W
M
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Service Manual

Coffee Machine *presto!* English

Series 1400 Edition 08.2014

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WMF presto Service manual edition 08/2014

1   Initial operation

During the initial operation the steam boiler respectively the hot water boiler is filled automatically according to the procedure described as follows.
Machines with steam boiler and hot water boiler:
The steam boiler is filled from the hot water boiler via the steam boiler supply valve. The steam boiler supply valve is opened until the steam boiler electrode is contacted. Then the machine is heated up.
Machines with only hot water boiler:
As the level of these machines can not be detected, the hot water boiler is filled for 300 s. The waste water is led into the drip tray via the release valve. If the first filling up is interrupted, it will be restarted by switching ON the machine.

Condition:
Machine is reset to customer setup and connected to the power supply.

�֎ Run display-guided setup.
   The following settings are made:
   • Language
   • Descaling filter yes/no
   • Descaling filter range
   • Descaling filter replacement mode
      (customer or service)
�֎ Update software to current status
   (only possible with laptop program "KonfigTool")
✤ Set beverages according to customer specifications
   (Customer setting ▷ recipes/buttons or by „KonfigTool"
   ▷ beverage configuration)
✤ Enter service point
   (only possible with "KonfigTool").
✤ Save data ▷ Defaults ▷ Customer➜Service
✤ Backup machine data on laptop

Additional settings for recipes after the service PIN is entered

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, machine has to be turned off at source. The user manual and accessories were given to the customer."
The customer must acknowledge this with his signature.

2   Software service info

2.1   Software Service–Info overview
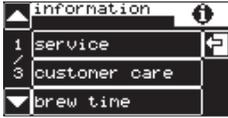
2.2   Service

- Contact address
- Date of next customer check-up
- Setup start date
- Software version
- Bootmanager version
- Machine number

2.3   Maintenance

- Last 100 cleaning operations with date and time ▷ care
  ▷ report
- Info Cleaning (last cleaning)
- Info Descaling (liter until descaling)
- Info Water filter (liter until filter change)

2.4   Brew time

- last brewing

2.5   Protocol

- Error list

2.6   Timer

- Timer settings

2.7   Accounting

- Info Vending device
- Software version
- Operating state

2.8   Milk temperature

- hourly recorded milk temperature

3   Software machine data

3.1   Machine data overview
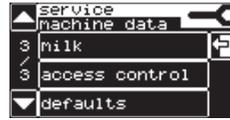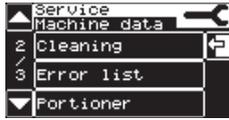
3.2   Submenu counter

These displays are only for your information.
We recommend, in order to keep the information, only to reset the counters below mentioned if the components have really been exchanged!
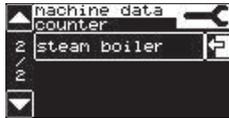
3.3   Submenu Service date

With click on „OK", the actual date will be entered as the last visit.
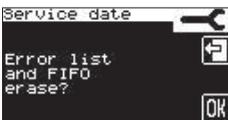
With click on „OK" the error list and FIFO will be erased.

On these three displays all possible service actions are listed. They can be looked at and can be reset if carried out.

Service date
customerCheckup

8547 / 15000
01.2011 [OK]

Brewings since last customer check-up /Brewings to Customer check-up
Date of next Customer check-up (MM.JJJJ).

The customer check-up can be reset only here.

Service Maintenance and Revision:
Along the lines of customer check-up, the service dates,
service maintenance and revision are composed. Revision is
only requested after some time (every 6 years).

Service date
service-Mainten

22458 / 30000
01.2012 [OK]

Service date
revision

01.2016 [OK]

Softener exchange:

softener/filter

Did you exchange
softener/filter?

no   yes

After confirming with „Yes" the water filter will be rinsed.

Rinse filter:

Filter rinsing

Hot water rinsing
up to max. 4 ltr.
in progress.
Stop with <break>
Continue

Brewer:

Service date
brewer
gasket   15000
brewer   30000
drive   90000
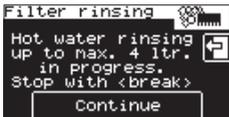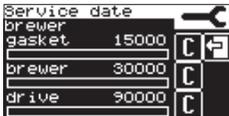
Counter brewer gasket: will be reset by customer care
Counter brewer: will be reset by service maintenance
Counter brewer drive: no service message

Mixer:

Service date
mixer
mix cycle 6000

Every 6000 servings, the mixer reports a service message.
The counter of the mixer can be looked at and reset.

Maintenance after 6,000 portionings mixer

Parts to be replaced:

- the mixer unit
- the mixer valve

Portioner (example right grinder):
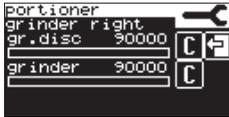
Only grinder disk counter (no service message)
Only drive counter (no service message)

3.4   Temperature submenu
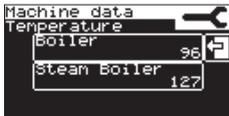
Setting range 80 to 100°C, default 96° C
Setting range 110 to 130° C, default 127° C

Changing the steam boiler temperature leads to great changes in the dosage of milk and milk foam. Changes are not recommended.	

3.5   Submenu cleaning
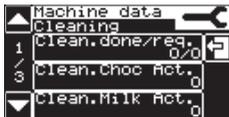
Number of cleanings performed and to be performed
Number of mixer rinsings performed
Number of milk system cleanings performed

Time until request for cleaning/forced cleaning
Hardware for foamer rinsing available?
Delay in foamer rinsing after last beverage dispensing

Switch warning signal before foamer rinsing on/off

3.6   Submenu error list

Delete individual errors: tap on the line

Delete complete error memory: tap **C**

Malfunction and events list see chapter Error list

3.7   Submenu portioner

Example right grinder
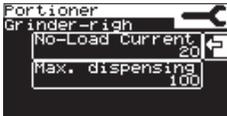
Portioner Grinder-righ No-Load Current 20	Idling current (determined via service routine)
Max. dispensing 100	Maximum dosage amount in 1/10 seconds

Only the maximum dosage amount can be set for the
powder portioner (default 150). A detection of the idling
current is not possible.

3.8   Submenu milk

machine data Milk 1 Temp. sensor no	Yes: temperature sensor of cooler activated
2 empty message none	empty message via sensor
cooler next to	cooler next to or below
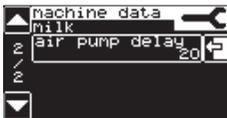
machine data Milk 2 air pump delay 20	air pump delay settable
2	

3.9   Submenu access control

The settings correspond to the default of the previous
standard setting. However, they can now be changed /
assigned independently of each other.
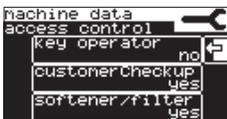
machine data access control key operator no	if „yes" is activated: access to key operator is activated.
customerCheckup yes	if „yes" is activated: customer check-up can be performed.
softener/filter yes	if „yes" is activated: water filter can be exchanged and rinsed.

If activated („yes"), the key operator is able to
• do the descaling (turbo descaling)
• carry out and reset the customer check-up
• exchange and rinse the scale filter
• access the component test
• access the service routines
• access the counters

Maintenance messages in Key Operator mode

Customer check-up
Maintenance after 1 year or 15,000 brewings
Tasks to be performed analogy to customer check-up

*Reset with C on display see
machine data ▷ service date
▷ Customer check-up*

or Menu Care ▷ Maintenance

3.10   Submenu standards factory→service/customer

After tapping "self-detect" is first run automatically. All components operating on 24 V or 30 V are automatically addressed. The components are automatically identified.

During self-detect the grounds container must be in place, the adjustable screen closed or the 24/30 V circuits of the components are interrupted.

Factory→service/customer menu 1
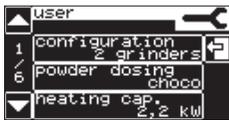
Configuration of grinders	
Configuration of powder portioner	
Heating capacity	

Configuration of grinders is registered automatically (see chapter portioner).
Configuration of powder portioner is registered automatically (see chapter portioner).
Heating capacity can be changed as required.

See chapter engineering, portioner in the training manual

Factory→service/customer menu 2
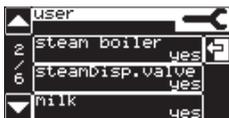
Steam boiler existent	
Steam dispensing valve existent	
Fresh milk valve (cappuccino valve) existent	

Steam boiler is registered automatically by its intake valve (See chapter boiler ▷water system).
Steam dispensing valve is automatically detected (See chapter boiler ▷water system).
Milk is automatically detected (See chapter boiler ▷water system).

See chapter Boiler water systems in the training manual
Part 2 Engineering

Factory→service/customer menu 3
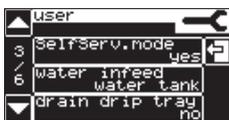
Self-Service mode activated?	
Water tank / water infeed	
Drain drip tray existent? (changes cleaning and descaling)	

Self-Service mode
The default settings can be adjusted individually in the operating options**.**

	Default at „No"	Default at „Yes"
2nd level (Yes/No)	depending on configuration	No
On/Off button (direct/through PIN)	directly	directly
Warm rinse pad (active/inactive)	active	inactive
Barista pad (active/inactive)	active	inactive
Cancel Beverage (Yes/No)	active	inactive
Menu pad (immediately/delayed)	immediately	delayed
Error message (normal/symbol)	normal	symbol

Water tank/ Water infeed is automatically detected by nonexistent intake valve. The external tank can be selected. By detecting the intake valve the display shows constant water. Option Aquaflex / technical insert (mobile station) can be selected.
Drain of drip tray must be correctly adjusted manually.

See chapter Boiler water systems
See chapter drip tray
in the training manual
Part 2 Engineering

Factory→service/customer menu 4
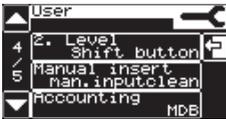
Beverages configured on 2 levels

Manual insert for coffee and cleaning or cleaning only

Accounting via accessory device via MDB or serial connection

It only makes sense to adjust the **2. level** if milk is available.
Tablet insert ("Handrein") must be set manually for more than 2 portioners, for up to two portioners manual insert coffee (HandKaff).
Accounting must be set manually (MDB or serial connection).

See user manual and additional user manual for accounting.

Factory→service/customer menu 5
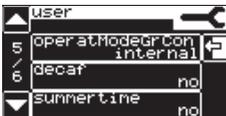
Operating mode grounds container: external = grounds disposal through counter

Preselect-button for decaf brewing instead of steam button

Daylight saving time selected?

Grounds disposal through counter must be correctly set manually. (default = internal)
Decaf must be set manually.
Summertime automatic change to daylight saving time can be activated.

See user manual

Factory→service/customer menu 6
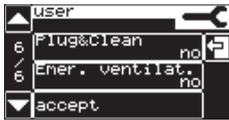
Option Plug&Clean existant?	
only available for railway version	
Accept	

Option Plug&Clean can be activated
Safety queries follow **acceptance**.

Safety queries upon acceptance of the variations:
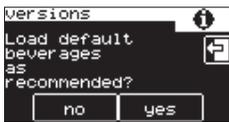
If „yes":
❋ The pre-settings will be transferred
❋ The default beverages and prices will be set according
   to factory setting
If „no":
❋ The pre-settings will be transferred
❋ The default beverages and prices remain set
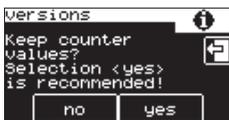
If „yes":
❋ the day counter remains unchanged
If „no":
❋ the day counter will be reset

Components

4 Software components test

4.1 Component tests overview

Depending on the machine configuration the following tests are available in the software:

Service Components	Service Components	Service Components
1 Brewer Motor / 8 Portioner / BrewValve/FlowM	2 SteamDisp.Valve / 8 Release Valve / HotwaterValve	3 Capp. Valve / 8 Cappuccino Pump / FoamerRinsValve
4 Group Boilers / 8 Contr. elements / Manual insert	5 24V/30V supply / 8 Vibration pump / Backup Battery	6 Display Illumin / 8 Grounds cont. / Water tank
7 Fan / 8 Power status / Choc-Dispens.	8 Topping / 8	

4.2 Submenu brewer motor

Components
Brewer Motor
Pos. switch: 1
Current [mA]: 0

Start pos.   Start

⬇	Run brewer to end switch
⬇	Run brewer up
⬆	Run brewer down

End switch: 0001 end switch contacted
Current (mA): Display value during procedure

4.3 Submenu portioner

Components
Portioner
Grinder right
Grinder left
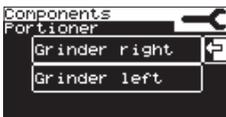
Test right grinder
Test left grinder

Current (mA): Value during portioning procedure is displayed

During the test the grounds container must be in position and the adjustable screen closed as the brewer receives the coffee powder during the test and dumps it afterwards.

4.4   Valves

During the test additional data is displayed, e.g. the maximum current consumption of the valve(s) or the number of flowmeter pulses.

When testing the brewer valve the brewer must be in functioning condition as it receives the brewing water during the test and discharges it afterwards.

4.5   SBHWB group (steam boiler and hot water boiler)
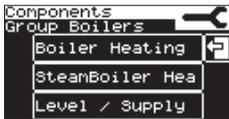
Additional data during tests:
Heating units: display of condition and current temperature.

Level/feeding:
- - button: The level in the steam boiler is lowered via the steam valve.
+ - button: The level in the steam boiler is raised by the supply valve.
Liquid level: the current capacitative value of the sound is displayed. The trigger value at which the steam boiler is detected as "full" is 180 digits.
Normally the "full" value is at 212 digits.

4.6   Control elements

Beverage LEDs	Beverage button LEDs are subsequently addressed
Beverage btns	Test beverage buttons by pushing them
Touch	Test touch fields on the display by touching them

4.7   Manual insert
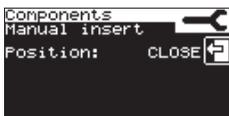
Test reed swich, manual insert.
Reed swich touched or not.

4.8   Current supply

```
Components
24V/30V supply
State:        ON
             ☐
```
Switch the 24/30 V circuits on and off from the mains.

4.9   Oscillation pump

```
Components
Vibration pump
Countdown:    000
           Start
```
Access of the oscilliation pump

4.10   Backup battery

During the test the battery is short-circuited. This procedure shortens battery life.

4.11   Display illumination

The display illumination can be switched off for testing.

4.12   Grounds container

Display if the micro switches switch the 24 V circuits of the grounds container and the adjustable screen.

4.13   Water tank

```
Components
ext. LevelSens.
Fill Level    FULL
```
Function capacitive sensor water tank (touched/not touched). Ext. level sensor.

4.14   Fan

Test of function and current consumption

4.15   Power status

```
Components
Power status
Power failure OK
```
Report "power failure" to the control unit

4.16   Choc dispenser

Hot water valve	Test choc valve
Portioner	Test the portioner, the choc valve is also addressed
Mixer Motor	Test mixer motor

4.17   Topping

5 Software service routines

5.1 Service routines overview

Service routines
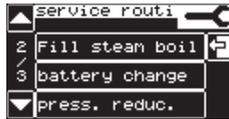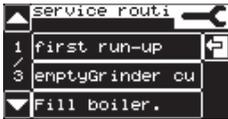
5.2 First Run up

The software is restarted, with a "reset event" entered into the laptop ring memory (see chapter "service", reset events).

The cleaning obligation is reset as if a cleaning cycle had just been done.

A cleaning cycle can be interrupted.

A descaling cycle can be interrupted.

See chapter software, First Run up in the training manual part 4 software

Attention: If a cleaning or descaling cycle has been interrupted adequate measures must be taken to ensure that no residues of cleaning or descaling agents remain in the machine. In this case cleaning or descaling must be repeated.

The reset of the customer settings program is treated in the same way by the software, however does not reset the cleaning and descaling obligations.

5.3 Idling current grinder

For a correct "empty" report the grinder idling current must be entered into the system as base following the entering of the factory values or motor replacement. This is done via a service routine.

Notices for technicians
The idling current must by all means be determined with the grinder completely empty.

5.4 Filling the boiler (replacing hot water boiler)

Before replacing the hot water boiler the display guided routine „filling up boiler" must be started.
Only with this routine a blowing of the heating in case of an empty hot water boiler can be avoided (excess water is led into the drip tray via the release valve during the filling routine)
Without doing this routine there is a risk of heating up the still empty hot water boiler, in case that the steam boiler electrode gets in contact with water.

5.5 Filling the steam boiler (replacing steam boiler)

Before replacing the steam boiler the display guided routine „filling up steam boiler" must be started.
Only with this routine it can be assured that the filling level reaches the steam boiler electrode. Without doing this routine there is a risk of not reaching the filling level up to the steam boiler electrode. Because of missing ventilation the steam boiler would be filled up against an air cushion.

See chapter software, grinder idling current
part 4 software

See chapter engineering, portioner, grinder with motor
in the training manual
Part 2 Engineering

5.6   Exchanging control battery at F 157

At error message 157 the control battery must be replaced.

The notices on the display are to be followed:
All data is stored in the service memory.
Disconnect machine from mains
✳ Exchange battery
As soon as the machine is reconnected to the mains all data is automatically loaded into the service memory.

5.7   Check pressure reducer

see chapter 8.2.

See chapter 8.2 Setting pressure reducer

5.8   Depressurization

Before opening the screws at the boiler water system the display guided routine "depressurization" must be started. This is for your own safety, because the steam boiler pressure will be relieved via the Cappuccino and steamer valve.
Please pay attention that the heating only remains switched off until the customer service menu is left and thus the machine is working in a normal operation mode.

5.9   Descaling

Constant water supply: see User Manual ▷ *Care*
External tank / technical group: see Info letter 2011-33

5.10   Filter replacement

The same function as in the customer care menu.

6.   Beverage data

6.1   Beverage data overview

**Overview of beverage data main menu
        e.g. cappuccino**
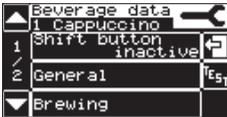
Shift key: active = beverage on the 2. level is set.
General: Set recipe, portioner, amounts of powder and water.
Brewing: Set pre-treatment, dry pressing pause, multiple pressing and water amount for warm rinse.
Milk: set dosage time 1 (e.g. milk) and 2 (e.g. foam) and beverage-specific foam quality.

**Overview of beverage data main menu
        e.g. hot water**
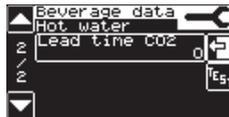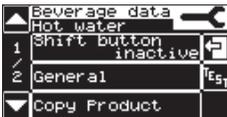
General: Set recipe and dosage variation
Water: Set dosage amount

6.2   Additional laptop setting options (KonfigTool)

Page customer\general item pretreatment:
• User-defined pretreatment setting possible
  (Pressing, pre-infusion, wet pressing, warm rinse)

Page customer\general item variety text:
• Random variety text

Page general:
• Multiple brewing (e.g. for a pot of coffee)

7   Error messages and events

7.1   Display messages

Operation messages

Fill the water tank	Water tank is empty or not inserted.
Open water supply	Shut-off valve is closed or flowmeter malfunction.
Hot Rinsing	If temperature in boiler or steam boiler too low.
Hot Rinsing	During automatic (following first heating) or manual (via warm rinse button) warm rinse.
Insert beans	Beans left idling current detected.
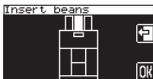
Insert beans	Beans right idling current detected.
Empty grounds cont.	Grounds container at full limit (Default 200 seconds grinding-time of grinders).
Grounds container!	Micro switch grounds container or micro switch adjustable screen without contact.
Ground container really emptied? Please confirm No / Yes	If grounds container was drawn out for more than 5 seconds.
Empty watertank	With Aquaflex only: Water in tank but set to permanent water supply.
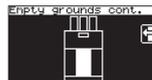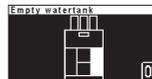
Cleaning messages
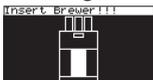
Insert Brewer!!!	Brewing unit not detected following closing of door or inserting of grounds container.
Remove brewing unit!	A flow error has occurred during the cleaning program.
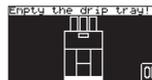
Empty the drip tray!	With machines without drain connection and after cleaning with switching off at next switching on of the machine.

Maintenance and care messages

Customer check-up	After 15,000 brewings or 1 year.
Maintenance 2	After 30,000 brewings or 2 years.
Maintenance 3	After 6 years.
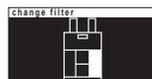
Change filter	With machines with constant water connection.
change filter	With water tank machines.

7.2   Error list

See training manual in part 6 chapter troubleshooting

Report Display	Descr.	Entry ring mem.	Entry display	Comment	No. malfunction memory	
2	F2 Brewer without electricity	√	√		195	CAUTION! ⚠ 2 Call Service! Tel.
5	F5 Brewer shutoff	√	√		198	CAUTION! ⚠ 5 Call Service! Tel. »
6	F6 Brewer over current	√	√		253	CAUTION! ⚠ 6 Please consult the user manual!
7	F7 Brewer timeout (no electricity)	√	√		254	Insert Brewer!!!
26	F26 Portioner current malfunction	√	√		1	CAUTION! ⚠ 26 Please consult the user manual! OK
36	F36 Current malfunction Portioner 2	√	√		3	CAUTION! ⚠ 36 Please consult the user manual! OK
46	F46 Current malfunction Portioner 3	√	√	not implemented	5	not implemented
87	F87 Boiler sensor damaged	√	√		40	CAUTION! ⚠ 87 Call Service! Tel.
88	F88 boiler excess temperature	√	√		39	CAUTION! ⚠ 88 Please consult the user manual!
89	F89 boiler heating time	√	√		41	CAUTION! ⚠ 89 Please consult the user manual!

Report Display	Descr.	Entry ring mem.	Entry display	Comment	No. malfunction memory	
130	F130 General current malfunction	√	√	Short circuit if immediately at switching-on 24/30V present	28	not implemented
149	F149 General voltage malfunction	√	√	If short circuit is present in 24/30V systems	86	CAUTION! ⚠ 149 Call Service! Tel.
157	Battery must be replaced	√	√	Batterie voltage too low to preserve data. Data is automatically stored in service memory.		
161	F161 flowmeter malfunction during brewing	√	√		241	CAUTION! ⚠ 161 Please consult the user manual! OK
162	F162 flowmeter malfunction during cleaning	√	√		242	Remove brewing unit!
163	F163 flowmeter malfunction during warm rinsing	√	√		243	CAUTION! ⚠ 163 Call Service! Tel. OK
164	F164 flowmeter malfunction during hot water dosage	√	√		244	
165	F165 flowmeter malfunction during choc dosage	√	√		245	
166	F166 flowmeter malfunction during DK feeding	√	√		246	
167	F167 flowmeter malfunction during descaling	√	√		274	
186	F186 timeout during steam boiler filling	√	√		247	CAUTION! ⚠ 186 Call Service! Tel.
187	F187 Steam boiler sensor damage	√	√		232	CAUTION! ⚠ 187 Call Service! Tel.

Report Display	Descr.	Entry ring mem.	Entry display	Comment	No. malfunction memory	
188	F188 Excess temperature in steam boiler	√	√		231	CAUTION! ⚠ 188 ⊡ Please consult the user manual!
189	F189 Heating-time steam boiler	√	√		43	CAUTION! ⚠ 189 ⊡ Please consult the user manual!
9061	Standby Event	√		Coming and going	61	Coming and going
9062	Reset Event!	√		Coming and going	62	
9104	Timer function not possible	√	√	Machine cannot switch off due to cleaning in progress	104	
9118	Fifo was deleted	√	√		118	
9119	Defaults into RAM	√	√		119	
9120	Defaults into flash	√	√		120	
9125	Machine cleaning in progress	√		internal	125	internal
9126	Milk foam cleaning in progress!	√		internal	126	internal
9136	Cleaning was interrupted	√	√	due to an error in the cleaning program	136	Display cleaning obligation
9180	Mixer cleaning in progress	√		internal	180	
9236	AD-transformer ready! (for developers only)	√	√	internal	236	
9248	Malfunction in level sensor	√	√		248	
9256	Auto detect malfunction: Right grinder not detected	√	√		256	
9257	Auto detect malfunction: brewing-valve not detected	√	√		257	
9258	Auto detect malfunction: Oscillating pump not detected	√	√		258	
9259	Auto detect malfunction: Release valve not detected	√	√		259	
9260	Auto detect malfunction: Fan not detected	√	√		260	

Report Display	Descr.	Entry ring mem.	Entry display	Comment	No. malfunction memory	
9261	Auto detect malfunction: Hot water dispensing valve not detected	√	√		261	
9262	Auto detect malfunction: Mixer not detected but choc/topping portioner detected	√	√		262	
9263	Auto detect malfunction: choc/topping portioner not detected but mixer detected	√	√		263	
9264	Auto detect malfunction: Mixer valve detected but no powder portioner detected or; Hot water–Choc/topping valve not detected but choc/topping portioner detected	√	√		264	
9265	Auto detect malfunction: Milk pump detected but no cappuccino valve detected or milk pump not detected but cappuccino valve detected	√	√		265	
9268	Power supply reports voltage too low	√	√	External mains voltage!	268	
9271	Pump switches to pressure -lowering mode (Info = button number)	√	√	Pump pressure lowered. The beverage number is entered into the laptop Info column	271	Pump pressure lowered, 9271
9275	Reset triggered by customer	√	√		275	9275
9288	MDB communication error coin checker	√	√		288	9288
9289	MDB communication error card reader	√	√		289	9289
9290	MDB communication error banknote reader	√	√		290	9290
9291	24 V are switched off and then on again (reset for MDB equipment on 24 V)	√	√		291	9291

8   Mechanical settings

8.1   Grinder setting (coarse – fine)

Setting grinder degree
The grinder must be dismantled. 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.

Espresso grinder (right side)
✳ Open the setting-wheel by a total of 10 turns.
This setting corresponds to setting no. 1 (espresso)

See chapter troubleshooting or user manual or respective error massage no. 161 if powder is too fine.

Cream grinder (left side)
✳ Open the setting-wheel for a total of 18 turns.
This setting corresponds to setting no. 5 = cream fineness.
2 turns of the setting-wheel are necessary to adjust the fineness by one degree.
Machines with only one grinder are set to espresso fineness.

Installing replacement grinder:
The replacement grinder is prepared for installation in portioner position 1 and 3 (far right and far left).
For installation at portioner position 2 (center) the auger (grinder fineness setting) and is bearings must be reassembled to the intended position.

8.2   Setting pressure reducer

Setting pressure reducer without laptop
❊ Start service program ▷ service routine ▷ setting
   pressure reducer ▷ start.
❊ Remove screw-cap on water tank filler.
❊ Screw auxiliary nipple (33.2320.8000, O-ring
   33.0398.5000) to accept plug-in connector into the
   water tank filler
❊ Mount auxiliary tool on filler.
❊ Press field   **Start**
Supply valve opens
❊ Read pressure on pressure gauge.
❊ Set pressure to 1.8 bar at pressure reducer.
❊ Finish test (machine is turned off).
❊ Dismantle setting equipment and remove auxiliary
   nipple.
❊ Replace filler cap.

Setting pressure reducer with KonfigTool
❊ Adjust test environment ▷ set pressure reducer ▷ start
❊ Remove filler screw-cap
❊ Screw auxiliary nipple to accept plug-in connector into
   the water tank filler.
❊ Mount auxiliary tool on filler.
❊ Start test on laptop
Supply valve opens
❊ Read pressure on pressure gauge.
❊ Set pressure to 1.8 bar at pressure reducer.
❊ Finish test
❊ Dismantle setting equipment and remove auxiliary
   nipple.
❊ Replace filler cap.

9   Milk nozzles

Milk nozzles for WMF coffee machines
These milk nozzles correspond to the provided milk nozzle in maintenance kits

color	presto	value	part number	mark
beige		3,00	3320460100	×
purple		2,20	3324103000	
pink		2,10	3324102000	
blue		2,00	3313843100	
red		1,90	3324101000	
lightgreen		1,80	3395215000	
transparent		1,70	3320314100	
honey yellow		1,65	3395214000	
caramel		1,60	3395213000	
brown		1,50	3320315100	
white		1,40	3395169000	×
green		1,30	3323178000	×
grey-blue		1,20	3370071714	
orange		1,15	3395106100	
gray		1,10	3395097100	
yellow		1,05	3395900100	
black		1,00	3395137000	

If no cooler is used/ no Plug&Clean adapter is used, plug on this milk nozzle at the end of the hose

1. step: determine the adequate milk nozzle (at the milk foamer) first by means of the milk storage temperature (first use one of the nozzle enclosed in the delivery)

higher milk storage temperature

low milk storage temperature

2. step: now select the optimal milk nozzle by means of required dispensing temperature of the milk foam (first try the nozzles enclosed in the delivery).
If the required milk foam temperature can not be achieved, choose another nozzle.

low milk foam temperature

high milk foam temperature

Information: the temperature can be influenced additionally by setting the foam quality (settable in the submenu).
Attention: only use the milk nozzles enclosed in the delivery for the Tchibo Coffea!

figure: maintenance concepts for the different brewing rates per year

10   Maintenance concepts 15.000 brewings

10.1   Overview maintenance sets

Type of maintenance	abbr. Maintenance set	Maintenance cycle	Basic Milk	
			Optimized milk foamer	Previous milk foamer
Care kit	CK	Every 15.000 brewings or once a year	33.2876.5000	33.2828.7000
Service maintenance	MS	every 30.000 brewings or every 2 years	33.2834.9000 MS without brewer 1)	33.2828.8100 MS without brewer 1)
			– n.a. –	33.2828.8000 MS with brewer
			– n. a. –	33.2828.5100 MS with brewer and MS Additional Fresh Milk
	Additionally for fresh milk machines		33.2828.9100 MS Additional Fresh Milk	
Expanded steam boiler and boiler inspection		Within Service maintenance of maintenance sets that contain safety valves – Details see Info-letter Info-2013-07		
Additional Choc /Topping	MS Choc	every 6.000 mixer cycles	33.2828.6100	
Brewer exchange	Brewer	every 30.000 brewings	33.2823.6199 1) pay attention when ordering MS without brewer. Brewer has to be ordered separately	
Descaling		Due date: without water filter > depending on carbonate hardness; with water filter > once a year	2x 33.7006.2869 Descaling liquid	