

# ONXY & ONXY *Pro*

## TECHNICAL MANUAL



TM\_EN

Part No.: I764279\_02

EXPOBAR®

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01	July 26, 2017	None	First draft released for technical review.
02	Aug. 04, 2017	None	Update according to input from Crem Tech. Serv. Dept.
03			
04			
05			
06			
07			
08			
09			
10			

### Hazard intensity levels

There are five different levels of notification intensity within this manual, as identified by the signal words DANGER, WARNING, IMPORTANT, NOTE and PRO TIP. The level of risk and importance of the notification is determined by the following definitions. Always observe the warnings to ensure safety and prevent potential injury and product damage.



#### **Important:**

Alerts against unsafe practices. Observe *Important* notifications to ensure food safety, prevent possible minor personal injury, or damage to the machine.



#### **WARNING:**

Indicates a potentially hazardous situation which, if the *WARNING* is ignored, could result in serious injury or even death.



#### **DANGER:**

**INDICATES AN IMMINENTLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL LIKELY RESULT IN SERIOUS INJURY AND EVEN DEATH.**



#### **Note:**

Gives additional information which may be helpful during the operation, routine maintenance, and cleaning of the machine.



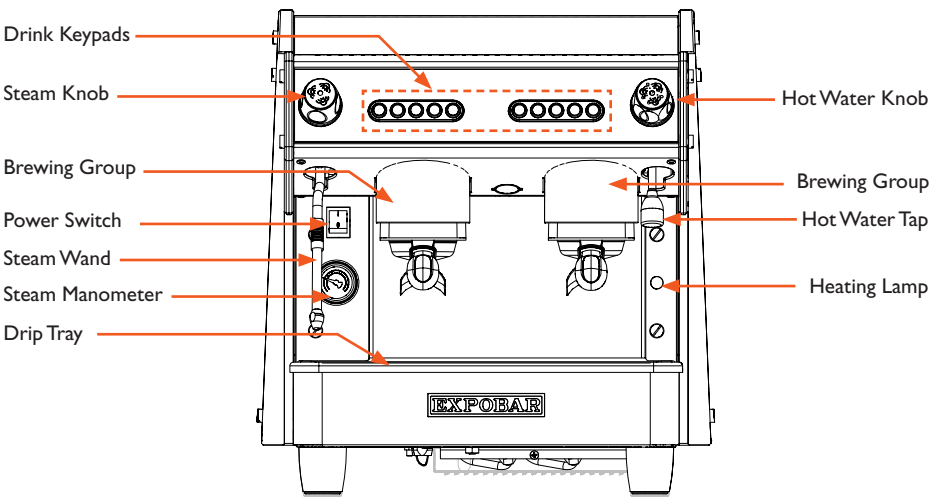
#### **Pro Tip:**

Gives helpful hints and suggestions from the manufacturer that take the guesswork out of choosing settings and care intervals.

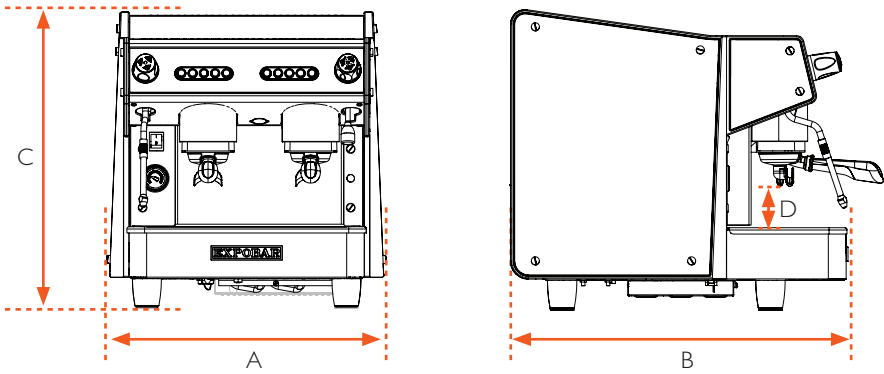
## ONYX 2GR MINI machine data

ONYX 2GR MINI	
Temperature control system:	Pressure switch
Dispensing control system:	Individual group programming capability
Steam wand:	I unit
Turbo steamer:	Not available
Hot water outlet:	I unit
Boiler system:	I steam boiler
Boiler operating pressure:	0.8 to 1.2 bar
Steam boiler operating volume:	6L
Power rating:	220-240V 1N~ 2800W 50-60 Hz
Water connection:	3/8" Internal thread
Height, width, depth:	520, 490, 585mm
Machine weight:	47kg
Ambient noise:	< 70 db

ONYX 2GR MINI front view



ONYX 2GR MINI external dimensions



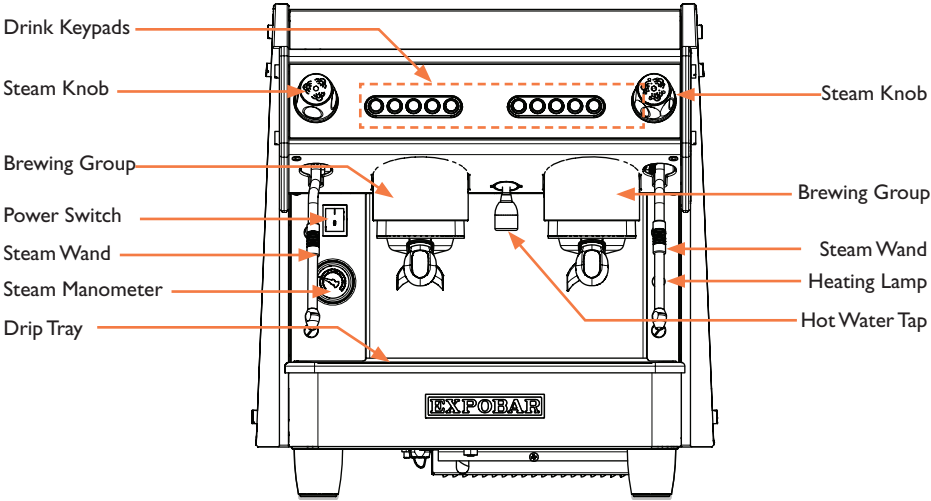
Dimension	Length
A	490mm
B	585mm
C	520mm
D	75mm



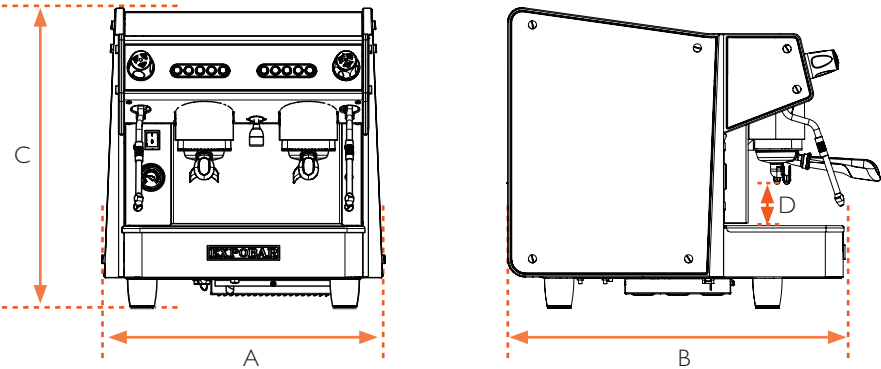
## ONYX 2GR MINI+ machine data

ONYX 2GR MINI+	
Temperature control system:	Pressure switch
Dispensing control system:	Individual group programming capability
Steam wand:	2 units
Turbo steamer:	not available
Hot water outlet:	1 unit
Boiler system:	1 steam boiler
Boiler operating pressure:	0.8 to 1.2 bar
Steam boiler operating volume:	6L
Power rating:	220-240V 1N~ 2800W 50-60 Hz
Water connection:	3/8" Internal thread
Height, width, depth:	520, 490, 585mm
Machine weight:	48kg
Ambient noise:	< 70 db

ONYX 2GR MINI+ front view



ONYX 2GR MINI+ external dimensions

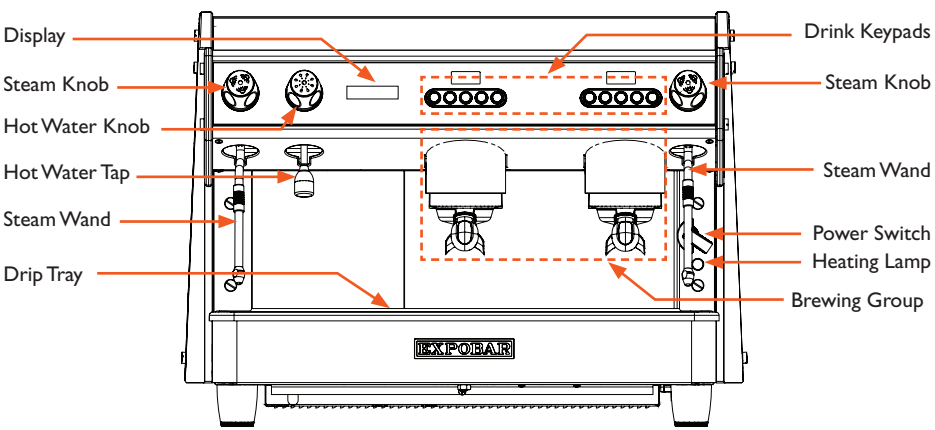


Dimension	Length
A	490mm
B	585mm
C	520mm
D	75mm

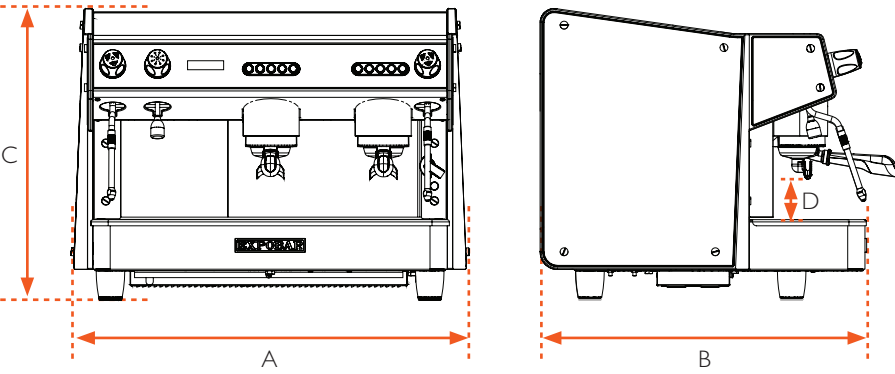
ONYX 2GR machine data

ONYX 2GR	
Temperature control system:	PID control
Dispensing control system:	Display control + individual group programming capability
Steam wand:	2 unit
Turbo steamer:	not available
Hot water outlet:	1 unit
Boiler system:	1 steam boiler
Boiler operating pressure:	0.8 to 1.2 bar
Steam boiler operating volume:	11.5L
Power rating:	220-240V 1N~ 3350W 50-60 Hz
Water connection:	3/8" Internal thread
Height, width, depth:	520, 720, 585mm
Machine weight:	67kg
Ambient noise:	< 70 db

ONYX 2GR front view



ONYX 2GR external dimensions

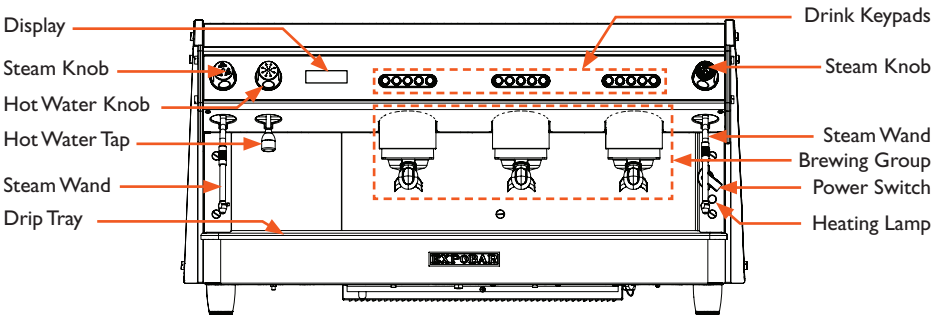


Dimension	Length
A	720mm
B	585mm
C	520mm
D	75mm

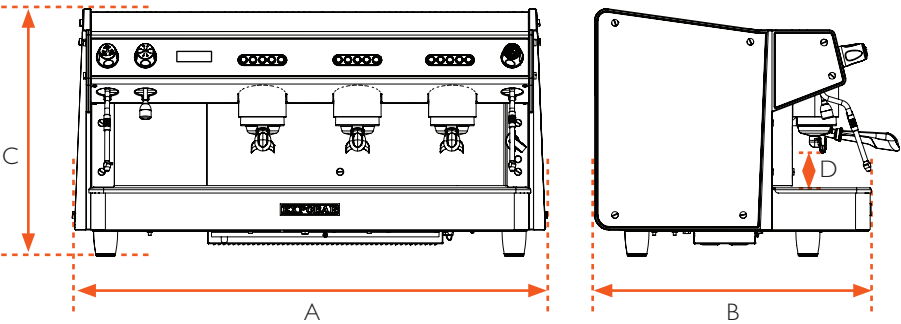
ONYX 3GR machine data

ONYX 3GR	
Temperature control system:	PID control
Dispensing control system:	Display control + individual group programming capability
Steam wand:	2 units
Turbo steamer:	not available
Hot water outlet:	1 unit
Boiler system:	1 steam boiler
Boiler operating pressure:	0.8 to 1.2 bar
Steam boiler operating volume:	17.5L
Power rating:	380-415V 3N~ 6350W 50-60 Hz
Water connection:	3/8" Internal thread
Height, width, depth:	520, 1000, 585mm
Machine weight:	95kg
Ambient noise:	< 70 db

ONYX 3GR front view



ONYX 3GR external dimensions

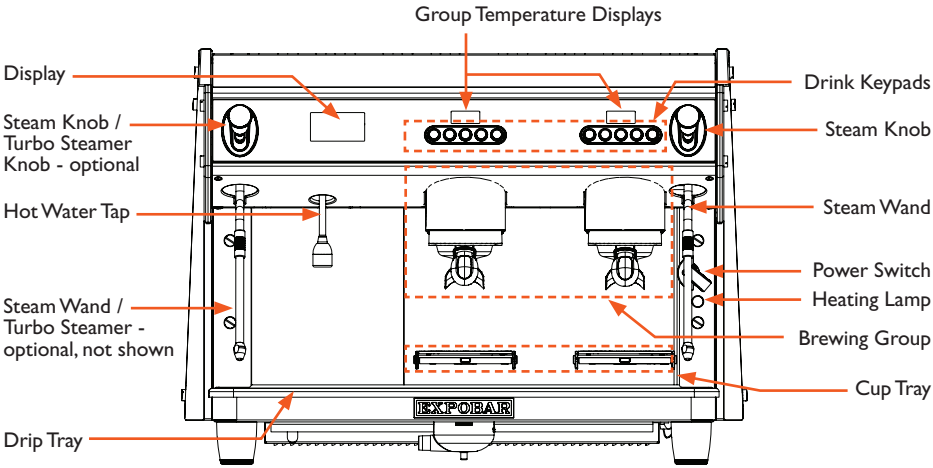


Dimension	Length
A	1000mm
B	585mm
C	520mm
D	75mm

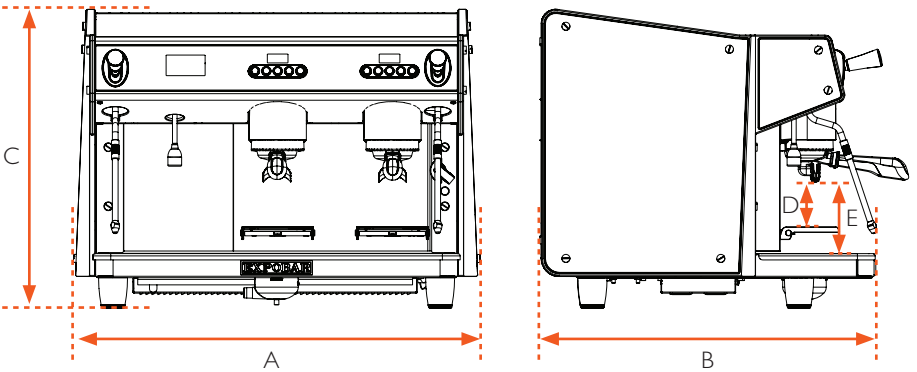
## ONYX *Pro* 2GR machine data

ONYX <i>Pro</i> 2GR	
Temperature control system:	PID control
Dispensing control system:	Touchscreen control + individual group programming capability
Steam wand:	2 units
Turbo steamer:	optional
Hot water outlet:	1 unit
Boiler system:	1 steam boiler + 2 group boilers
Boiler operating pressure:	0.8 to 1.2 bar
Steam boiler operating volume:	11.5L
Group boiler volume:	1.5L
Power rating:	220-240V 1N~ 3350W 50-60 Hz (non-Turbo Steamer) 220-240V 1N~ 3350W 50-60 Hz (Turbo Steamer-equipped) 380-415V 3N~ 4840W 50-60 Hz (non-Turbo Steamer) 380-415V 3N~ 4860W 50-60 Hz (Turbo Steamer-equipped)
Water connection:	3/8" Internal thread
Height, width, depth:	520, 720, 585mm
Machine weight:	70kg
Ambient noise:	< 70 db

ONYX *Pro* 2GR front view



ONYX *Pro* 2GR external dimensions



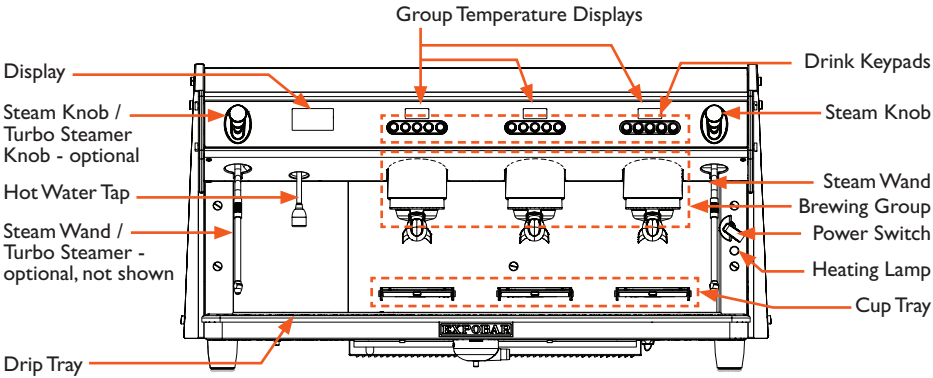
Dimension	Length
A	720mm
B	585mm
C	520mm
D	78mm
E	125mm



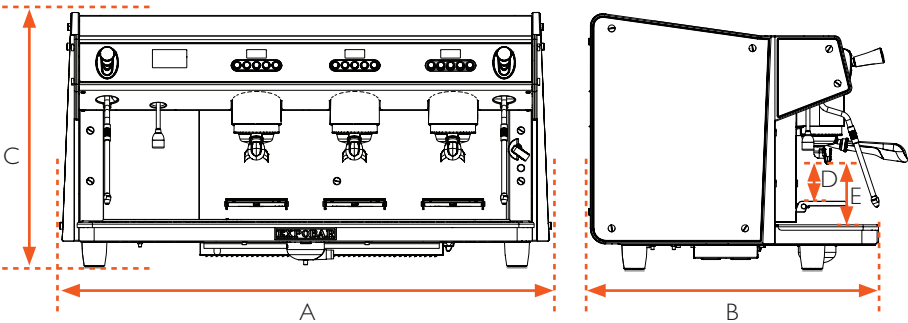
## ONYX *Pro* 3GR machine data

ONYX <i>Pro</i> 3GR	
Temperature control system:	PID control
Dispensing control system:	Touchscreen control + individual group programming capability
Steam wand:	2 units
Turbo steamer:	optional
Hot water outlet:	1 unit
Boiler system:	1 steam boiler + 3 group boilers
Boiler operating pressure:	0.8 to 1.2 bar
Steam boiler operating volume:	17.5L
Group boiler volume:	1.5L
Power rating:	380-415V 3N~ 6420W 50-60 Hz (non-Turbo Steamer) 380-415V 3N~ 6440W 50-60 Hz (Turbo Steamer-equipped)
Water connection:	3/8" Internal thread
Height, width, depth:	520, 1000, 585mm
Machine weight:	95kg
Ambient noise:	< 70 db

ONYX *Pro* 3GR front view



ONYX *Pro* 3GR external dimensions



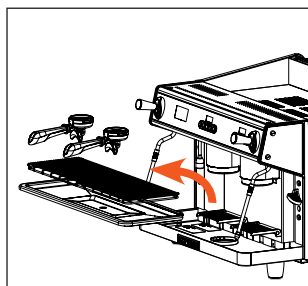
Dimension	Length
A	1000mm
B	585mm
C	520mm
D	78mm
E	125mm



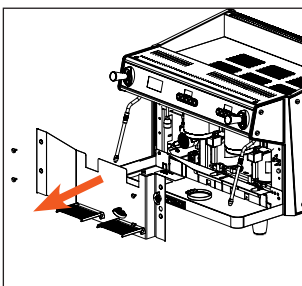
## Important:

All versions of ONYX and ONYX Pro are equipped with redundant overheat protection (via software in a water filling time-out feature and a mechanical EGO circuit interrupter high limit safety switch). The first line software protection can be reset by simply restarting the machine at the main power switch. However, if the mechanical high limit safety switch ever trips, it must be reset manually by pressing the reset button.

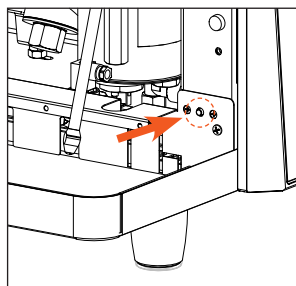
### Take away (tall cup) version machines



1. Remove the portafilters, cup grill and drip tray.

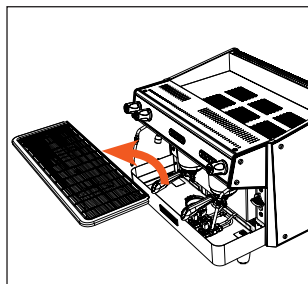


2. Remove the main power switch handle by pulling it straight out. Then remove the four screws securing the frontal panel at each corner and remove the panel. (For three group machines the centre screw can remain installed.)

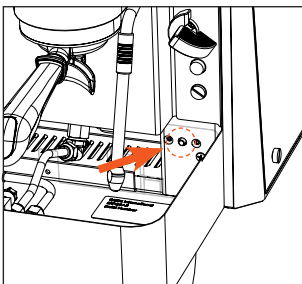


3. Press the overheating safety switch reset button to reset the device. Reassemble the machine in reverse order then power the machine on to test heating functions.

### Standard (high group) version machines



1. Remove the cup grill and drip tray.



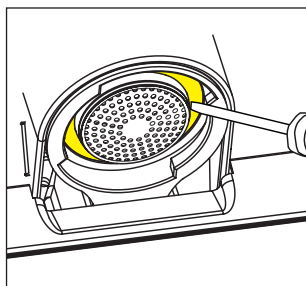
2. Press the overheating safety switch reset button to reset the device. Reassemble the machine in reverse order then power the machine on to test heating functions.



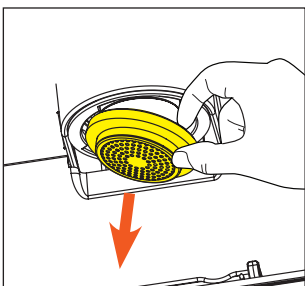
## Pro Tip:

The simplest way to diagnose a tripped high limit safety switch is to turn the machine on at the main power switch and check for a functional displays and/or touchscreen, but with lower than expected water heating temperatures accompanied by a unilluminated heating lamp. This indicates that power to the boiler's heating element is being interrupted by the safety switch.

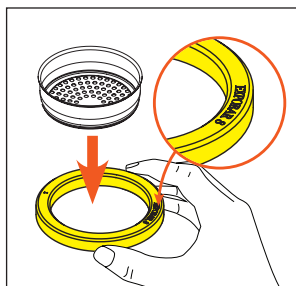
## All versions



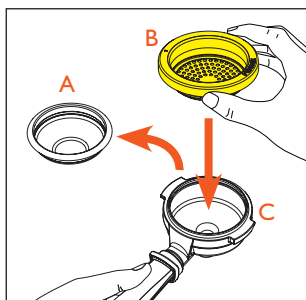
1. To remove the porta-filter, use a straight-blade screwdriver to release the shower by prying down with medium force.



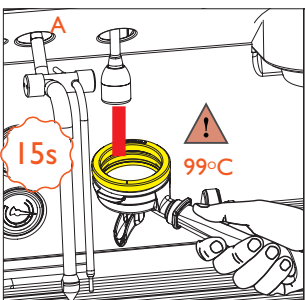
2. Remove the shower and gasket.



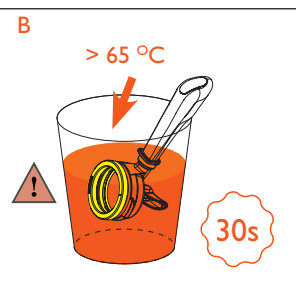
3. Remove and discard the old gasket. Insert the new gasket (chamfer and EXPOBAR logo facing up) into the shower.



4. Remove the filter basket(A), then place the new gasket and shower(B) into the porta-filter(C).



5. Preheat the gasket to soften the rubber. A - heat the gasket for 15 seconds using the water from the hot water outlet, or B - place the gasket, shower, and porta-filter in hot water for 30 seconds.



## WARNING:

The water from the water tap is very hot! Handle with care to prevent scalding or burns.

## Service intervals - ONIX

Main components	Part No.	Months (Cycles)			
		6 (12500)	12 (25000)	18 (37500)	24 (50000)
Boiler					
Non suction valve	C65000200		Replace		Replace
1/4 X 1/4 Electrovalve Parker 220V	MINI & MNI+: C60000100  2 & 3Gr: C60000105				Replace
Thermics Sup.Adaptor 1/2 X 1/2	C30000200		Check		Replace
Thermics Inf.Adaptor- 1/2X1/2X1/4	C30000210		Check		Replace
3/8 Safety Valve	C65000100		Check		Check
Brewing group					
Electrovalve 220V	C60000112				Replace
Shower	C75000010	Replace	Replace	Replace	Replace
8mm group head gasket	C75000081	Replace	Replace	Replace	Replace
Taps					
Steam tap body	C15000325		Clean	Replace	
Water tap body	C15000325				Replace
Motor-pump					
Pump head	C60000030				Replace
Retention Valve	C65000010				Replace
Pump Bypass Condor	C30400055				Replace



### Important:

Always conduct the 6 month service intervals without delay to ensure excellent performance of the machine and to ensure full warranty coverage.

## Service intervals - ONYX *Pro*

Main components	Part No.	Months (Cycles)			
		6 (12500)	12 (25000)	18 (37500)	24 (50000)
Boiler					
Non Suction Valve	C65000200		Replace		Replace
Solenoid Electrovalve 50/60Hz 220V	C60000105				Replace
Thermics Sup.Adaptor 1/2 X 1/2	C30000200		Check		Replace
Thermics Inf.Adaptor- 1/2X1/2X1/4	C30000210		Check		Replace
Cone Injector 1/4	C30000220		Check		Replace
Brewing group					
Gro Head Electrov. Parker 220V	C60000112				Replace
Showers	C75000010	Replace	Replace	Replace	Replace
Group Head Gasket	C75000081	Replace	Replace	Replace	Replace
Taps					
Steam tap body	C15000325		Clean	Replace	
Water tap body	C15000325				Replace
Valve Turbo Steamer (option on Pro 2/3Gr)	C60000120				Replace
1/4 x 1/4 Electrovalve (for auto water tap)	C60000100				Replace
Motor-pump					
Pump head	C60000030				Replace
Retention Valve	C65000010				Replace
Retent+Expans.Valve Set No Hole	C65000031				Replace



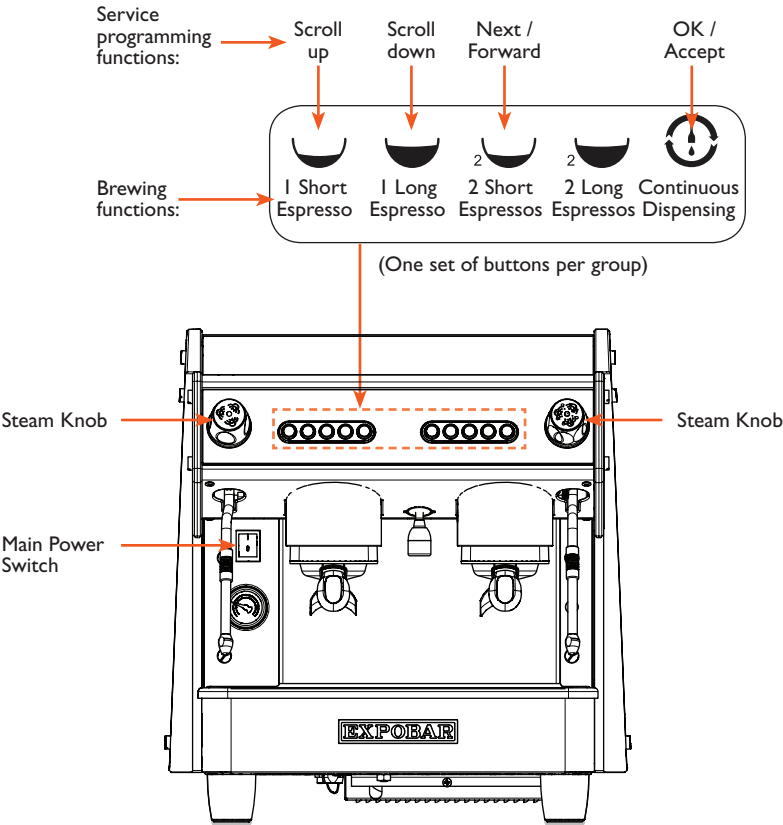
### Important:

Always conduct the 6 month service intervals without delay to ensure excellent performance of the machine and to ensure full warranty coverage.

ONYX MINI & MINI+

ONYX is controlled by a combination of manual control knobs and push buttons at each brewing group for dispensing. Control functions are explained below.

For service programming functions follow the instructions on the following pages.



### Restore factory default settings

To restore the machine to factory default programming and temperature settings follow the steps below:

1. Turn the machine off at the main power switch.
2. On the left side drinks group (when viewed from the front of the machine) press and hold the Short Espresso, Long Espresso and Hot Water Dispensing buttons simultaneously for five seconds while turning the main power switch back on. The machine will restart and any previously customized settings will be erased and replaced with the factory settings.
3. Cycle the machine off and on once more at the main power switch to return to normal operation.

### Enabling/disabling prebrewing

To enable or disable the prebrewing option follow the steps below:

Activating prebrewing-

1. Turn the machine off at the main power switch.
2. Press and hold the | Short Espresso button while turning the main switch back on.

Deactivating prebrewing-

1. Turn the machine off at the main power switch.
2. Press and hold the | Long Espresso button while turning the main switch back on.



#### **Pro Tip:**

Prewriting (often called preinfusion) is a useful feature for many roasts of coffee that benefit from just a little more time to “develop” during brewing. To decide if preinfusion is best for any specific coffee roast, it is recommended to do a taste comparison with and without preinfusion, then set up machine according to what tastes best for that roast.



#### **Note:**

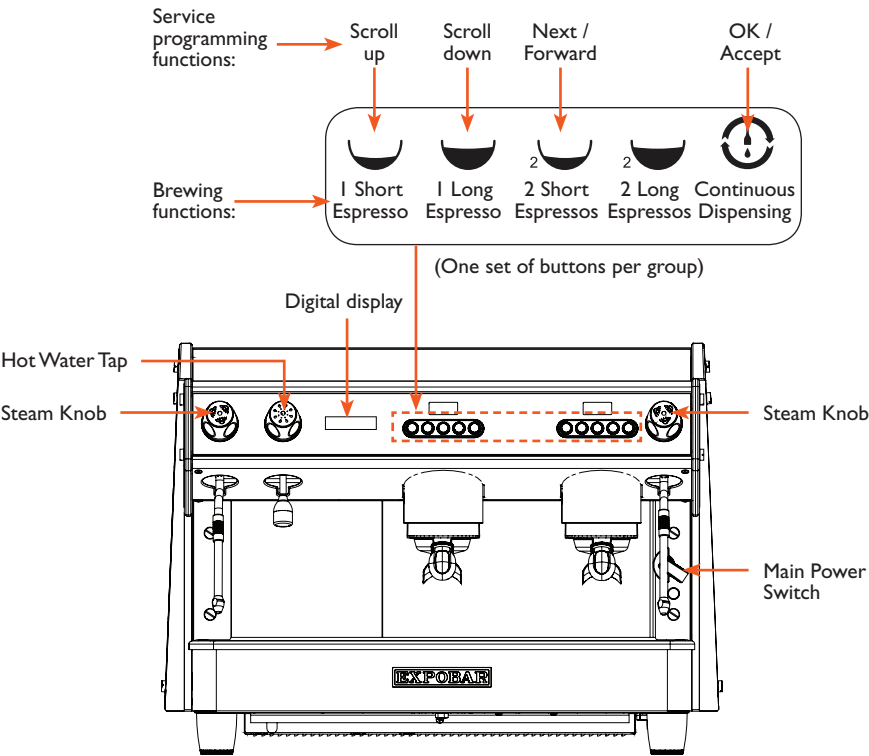
By default, prebrewing is deactivated. The reason for this is because the group boiler has a preinfusion injection chamber built in. However, for coffee roasts which need even more preinfusion time, this function can be enabled to achieve maximum extraction.



ONYX 2GR & 3GR

ONYX is controlled by a combination of manual control knobs and push buttons at each brewing group for dispensing, combined with a digital display to provide user feedback during operation and programming. Control functions are explained below.

For service programming functions follow the instructions on the following pages.



ONYX 2GR and 3GR feature an LCD digital display for monitoring machine status.

96°C      08:47  
SELECT DOSES

### Restore factory default settings

To restore the machine to factory default programming and temperature settings follow the steps below:

1. Turn the machine off at the main power switch.
2. On the left side drinks group (when viewed from the front of the machine) press and hold the 1 Short Espresso, 2 Short Espressos and Continuous Dispensing buttons simultaneously for five seconds while turning the main power switch back on. The display will show "SERVICE RESET" and all previously customized settings will be erased and replaced with the factory settings.
3. Cycle the machine off and on once more at the main power switch.
4. The machine display will show "OFF". To return to normal operation press the 2 Short Espressos button, or to create new custom programming, press the Continuous Dispensing button to enter the service programming functions (see following instructions for more information).

### Accessing service programming

To access the service programming settings follow the steps below:

1. On the left side drinks group (when viewed from the front of the machine) press the 2 Short Espressos and Continuous Dispensing buttons simultaneously to put the machine into standby mode.
2. Press and hold the Continuous Dispensing button for 15 seconds (until "Language" shows on the display).



#### Note:

To exit the service programming menu, simply continue pressing the Continuous Dispensing button until the machine display shows "OFF". To return to normal operation press the 2 Short Espressos button.

### Display language selection

To change the machine's operating language follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Language" is shown on the display, use the 1 Short Espresso or 1 Long Espresso to scroll between the language options.
3. When the desired language is shown, press the Continuous Dispensing button to select it as the new operating language.

### Programming the top line (Name 1) publicity message

To change the machine display's top line welcome/publicity message follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Name 1" is shown on the display, use the 1 Short Espresso or 1 Long Espresso buttons to scroll between the character options.
3. When the desired character is shown, press the 2 Short Espressos button to accept it and move to the next input.
4. When the desired message is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.



**Pro Tip:**

To minimize the chance of anyone changing the publicity message to anything inappropriate or offensive, keep the instructions listed above confidential.

### Programming the top line (Name 2) publicity message

To change the machine' display's second line welcome/publicity message follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Name 2" is shown on the display, use the 1 Short Espresso or 1 Long Espresso buttons to scroll between the character options.
3. When the desired character is shown, press the 2 Short Espressos button to accept it and move to the next input.
4. When the desired message is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.



**Pro Tip:**

To minimize the chance of anyone changing the publicity message to anything inappropriate or offensive, keep the instructions listed above confidential.

### Programming the service helpline phone number

To change the machine's service request phone number follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Service Phone" is shown on the display, use the | Short Espresso or | Long Espresso buttons to scroll between the character options.
3. When the desired character is shown, press the 2 Short Espressos button to accept it and move to the next input.
4. When the desired phone number is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.



#### *Pro Tip:*

To minimize the chance of anyone changing or deleting the automatically displayed phone number, keep the instructions listed above confidential.

### Enabling/disabling user dose setting capability

To enable or disable the option for the user to adjust the dose programming follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Doses setting" is shown on the display, use the | Short Espresso or | Long Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Enabling/disabling continuous dispensing capability

To enable or disable the continuous dispensing follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Continuous key" is shown on the display, use the | Short Espresso or | Long Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Enabling/disabling tea brewing option

To enable or disable the tea brewing option follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Tea Key" is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

**Note:**

By default, the tea brewing function is disabled in favour of a continuous dispensing option.

### Enabling/disabling the Turbo Steamer option

To change the machine's Turbo Steamer function follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Steam Tap Gr." is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

**Note:**

This function can only be enabled on machines which are configured with the Turbo Steamer as an optional extra. For machines which are not equipped with a Turbo Steamer, the setting should always be disabled.

### Programming the boiler level sensor sensitivity

To change the machine's steam boiler water level sensor probe sensitivity follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Probe Sensitivity" is shown on the display, use the **I Short Espresso** buttons to increase sensitivity or **I Long Espresso** buttons to reduce sensitivity.
3. When the desired sensitivity is shown, press the **Continuous Dispensing** button to accept it and proceed to the next service programming function.



#### Note:

By default, the level sensor's sensitivity is set at "Medium", which should be adequate for almost all installations. Only in locations where the water quality is exceptionally pure (very low dissolved salts) should it be set to "High". Conversely, in locations where the water quality is exceptionally poor (very high volume of dissolved salts) should it be set to "Low".

### Enabling/disabling prebrewing

To enable or disable the prebrewing option follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Prewewing" is shown on the display, use the **I Short Espresso** or **I Long Espresso** buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the **Continuous Dispensing** button to accept it and proceed to the next service programming function.



#### Pro Tip:

Prewewing (often called preinfusion) is a useful feature for many roasts of coffee that benefit from just a little more time to "develop" during brewing. To decide if preinfusion is best for any specific coffee roast, it is recommended to do a taste comparison with and without preinfusion, then set up machine according to what tastes best for that roast.



#### Note:

By default, prebrewing is deactivated. The reason for this is because the group boiler has a preinfusion injection chamber built in. However, for coffee roasts which need even more preinfusion time, this function can be enabled to achieve maximum extraction.

### Enabling/disabling grinding warning alert

To enable or disable the coffee grind warning option follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Grinding Notice" is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the grinding warning alert settings

With the Grind Notice function enabled, adjust the timing and volume that trips the coffee grind warning follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Grinding Notice" and "Min" are shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll up and down to set the minimum volume and time required to trip the warning then press the Continuous Dispensing button to accept it and move to the next input.
3. When "Grinding Notice" and "Max" are shown on the display, use the I Short Espresso or I Long Espresso to scroll up and down to set the maximum dispensing speed allowed before the warning is tripped, then press the Continuous Dispensing button to accept it and move to the next input.
4. When the desired settings are shown, press the Continuous Dispensing button to accept them and proceed to the next service programming function.

### Enabling/disabling LED rotation

To enable or disable the LED flashing while brewing feature for all groups follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Rotation LED" is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the service cycle counter setting

To adjust the number of cycles required to activate the service alert follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Service Cycles" is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll up and down to set the number of cycles (in thousands).
3. When the desired number of cycles is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the display temperature units (°C or °F)

To adjust the temperature units shown on all displays follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Temperature" is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll between Centigrade (°C) or Fahrenheit (°F).
3. When the desired number of cycles is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the boiler temperature

To adjust the steam boiler operating temperature follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Boiler Temperat." is shown on the display, use the I Short Espresso or I Long Espresso buttons to adjust the temperature setting up or down.
3. When the desired temperature is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the water softener/filter regeneration alert setting

To adjust the number of litres required to activate the water filter/softener change or regeneration alert follow the steps below:

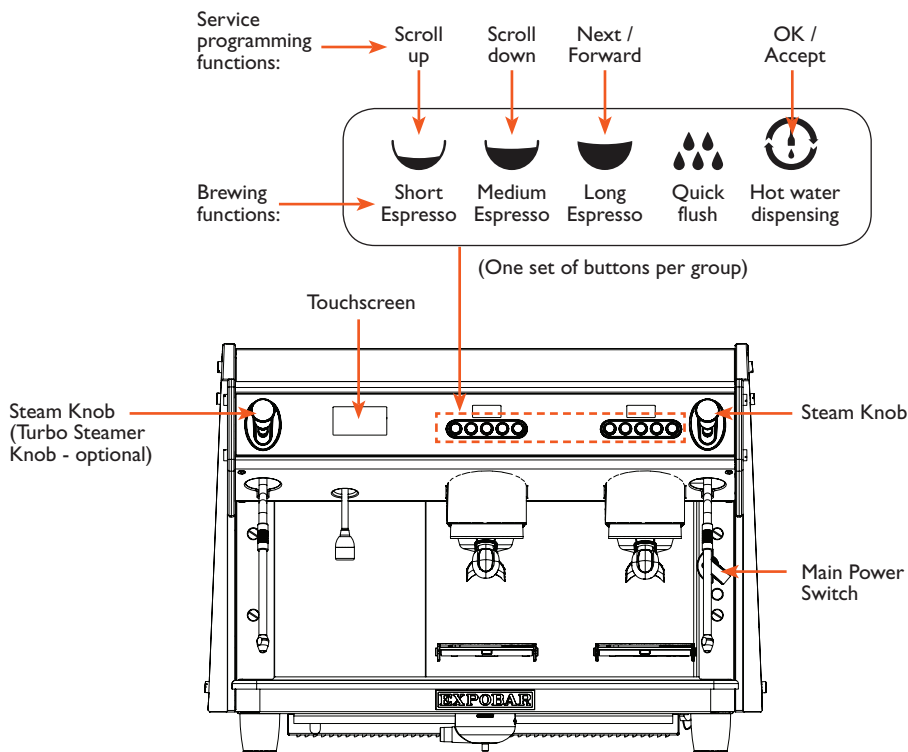
1. Enter the service programming menu (see previous instruction).
2. When "Water Filter" is shown on the display, use the I Short Espresso or I Long Espresso buttons to scroll up and down to set the number of litres.
3. When the desired number of litres is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.



## All versions

ONYX *Pro* is controlled by a capacitive interface LED touchscreen to provide user feedback during operation, monitoring machine status and performing user programming and machine adjustments, customization and cleaning along with push buttons at each brewing group for dispensing. Control functions are explained below.

For service programming functions follow the instructions on the following pages.



ONYX *Pro* features a capacitive interface LED touchscreen for monitoring machine status and performing user programming and machine adjustments, customization and cleaning.



### Restore factory default settings

To restore the machine to factory default programming and temperature settings follow the steps below:

1. Turn the machine off at the main power switch.
2. On the left side drinks group (when viewed from the front of the machine) press and hold the Short Espresso, Long Espresso and Hot Water Dispensing buttons simultaneously for five seconds while turning the main power switch back on. The touchscreen will show "DATA PRESET COMPLETED" and all previously customized settings will be erased and replaced with the factory settings.
3. Cycle the machine off and on once more at the main power switch. The machine will be in off mode and can be turned on by pressing the power button on the touchscreen or any drinks button on the left side drinks bank.
4. If new custom service programming is required follow the instructions below.

### Accessing service programming

To access the service programming settings follow the steps below:

1. On the left side drinks group (when viewed from the front of the machine) press the Long Espresso and Hot Water Dispensing buttons simultaneously to put the machine into standby mode.
2. Press and hold the Hot Water Dispensing button for 15 seconds until "PASSWORD" shows on the touchscreen.
3. From the left side drinks group press the Small Coffee button five times to input the default password.



#### Note:

To exit the service programming menu, simply continue pressing the Hot Water Dispensing button until "OFF" is shown on the touchscreen. To return to normal dispensing simply press the Long Espresso button.

### Operating language selection

To change the machine's operating language follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "LANGUAGE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between the language options.
3. When the desired language is shown, press the Hot Water Dispensing button to select it as the new operating language.

### Adjusting the touchscreen display mode

To adjust the touchscreen display mode follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "DISPLAY MODE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between normal or reversed.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**

By default the touchscreen is programmed to display as a black background with coloured icons and text. Reverse mode changes the display to a coloured background with black icons and text.

### Adjusting the touchscreen lighting contrast

To adjust the touchscreen contrast level follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "CONTRAST" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to increase or decrease the contrast level.
3. When the desired level is set, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the touchscreen ON colour

To adjust the in-use touchscreen colour follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "COLOUR STATE ON" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll to the desired touchscreen colour.
3. When the desired colour is visible, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the touchscreen OFF and STANDBY colour

To adjust the not-in-use touchscreen colour follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "COLOUR STATE OFF" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll to the desired touchscreen colour.
3. When the desired colour is visible, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Programming the publicity message

To change the touchscreen welcome/publicity message follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "Name 1" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll between the character options.
3. When the desired character is shown, press the Long Espresso button to accept it and move to the next input.
4. When the desired message is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



**Pro Tip:**

To minimize the chance of anyone changing the publicity message to anything inappropriate or offensive, keep the instructions listed above confidential.

### Programming the service helpline phone number

To change the machine's service request phone number follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "SERVICE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between the character options.
3. When the desired character is shown, press the Long Espresso button to accept it and move to the next input.
4. When the desired phone number is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



**Pro Tip:**

To minimize the chance of anyone changing or deleting the automatically displayed phone number, keep the instructions listed above confidential.

### Enabling/disabling user dose setting capability

To enable or disable the option for the user to adjust the dose programming follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "DOSES SETTING" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Enabling/disabling continuous dispensing capability

To enable or disable the continuous and tea shot dispensing follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "CONTINUOUS KEY" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Programming the Turbo Steamer activation method

To program the Turbo Steamer activation method follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "AUTOSTEAMER MODE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between LEVER or BUTTON.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

By default, the Turbo Steamer is activated by the lever, which allows the Hot Water Dispensing button to be used for activating/deactivating the hot water tap.

### Enabling/disabling external LED panels (if equipped)

To change the machine's steam boiler water level sensor probe sensitivity follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "LED PREMIUM" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**

On machines which are equipped with the optional LED panels on the sides and back of the machines (mounted behind the glass panels) the LED panels are, by default, set to illuminate whenever the machine is in-use.

### Enabling/disabling preinfusion

To enable or disable the preinfusion option follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PREINFUSION" is shown on the display, the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Pro Tip:**

Prebrewing (often called preinfusion) is a useful feature for many roasts of coffee that benefit from just a little more time to "develop" during brewing. To decide if preinfusion is best for any specific coffee roast, it is recommended to do a taste comparison with and without preinfusion, then set up machine according to what tastes best for that roast.



#### **Note:**

By default, prebrewing is deactivated. The reason for this is because the group boiler has a preinfusion injection chamber built in. However, for coffee roasts which need even more preinfusion time, this function can be enabled to achieve maximum extraction. During preinfusion the coffee will be dosed for pre-programmed number of seconds, then the pressure will be released for a pre-programmed number of seconds, known as pausing, then the brew will begin again and run until the brewing is completed.

**Adjusting preinfusion dosing time COFFEE1, COFFEE2, COFFEE3, FLUSH**

To adjust the prebrewing dosing time follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PREINF. ON SEC" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll the number of dosing seconds up or down.
3. When the desired number of dosing seconds is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

**Note:**

The preinfusion dosing times will only be adjusted if preinfusion is activated. When deactivated, no additional preinfusion (beyond the prebrewing which is a result of the preinfusion from the injection chamber) will occur.

**Adjusting the preinfusion pausing time COFFEE1, COFFEE2, COFFEE3, FLUSH**

To adjust the prebrewing pausing time follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PREINF. OFF SEC" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll the number of dosing seconds up or down.
3. When the desired number of dosing seconds is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

**Note:**

The preinfusion pausing times will only be adjusted if preinfusion is activated. When deactivated, no additional preinfusion (beyond the prebrewing which is a result of the preinfusion from the injection chamber) will occur.

### Programming the steam boiler level sensor sensitivity

To change the machine's steam boiler water level sensor probe sensitivity follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PROBE SENSITIVITY" is shown on the display, use the Short Espresso button to increase sensitivity or Medium Espresso buttons to reduce sensitivity.
3. When the desired sensitivity is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

By default, the level sensor's sensitivity is set at "Medium", which should be adequate for almost all installations. Only in locations where the water quality is exceptionally pure (very low dissolved salts) should it be set to "High". Conversely, in locations where the water quality is exceptionally poor (very high volume of dissolved salts) should it be set to "Low".

### Enabling/disabling grinding warning alert

To enable or disable the coffee grind warning option follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "GRINDING NOTICE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



### Adjusting the too fine grinding warning alert settings

With the Grind Notice function enabled, adjust the timing and volume that trips the coffee grind warning follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "FINE GRINDING" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll up and down to set the minimum volume over time required to trip the warning.
3. When the desired settings are shown, press the Hot Water Dispensing button to accept them and proceed to the next service programming function.

### Adjusting the too coarse grinding warning alert settings

With the Grind Notice function enabled, adjust the timing and volume that trips the coffee grind warning follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "COARSE GRINDING" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll up and down to set the maximum volume over time required to trip the warning.
3. When the desired settings are shown, press the Hot Water Dispensing button to accept them and proceed to the next service programming function.

### Adjusting the keypad illumination

To enable or disable the illumination of the keypad buttons follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "KEYPAD MODE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between enabled, disabled or rotating.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the chrono (boiler readout on touchscreen) setting

To adjust the boiler activity readout format on the touchscreen follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "CHRONO" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between "TIMER" or "IMPULSES".
3. When the desired readout format is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the service cycle counter setting

To adjust the number of cycles required to activate the service alert follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "SERVICE CYCLES" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll up and down to set the number of cycles.
3. When the desired number of cycles is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the display temperature units (°C or °F)

To adjust the temperature units shown on all displays follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "TEMPERATURE" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll between Centigrade (°C) or Fahrenheit (°F).
3. When the desired number of cycles is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the steam boiler temperature

To adjust the steam boiler operating temperature follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "BOILER TEMPERAT" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to adjust the temperature setting up or down.
3. When the desired temperature is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the steam boiler KP, KI, and KD settings

If it is ever necessary to adjust the steam boiler heating algorithm follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "KP KI KD" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to adjust setting up or down.
3. When the desired temperature is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Important:**

By default the steam boiler heating algorithm is set at KP: 4.0, KI: 0.07 and KD: 2.2 which is optimised for consistent heating and best brewing. These settings should not be adjusted. The only reason to ever access and adjust these settings is if they ever were deleted for any reason.

### Adjusting the steam boiler PID settings

If it is ever necessary to adjust the steam boiler temperature control parameters follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PID SETTING" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to adjust the temperature setting up or down.
3. When the desired temperature is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Important:**

By default the steam boiler temperature control parameters are set at 5°C (low limit) and 9°C (high limit) which is optimised for consistent heating and best brewing. These settings should not be adjusted. The only reason to ever access and adjust these settings is if they ever were deleted for any reason.

### Adjusting the group heating settings

To adjust the number of cycles required to activate the service alert follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "HEATING GROUP" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to adjust the group arrangement to the correct number or groups for the machine.
3. When the correct number of groups is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

For two group machines the setting should be GR1 + GR2. For three group machines the setting should be GR1 + GR2 + GR3. Setting the priority to NONE will turn off all group boilers and rely on the steam boiler only for heating.

### Programming the boiler heating setting priority

To change the machine's steam boiler water level sensor probe sensitivity follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PRIOR. HEATING" is shown on the display, use the Short Espresso button to increase sensitivity or Medium Espresso buttons to scroll up and down to set the boiler which should hold top priority.
3. When the desired setting is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

By default, the top priority for heating is the group boilers, which allows the machine to be used more quickly from a cold start up. However, to steam or froth milk, the steam boiler will still need to heat up to operating temperature.

## Adjusting the group heating temperatures

To adjust the operating temperatures for each brewing group follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "TEMPERATURE GR1" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to set the desired temperature for the group being adjusted.
3. When the desired number of dosing seconds is shown, press the Long Espresso button to accept it and move to the next input (GR2 and GR3).
4. When all group temperature settings are set as desired, press the Continuous Dispensing button to accept them and proceed to the next service programming function.



### Note:

For two group machines, when the group heating setting is adjusted to GR1 + GR2, the GR3 heating settings will not be visible.

## Programming the dispensing offset temperature differential

To change the machine's dispensing temperature differential (the difference in temperature between the group boiler and group brewing head) for all groups follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "OFFS.TSET COFFEE" is shown on the display, use the Short Espresso button to increase sensitivity or Medium Espresso buttons to set the offset temperature for the groups.
3. When the desired temperature is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



### Important:

By default the offset temperature is set at 13.5°C/24°F which is optimised for best brewing and to avoid damaging the flavour profile of the espresso by exposing the coffee to temperature that is too high. These settings should only be adjusted if the steam boiler temperature is adjusted to a significantly higher static temperature which would result in the brewing temperature exceeding 96°C after the offset is applied. For example; adjusting the steam boiler to a setting of 125°C (an increase of 5°C and the highest temperature recommended) would require the offset temperatures to be adjusted lower by 5°C to account for the new static temperature while still maintaining the brewing temperature with an acceptable range.

### Adjusting the group heating KP, KI, and KD settings

If it is ever necessary to adjust the group heating algorithm follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "KP KI KD" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to adjust setting up or down.
3. When the desired temperature is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.



#### **Important:**

By default the group heating algorithm is set at KP: 1.0, KI:0.01 and KD: 2.0 which is optimised for consistent heating and best brewing. These settings should not be adjusted. The only reason to ever access and adjust these settings is if they ever were deleted for any reason.

### Adjusting the group heating PID settings

If it is ever necessary to adjust the steam boiler temperature control parameters follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "PID SETTING" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to adjust the temperature setting up or down.
3. When the desired temperature is shown, press the Continuous Dispensing button to accept it and proceed to the next service programming function.



#### **Important:**

By default the steam boiler temperature control parameters are set at 2°C/3°F which is optimised to maintain consistent heating. These settings should not be adjusted. The only reason to ever access and adjust these settings is if they ever were deleted for any reason.

### Adjusting the Turbo Steamer auto-stop temperature

To change the machine's Turbo Steamer NTC sensor temperature setting (which controls the auto-stop function) follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "TSET STEAM" is shown on the display, use the Short Espresso or Medium Espresso buttons to adjust the temperature setting up or down.
3. When the desired temperature is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**

By default, the Turbo Steam is programmed to stop automatically when the milk reaches 70°C/158°F. Depending on the fat ratio of the milk routinely used, this setting may need to be adjusted up or down to achieve perfect milk froth.

### Adjusting the water softener/filter regeneration alert setting

To adjust the number of litres required to activate the water filter/softener change or regeneration alert follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "WATER FILTER" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll up and down to set the number of litres.
3. When the desired number of litres is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.

### Adjusting the water filling time out alert setting

To change the machine's steam boiler water level sensor probe sensitivity follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "FILLING T-OUT" is shown on the display, use the Short Espresso button to increase sensitivity or Medium Espresso buttons to scroll up and down to set the boiler which should hold top priority.
3. When the desired setting is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

By default, the filling time out is set at 240 seconds. This should be adequate for virtually all installations, but if it is deemed necessary to adjust the time out be sure to not set the time out to an extremely short or overly long time setting to prevent unnecessary cut out or dry boiler overheating conditions.

### Enabling/disabling ECO mode

To enable or disable the ECO mode (for energy savings) follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "ECO MODE" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

The ECO mode allows the machine to reduce its electrical demand by lowering the boiler temperatures to approximately 60°C/140°F during low use times. When the machine is needed again, the user simply needs to press any button to "wake up" the machine for use again. Then it will start heating up to normal operating temperature and will be ready for use within just a few minutes.

### Adjusting the ECO mode-activated touchscreen colour

To adjust the touchscreen colour when ECO mode (if enabled) is activated follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "COLOUR ECO" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to scroll up and down to view the colour options available.
3. When the desired colour is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



### Adjusting the group boiler ECO mode activation timing settings

To change the machine's group boiler ECO mode activation times follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "TIME TO GR.3 ECO" is shown on the display, use the Short Espresso or Medium Espresso buttons to increase or decrease the delivery time required to activate ECO mode for the group number shown.
3. When the desired ECO mode deliver time setting is shown, press the Long Espresso button to accept it and move to the next input (GR2 and GR1).
4. After each group boiler time is set as desired, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### *Pro Tip:*

Staging the groups to enter ECO mode after different amounts of non-use is a good way to reduce the electrical demand of the machine while still keeping one group hot and ready for use at all times without needing to wait for the group boiler to heat up. For example; set group #2 to enter ECO mode after one hour of non-use and group #3 to enter ECO mode after one hour, but set group #1 to ECO mode only after two hours of non-use. This way there will always be one hot and ready group (group #1) during service hours. But if the barista forget to power the machine down at the end of the day, it will still go to ECO mode eventually, and finally shutdown fully by entering standby mode.



#### *Note:*

For two group machines, when the group heating setting is adjusted to GR1 + GR2, the GR3 heating settings will not be visible.

### Adjusting the steam boiler ECO mode activation timing settings

To change the machine's steam boiler ECO mode activation times follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "TIME ECO BOILER" is shown on the display, use the Short Espresso or Medium Espresso buttons to increase or decrease the delivery time required to activate ECO mode for the steam boiler.
3. When the desired time is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### *Note:*

By default the boiler ECO mode activation time is set to 12 hours. To determine how much time is appropriate for the steam boiler ECO mode to activate, it is best to consider how long the machine is not in use during service hours, then determine if the time should be adjusted longer or shorter.

### Adjusting the standby mode activation time setting

To adjust the amount of time required to initiate standby mode (automatic machine shutdown for energy savings after extended non-use) follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "DOWNTIME TO STBY" is shown on the touchscreen, use the Short Espresso or Medium Espresso buttons to increase or decrease the delivery time required to activate standby mode for the entire machine.
3. When the desired time is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

Standby mode shuts the machine down automatically to achieve maximum power savings. The default standby mode delivery time is 15 hours. It is recommended to adjust this setting to an appropriate shorter time based on serving requirements.

### Adjusting the steam boiler ECO mode temperature setting

To change the machine's steam boiler ECO mode temperature setting follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "TSET ECO BOILER" is shown on the display, use the Short Espresso button to increase the ECO mode temperature or Medium Espresso to reduce the temperature.
3. When the desired setting is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### Note:

By default, the ECO mode temperature is set to 60°C/140°F which saves energy but still allows for quick heat-up when returning to normal operating mode.

### Adjusting the group boilers ECO mode temperature setting

To adjust the machine's group boiler ECO mode temperature settings follow the steps below:

Enter the service programming menu (see previous instruction).

1. Enter the service programming menu (see previous instruction).
2. When "TSET ECO GROUPS" is shown on the display, use the Short Espresso button to increase the ECO mode temperature or Medium Espresso to reduce the temperatures for all groups simultaneously.
3. When the desired setting is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**

By default, the ECO mode temperature is set to 60°C/140°F which saves energy but still allows for quick heat-up when returning to normal operating mode.

### Enabling/disabling the standby wake up password function

To enable or disable the requirement to input a password to wake the machine up when in standby mode follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "STBY PASSWORD" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**

By default, the standby password is deactivated, since it is not typically needed in most serving scenarios.

### Enabling/disabling the main password function

To enable or disable the requirement to input a password to access the service programming menu follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "MAIN PASSWORD" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll between enabled or disabled.
3. When the desired option is shown, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**

By default, the main password is activated, since it prevents unintended tampering with display messages and unnecessary reprogramming of critical settings.

### Change the service programming password

To change the password to access the service programming menu follow the steps below:

1. Enter the service programming menu (see previous instruction).
2. When "CHANGE PASSWORD" is shown on the display, use the Short Espresso or Medium Espresso buttons to scroll between "YES" or "NO".
3. When "YES" is selected, press the Long Espresso button to proceed to resetting the password.
4. Use the Short Espresso, Medium Espresso, Long Espresso, Flushing, and Continuous buttons to create a customised sequence which will become the new password.
5. When the new password has been input, press the Hot Water Dispensing button to accept it and proceed to the next service programming function.



#### **Note:**


By default, the password is to press the Small Espresso buttons five times.



#### **Pro Tip:**

If the password is changed, it is advised to write the new password down and keep it in a safe place. If the password is ever lost or forgotten, it can be restored to default by resetting the machine to default settings.

Alarm flowmeter  
X




Flowmeter X failure / No flow detected in flowmeter X

No water



Check that the machine is receiving water.

Tprobe Unconnect  
X




Temperature sensor X fault.

Service  
9999999



Warning technical service needed.

Filter  
999999999

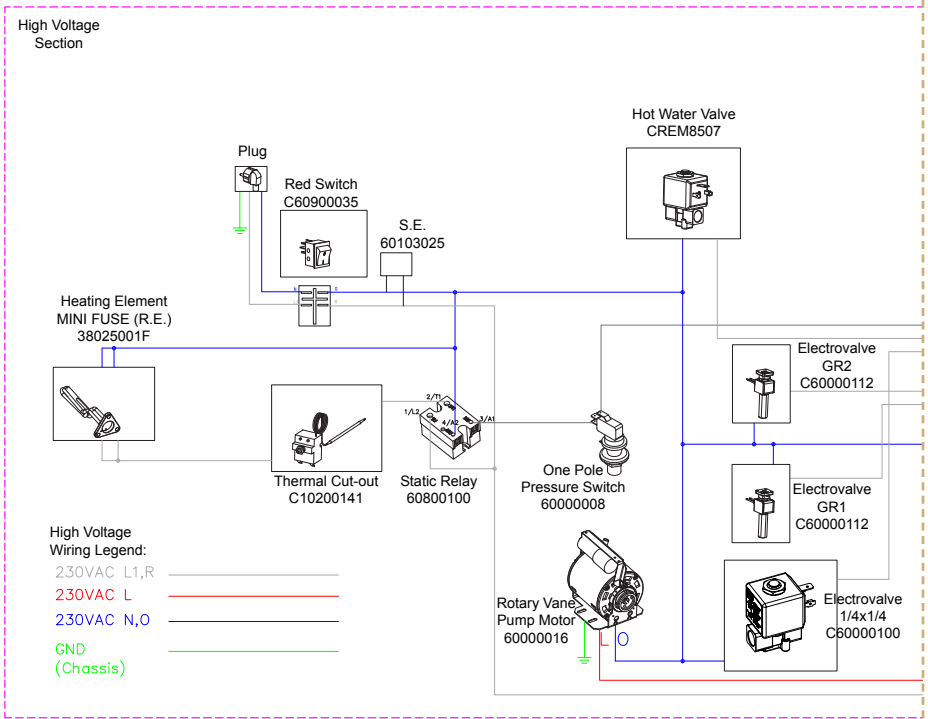


The water softener filter needs to be replaced.

ONYX 2GR MINI & MINI+

Power Rating:  
220-240V IN~ 2800W

Match line, see next page. →



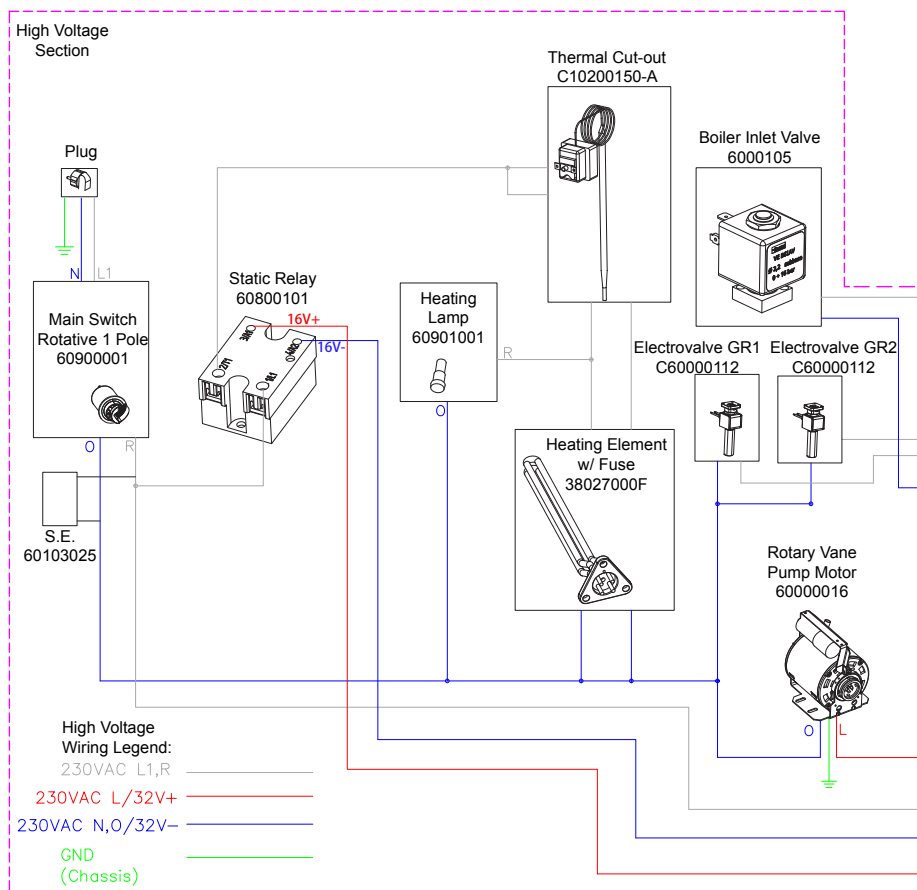
Match line, see previous page.



## ONYX 2GR

Power Rating:  
220-240V IN~ 3350W

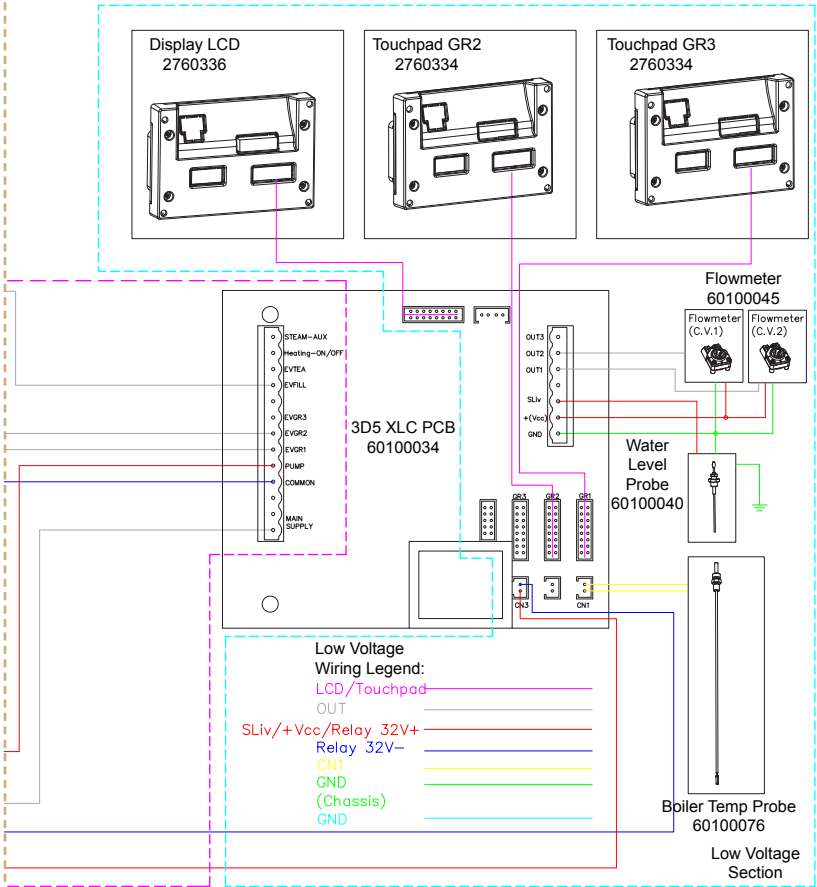
Match line, see next page. →





ONYX 2GR

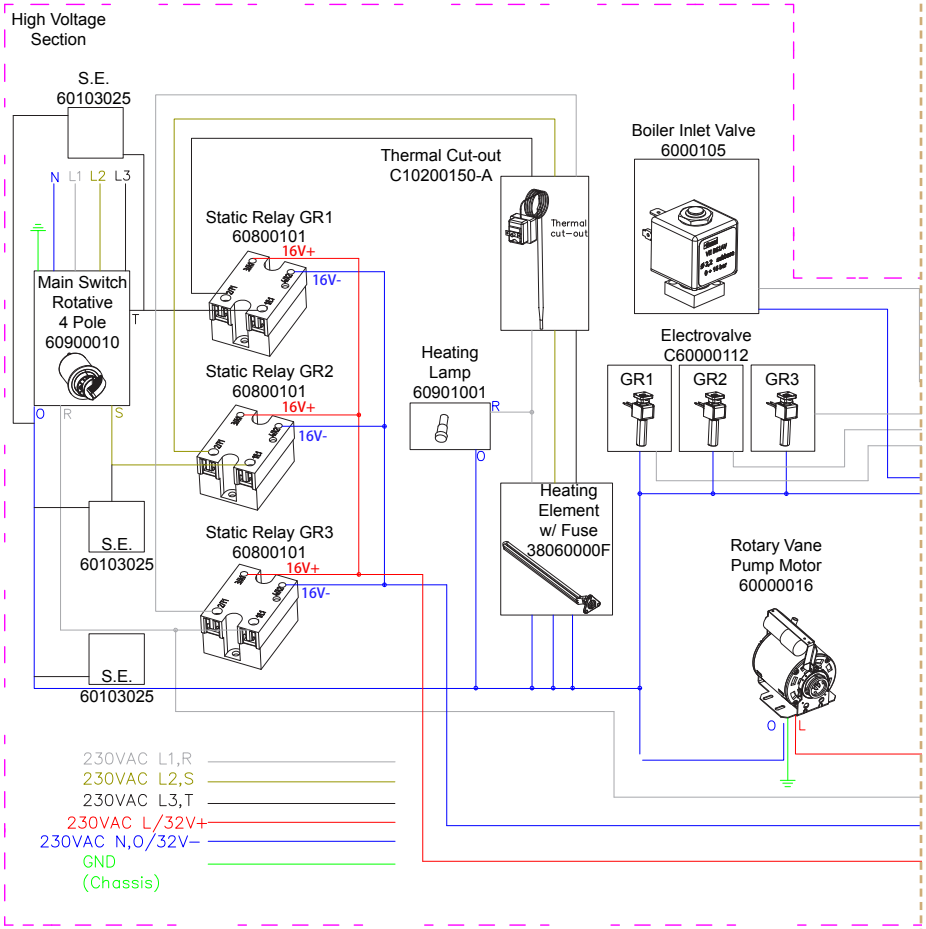
← Match line, see previous page.



ONYX 3GR

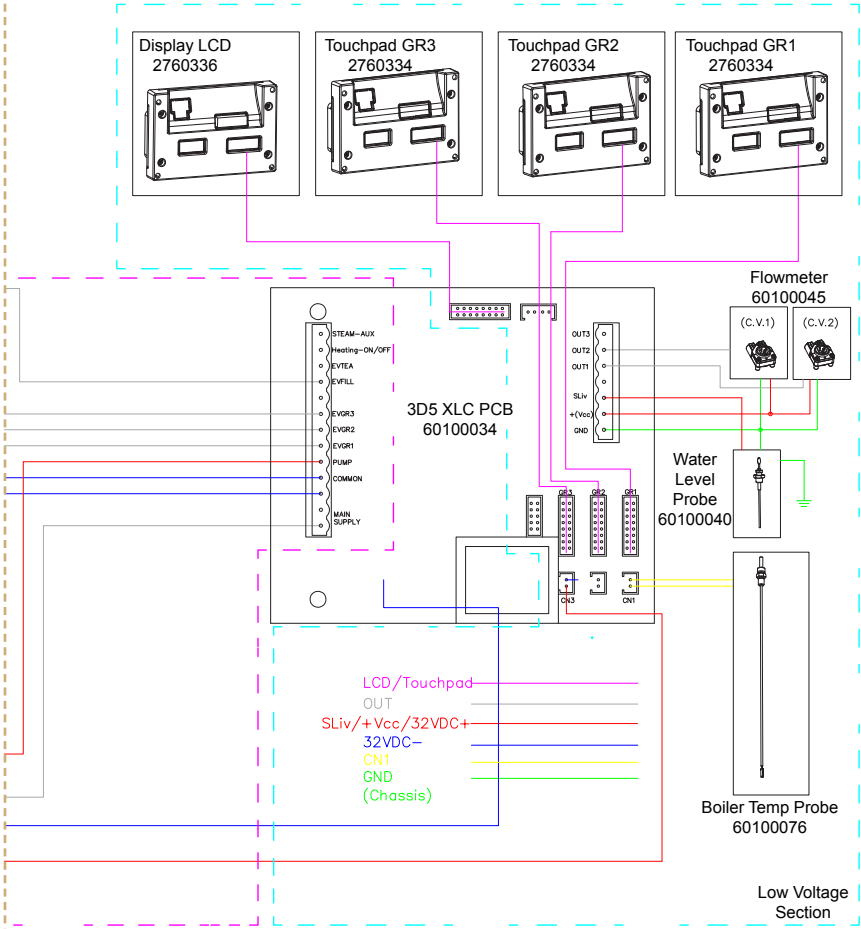
Power Rating:  
380-415V 3N~ 6350W

Match line, see next page. →



ONYX 3GR

← Match line, see previous page.



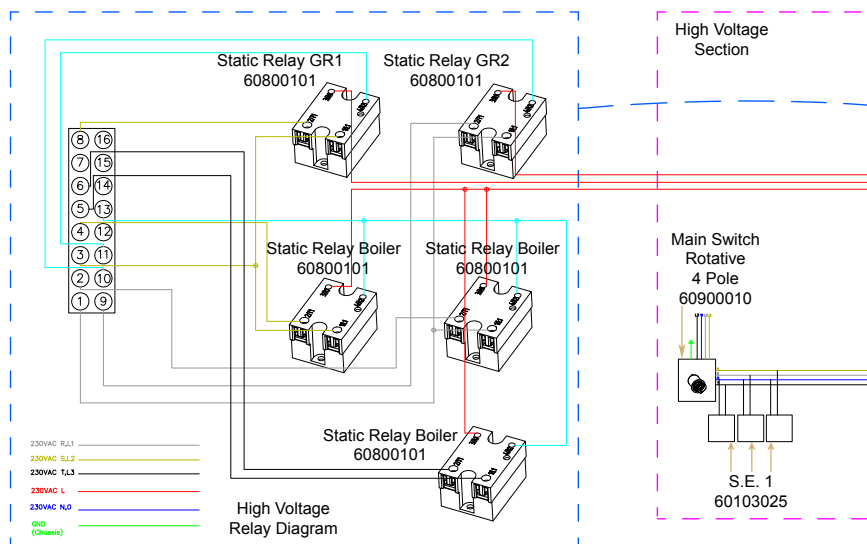
ONYX *Pro* 2GR

Power Rating:

With Turbo Steamer Option: 380-415V 3N~ 4860W

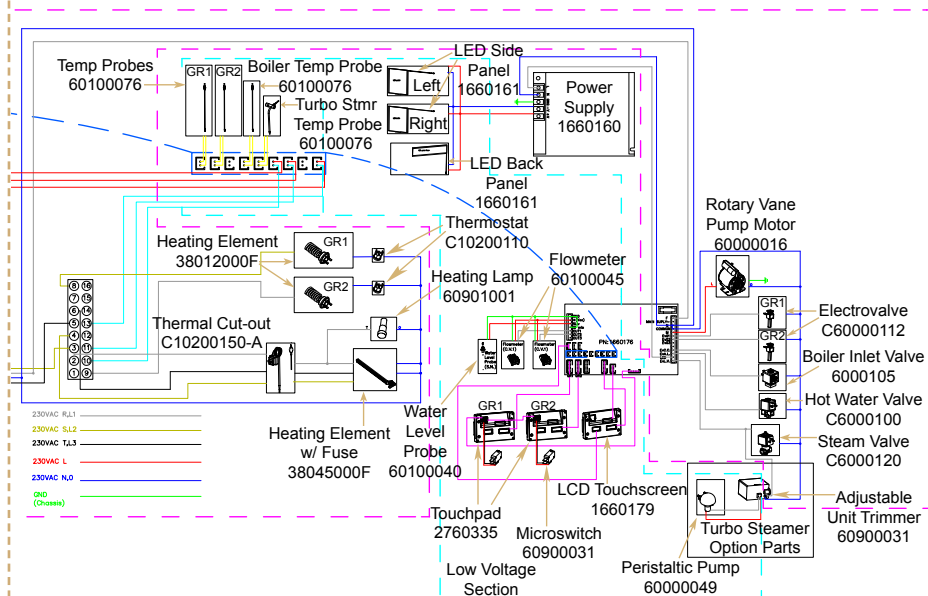
Without Turbo Steamer Option: 380-415V 3N~ 4840W

Match line, see next page. →



ONYX *Pro* 2GR

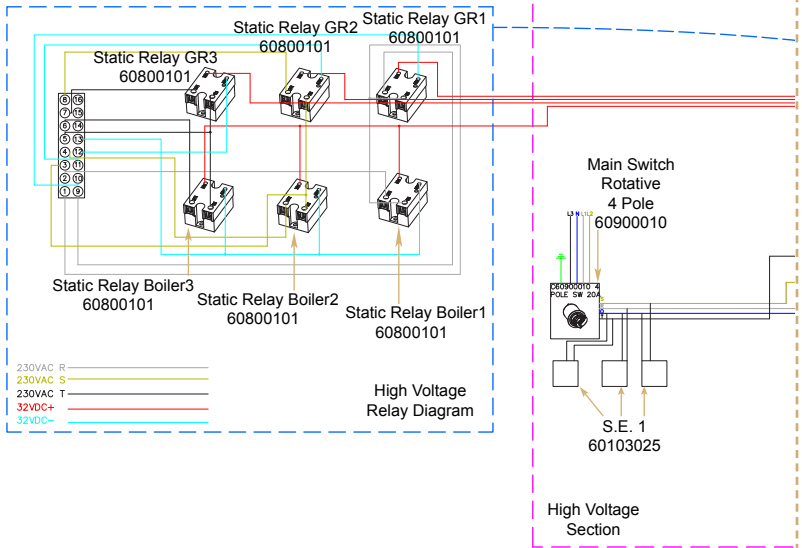
← Match line, see previous page.



ONYX *Pro* 3GR

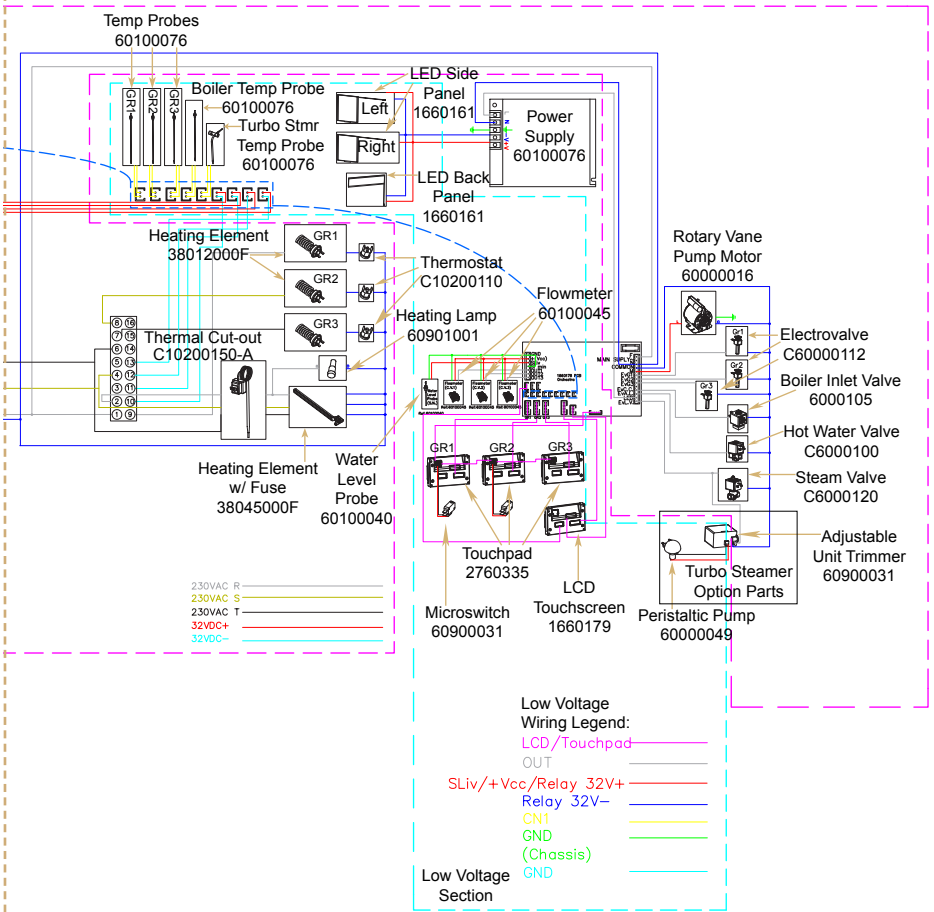
Power Rating:  
With Turbo Steamer Option: 380-415V 3N~ 6440W  
Without Turbo Steamer Option: 380-415V 3N~ 6420W

Match line, see next page. →



ONYX *Pro* 3GR

Match line, see previous page.



The following checks can be carried out by users once the machine has been turned off and disconnected from the power supply. For all other non-specified machine faults, disconnect the machine from the power supply and immediately contact authorised and qualified service personnel.

Problem	Possible cause	Solution
The machine does not start up	The plug is not correctly inserted into the power socket	Check that the plug is correctly inserted and that the power socket is operational.
	The circuit breaker and/or differential are disconnected.	Check that they are connected.
	The cable and/or plug are damaged.	Call service personnel to replace them.
The steam wand does not dispense steam	The steam wand is clogged by milk	Clean the wand and, if necessary, remove the nozzle and unclog it using a pin or needle.
Water is found underneath the machine	The drainage tube is blocked.	Clean the drainage tube.

#### Faults produced by limescale

Coffee not dispensed at right temperature:	Heat-exchanger outlet pipes clogged by limescale.
Brewing groups do not dispense water:	Water system is clogged by limescale.
90% of faults are due to limescaling inside the coffee machine (due to not softening the water). To avoid these faults, maintain the water softener regularly.	

#### Coffee-grinding problems

Coffee dispensing is very fast:	The coffee grinding is too coarse. Adjust the coffee-grinding setting.
Coffee dispensing is very slow:	The coffee grinding is too fine. Adjust the coffee-grinding setting.



For the warranty to be valid the conditions for maintenance must have been followed according to our instructions, proper precaution has been made and warranty claim been issued without delay.

The affected equipment may not be used during awaiting service if there is any risk that the damage or defect would worsen.

The warranty will not cover consumption supplies such as glassware, normal maintenance such as cleaning of filters, contaminations in water, lime, incorrect voltages, pressure or adjustment of water amounts.

The warranty will not cover damages of defects caused by incorrect handling and operation of the appliance.

## **FOR SERVICE**

**Please contact your dealer**

**Your Dealer**

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