coffee wakes up the world

Service manual

Coffee Machine

WMF 1200 F

English

Series 1200 Edition 10.2015

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1 Initial operation

During the initial operation the hot water boiler respectively the machine is filled automatically according to the procedure described as follows.
As the level of these machines can not be detected automatically by an electrode, the hot water boiler is filled with 900 ml of fresh water. The waste water is led thereby into the drip tray via the hot water spout at the combi spout. If the first filling up is interrupted, it will be restarted by switching on the machine. Then the machine is heated up.

Advice:
For initial installation please refer to the user manual.

Condition:
Initial operation has been activated.
It can only be activated during production.

Display guided setup

✻ Switch on the machine and perform the display-guided setup.
The following is set:
- language, time, date, water filter, degree of water hardness
- only water filter yes: filter capacity
- self-service mode

✻ Then a test brewing is made
✻ If necessary update software to latest version (Servicetool required)
✻ Perform portioner calibration (Servicetool required)
✻ Adjust boiler temperature and beverages according to customer specifications

Before regular operation:
✻ rinse the pipes, dispense three cups of hot water
✻ perform the cleaning cycle

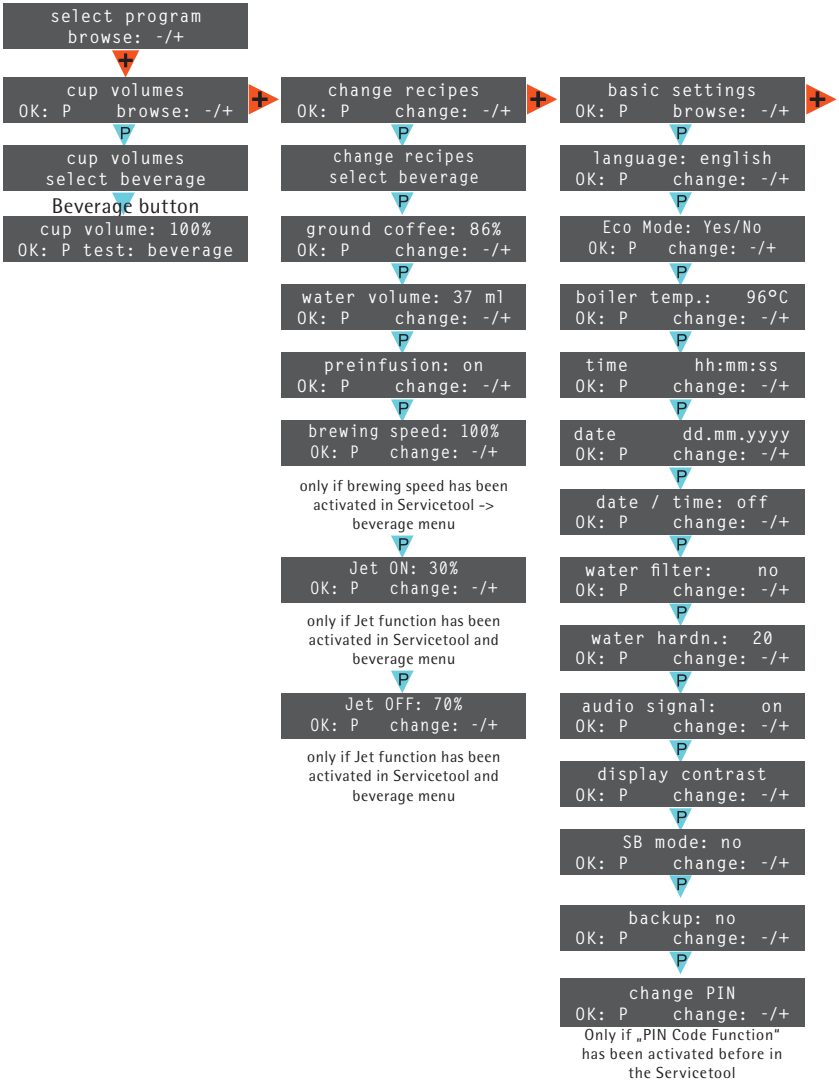
After setup, the service technician must note the following statement in the assembly invoice:
"At the end of operation, had to be turned off at source. The user manual and accessories were given to the customer."
The customer must acknowledge this by his signature.

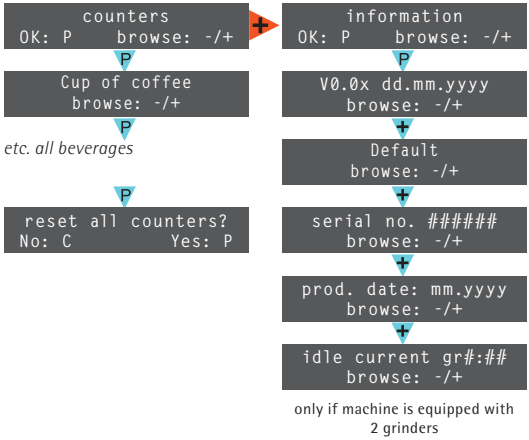
2 Overview machine software

2.1 Menu

Enter the submenü:

✻ Briefly touch P , then press +/- button.





only if machine is equipped with 2 grinders

2.2 Set cup volumes

Adjust: +/- button
Test beverage: beverage button
Save: P button

2.3 Change recipes

Adjust: +/- button
Test beverage: beverage button
Save: P button

- Ground coffee
- Water volume
- Preinfusion
- Brewing speed
- Jet ON
- Jet OFF

2.4 Basic settings

- Language
- ECO-mode
- Hot water boiler temperature
- Time
- Date
- Date / time (display)
- Water filter
- Water hardness
- Audio signal
- Display contrast
- SB mode (self-service mode)
- Backup
- Change PIN

2.5 Counters

You can display the number of the single beverages and the total counter. The beverage counter can be reset.

2.6 Information

- Software version
- Machine name
- Date of production
- Idle current (grinders)

2.7 Care

The following procedures can be made via the care pad:
- Cleaning program
- Filter change

2.8 Overview special features and settings

Warm-up rinse	Press care pad.
Beverage preselection	Having started the beverage, a preselection can be made via the „+ button". After this, the selected beverage is dispensed several times.
Boiler refilling	Keep the the non-illuminated p-button pressed for 3 s (in the machine menu under Information / production number). Then insert PIN (Default = 00000 - 5x highest beverage button or customer PIN). Then go to the menu „Refill boiler" with the „+-button" and start the boiler refill routine by pressing the „p-button".
2nd beverage level	2nd beverage level can be activated via the Servicetool. Beverages on the 2nd level are activated with double click.
Pressure reducing	Keep the the non-illuminated p-button pressed for 3 s (in the machine menu under Information / production number). Then insert PIN (Default = 00000 - 5x highest beverage button or customer PIN). Start the pressure reducing routine by pressing the „p-button".
Weigh ground coffee	Ground coffee can be tested: Empty grounds container, select beverage, interrupt it by pressing „C" button after grinding, weigh grounds.

Idle current grinder	Select „idle current M1 / M2" under the machine menu Information and press P button for 3 s (grinder has to be empty). In order to get an acceptable result, the idle current detection should be performed at least 3 times.
Backup	The technician saves the data in a data backup. It can be copied again into the working memory.
Descaling	Descaling can only be done and performed by the technicians. In order to start the descaling routine, the non-illuminated care pad must be pressed for 3 s under machine information -> serial number. Then insert the PIN (Default = 00000 - 5x highest beverage button or customer PIN).

3 Settings via Servicetool

The following settings can only be made via Servicetool

- Change button allocation / beverage names
- Enter or reset Service maintenance 1, Service maintenance 2 and Revision
- Adjust machine configuration (e.g. activate grounds disposal through counter, coin checker etc.)
- Test components
- Activate Jet function
- Activate PIN-Code

For more details see Training manual Servicetool.

4 Important Information

4.1 Idle current grinder

Having replaced the grinder, grinder disks or grinder motor the idle current has to be redetected.
Important: the grinder must be completely empty.
Press the non-illuminated „P-button" for 3 seconds in the machine program under Information / Idle current. This procedure must be repeated for at least 3 times. So an empty grinder can be assured when measuring. This routine can also be started via the Servicetool.
Important: Having exchanged the grinder, grinder disks or grinder motor, the grinder counter must be deleted in the Servicetool. Then the grinder compensation can be performed automatically after 100 grindings by the software.

4.2 Grinder setting

Grinding degree setting
The grinder must be removed. The setting-wheel (with worm gear) is dismantled.
✻ Turn the grinding-disks towards each other until they join and cannot be turned further by hand on the driveshaft.
✻ Fit the setting-wheel with the worm gear.
Cream grinder
✻ Open the setting-wheel for a total of 18 turns
This setting corresponds to setting no. 5 = cream fineness.
Two turns of the setting-wheel are necessary to adjust the fineness by one degree.
At machines with two grinders, both grinders are set to grinding degree 5 (creme).

4.3 Depressurization

Before opening the hot water boiler respectively the water system, the boiler pressure must be depressurized for safety reasons.
In order to start the depressurization routine, follow the step „pressure reducing" as described in chapter 2.8. Once the pressure reducing routine has been started, the hot water boiler heating switches off and the hot water valve opens for max. 30 s. After restarting, the machine switches on as usual.

see chapter 2.8 „pressure reducing"

4.4 Replacing hot water boiler

BEFORE exchanging the hot water boiler the display guided routine „boiler refilling" must be started. Without performing this routine there is a risk that the heating is running even if the hot water boiler is empty! If the machine is not working due to a defective heating (display message: F89- machine is heating up), the refilling routine can be carried out anyway. Therefore press the non-illuminated p-button for at least 3 s. This is the only way to avoid the heating from burning through due to empty hot water boiler (excessive water is led via the hot water spout to the drip tray during the refilling routine). To start the routine, follow the step „boiler refilling" as described in chapter 2.8.

see chapter 2.8 „boiler refilling "

4.5 Check and set pressure reducer

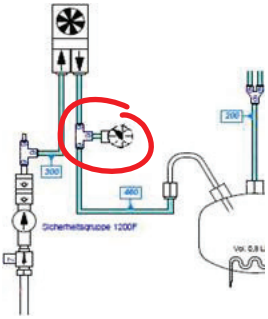
Material needed:

- pressure gauge 33.2745.3000

see chapter 2.8 „pressure reducing "

To check and set the flow pressure via the hot water dispensing, the pressure gauge must be installed before between flow meter and hot water boiler supply.
Recommended procedure:

- ✻ Remove the 1,1 mm restrictor and the 90° hose connection.
- ✻ Start pressure reducing routine and then disconnect the machine from the power supply
- ✻ Remove right side panel
- ✻ Install pressure gauge between flow meter and hot water boiler supply
- ✻ Connect machine to the power supply (Attention: parts may be live) and switch on
- ✻ Start the pressure check via the hot water button and set the flow pressure at the pressure reducer to 1,9 bar. Then stop the hot water dispensing
- ✻ Start pressure reducing routine, disconnect machine from the power supply, deinstall the pressure gauge, reconnect hoses and switch on the machine
- ✻ Put the machine into operation



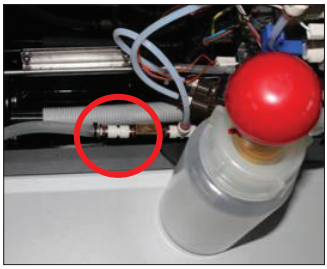
4.6 Descaling, Filter replacement, Filter rinse

Material needed - preparation:
- Descaling pump 33.1878.3000
- 0,75 l descaling liquid 33.7006.2869

1. Preparation

see chapter 2.8 *„Descaling"*

✻ Start descaling via special features descaling, enter PIN (Default = 00000 – 5x upper beverage button or customer PIN), follow the display guided descaling routine and disconnect machine from the power and water supply.
✻ Disassemble machine cover and right side panel.
✻ Fill in 0,75 l undilated descaling liquid into the descaling pump.
✻ Remove blind bolt from the connection (after the safety group, see mark below) and attach connection hose of the descaling pump.



✻ Attach machine cover and right side panel not fixed, connect machine to the power and water supply and switch on.
✻ **Attention: opened machine and live parts -> Hazard of live due to electric shock!**
✻ Confirm message „descaling pump connected" by pressing the P button und pump the descaling liquid manually into the machine. Pay attention, that no air is pumped into the system. Therefore the descaling container may not be emptied completely.
✻ First after the descaling liquid has been pumped in, confirm the message „descaling liquid pumped in" by pressing the P button.

2. Start descaling routine

- Confirm the message „start descaling?“ by pressing the P-button and follow the display guided descaling routine. Descaling is now running for about 20 minutes.
- During the descaling process the container of the descaling pump can be removed, emptied, refilled with 300 ml of fresh water and reconnected to the machine.
- Confirm the message „descaling pump rinsed? refilled?“ by pressing the P-button. Pump the fresh water out of the container into the machine, in order to rinse descaling residues from the the return valve.
- Confirm the message „water pumped in?“ by pressing the P-button, disconnect machine from the power supply, remove side panel, VENTILATE descaling pump, disconnect from return valve and reconnect the plug with blind bolt at the return valve. Assemble machine completely, connect to the power supply and switch ON.
- In order to finish descaling, follow the display messages. As soon as descaling is finished, the machine is heating up again and ready for use.
- The descaling routine takes about 30 min. If descaling has been interrupted for some reason, the descaling routine restarts from the beginning.

5 Error messages and events

5.1 Display messages

Operation messages

heating up ...	When temperature in hot water boiler is too low.
warm rinse in progress	During automatically (after first heating-up)or manually warm-up rinse (via rinsing button).
refill beans left	Idle current at bean hopper left is detected.
refill beans right	Idle current at bean hopper right is detected.
empty grounds cont.	Grounds container is full (Default 200 s grinding time).
insert brew arm	in order to perform the selected function, the brew arm must be inserted before.

Cleaning messages

replace brewing unit	Brewing unit not detected after reinserting the grounds container.

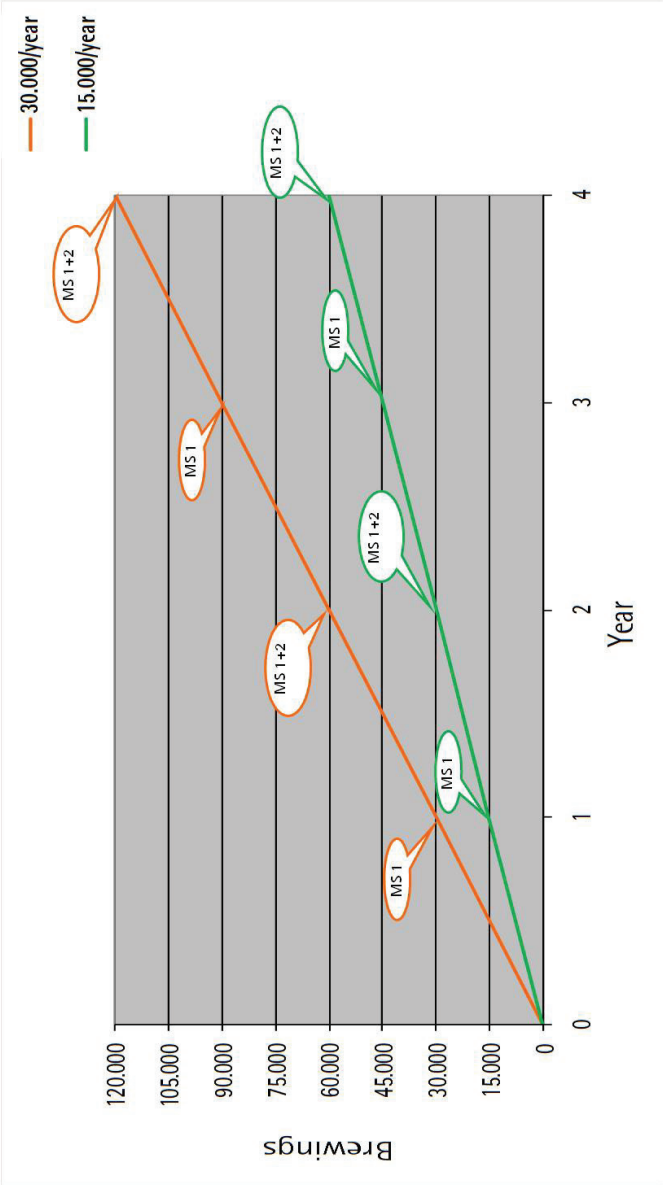
Maintenance and Care messages

Service maintenance 1	After 1 year
Service maintenance 2	After 2 years
Revision	After 6 years
Replace water filter	Replace the water filter (machines with constant water supply and tank)
WMF Service / descaling	Carry out machine descaling

5.2 Error list

Display	Description
F2	Brewer without electricity
F5	Brewer shutoff
F6	Brewer over current
F7	Brewer timeout (no electricity)
F26	Portioner 1 current malfunction
F36	Current malfunction Portioner 2
F87	Boiler sensor damaged
F89	boiler heating time
F125	EEprom missing or defective
F126	Front panel / CPU Communication error
F135	Motor driver error (grinder or brewer motor)
F161	flowmeter malfunction during brewing
F162	flowmeter malfunction during cleaning
F164	flowmeter malfunction during hot water dosage
F167	flowmeter malfunction during descaling

6 Maintenance concepts



6.1 Overview Maintenance sets

Type of maintenance	abbr. Maintenance set	Maintenance cycle	Standard
Service maintenance 1	MS 1	Once a year	33.2889.3000
Service maintenance 2	MS 2	Every 2 years	33.2889.4000
Expanded boiler inspection		Within Service maintenance of maintenance sets that contain safety valves – Details see Info-letter Info-2013-07	
Descaling		Due date: without water filter > depending on carbonate hardness; with water filter > once a year	1x 33.7006.2869 Descaling liquid