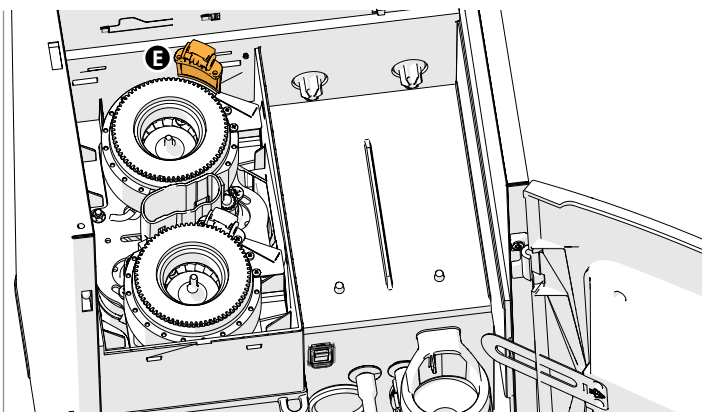
- remove the back panel as in [Step 1](#) of [section 3.4](#)

Step 4

- disconnect the wiring of the grinder from the mainboard (1 connector for each motor and 1 for each Hall sensor)

Step 5

- remove the 2 screws **D**



Step 6xy

- remove the adjusting part **E**