

Tango Installation & Programming

TANGO



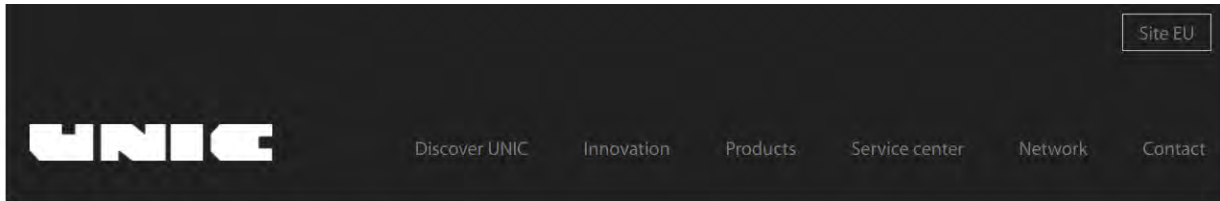
ace



ST



ST duo



Homepage > Service center > Technical center

TECHNICAL CENTER

TANGO

PDF	PDF	PDF	PDF	PDF	PDF
Tango S/UNO Service & PM Guide	UNO Spare Parts	SOLO-S Spare Parts	DUO-S Spare Parts	ACE Spare Parts	SOLO-ST/P Spare Parts
PDF	PDF	PDF	PDF		
ACE Technical Manual	ST/P Technical Manual	Service Data Fillable Form	Tango ST/ACE Service & PM Guide		



Versions

Operation

Installation

Start-up

Versions

TANGO

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Plastic Touchscreen
65mm Grinder Burrs

ST



Glass Touchscreen
80mm Grinder Burrs

ST duo



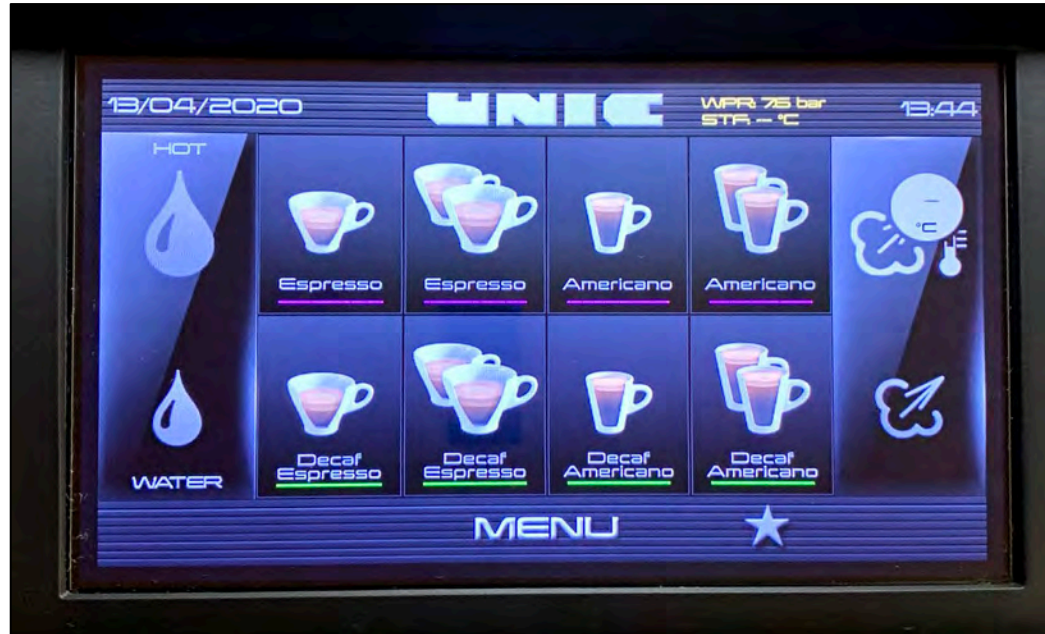
ST with 2 Brewing Groups

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1 & 2 Step Versions

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2 Step with Steam wand

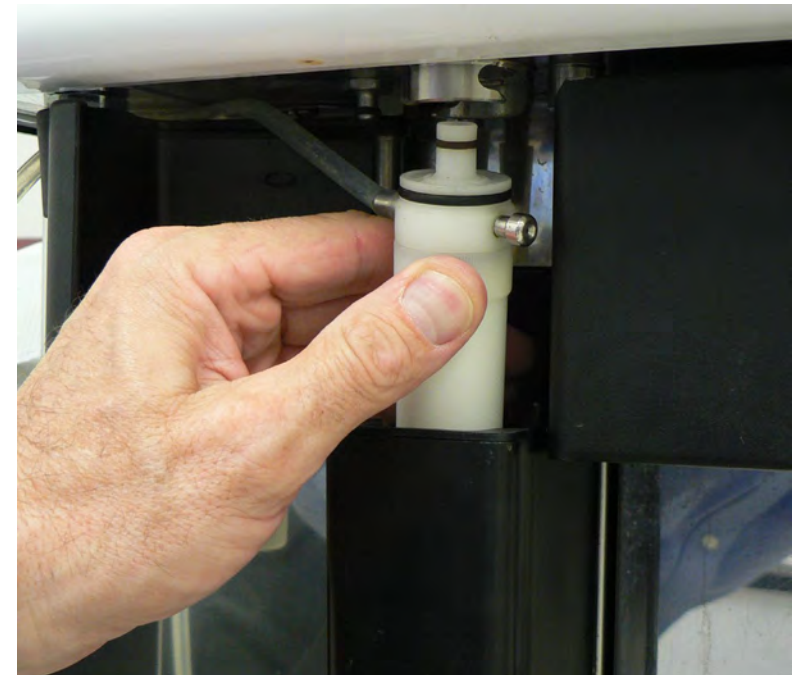


1 Step Milk Foamer with Steam wand

Venturi Milk System

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All External parts, no milk is ever inside the machine

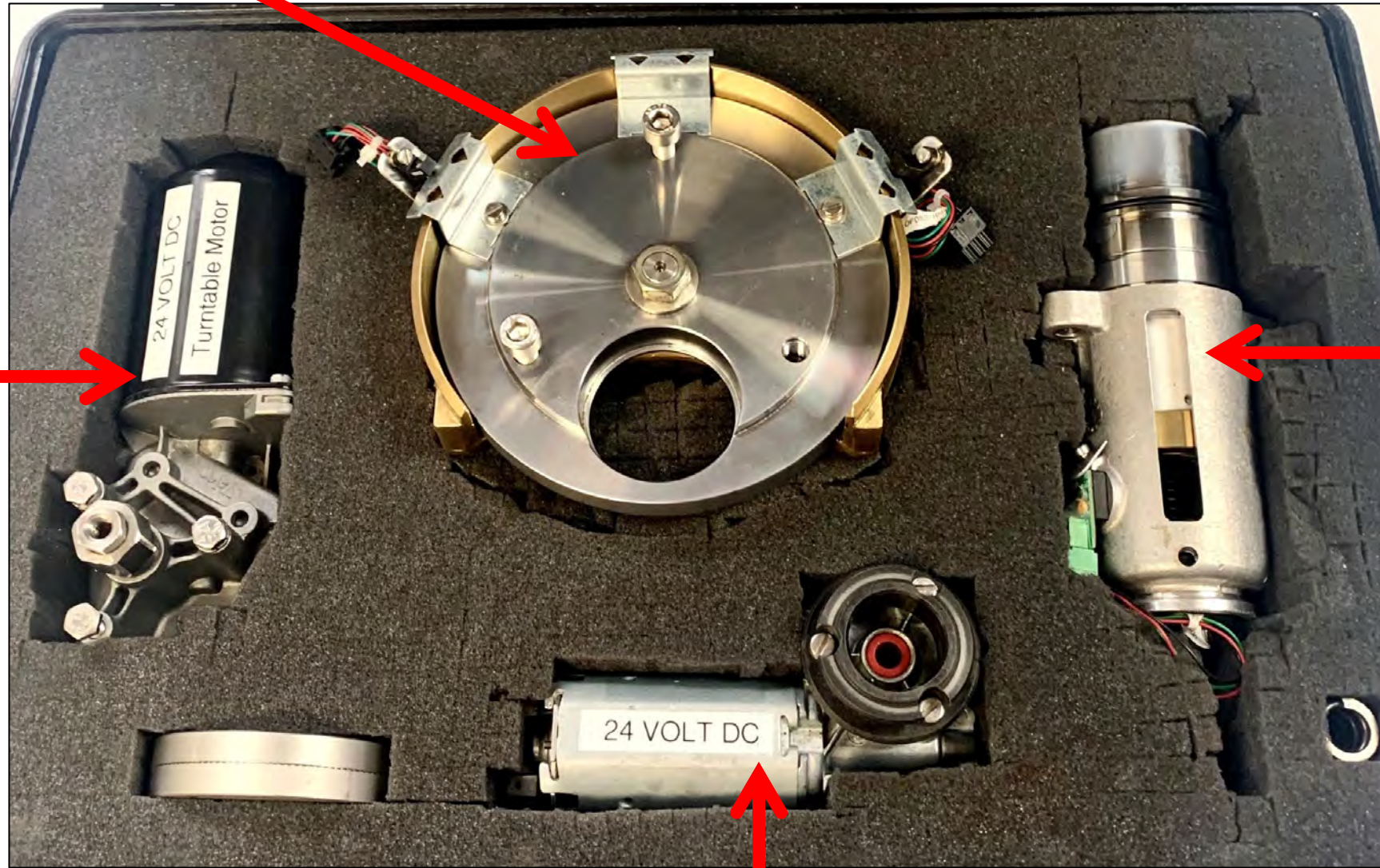


Operation

Turntable

Turntable Motor

Brewing Piston



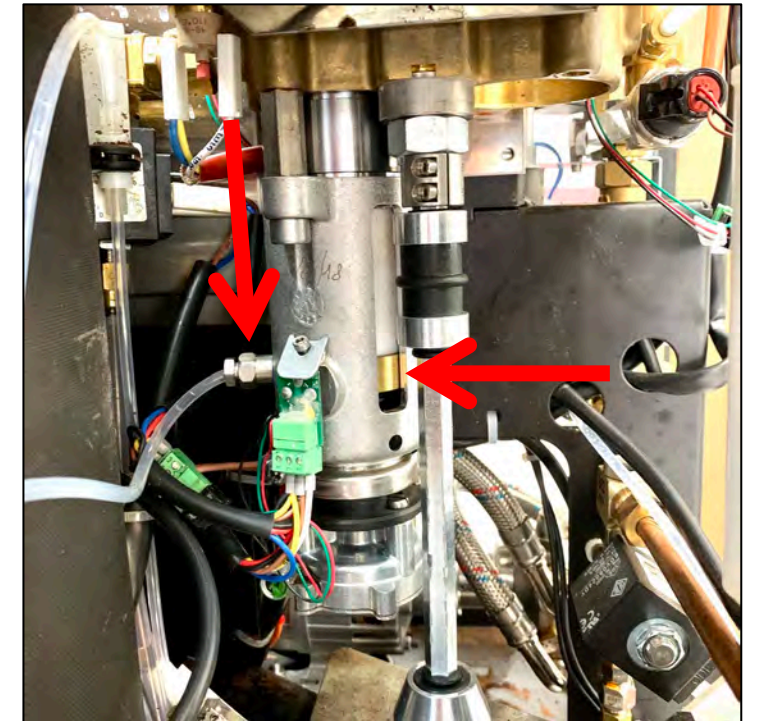
Piston Drive Motor

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Drink Cycle 1

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Turntable Home position

Turntable opening rotates over Piston

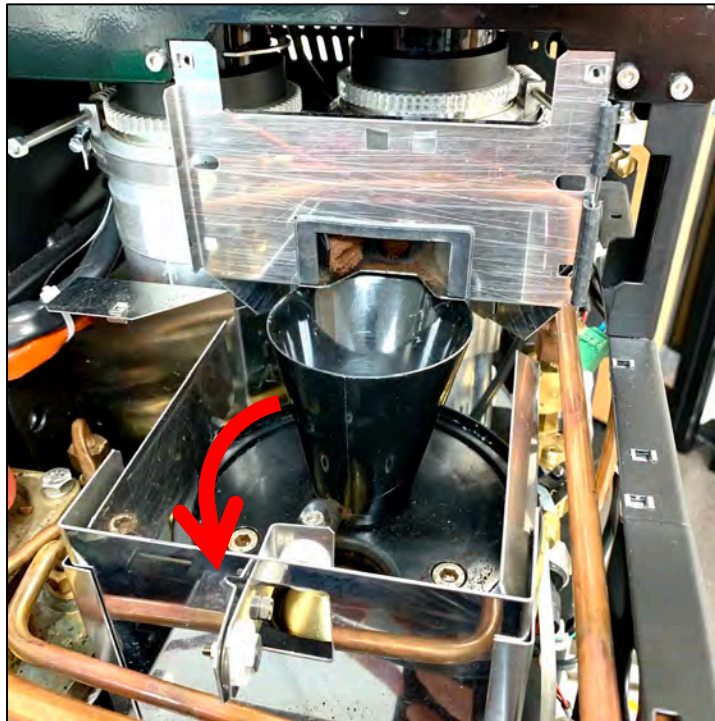
Piston Lowers

Drink Cycle 2

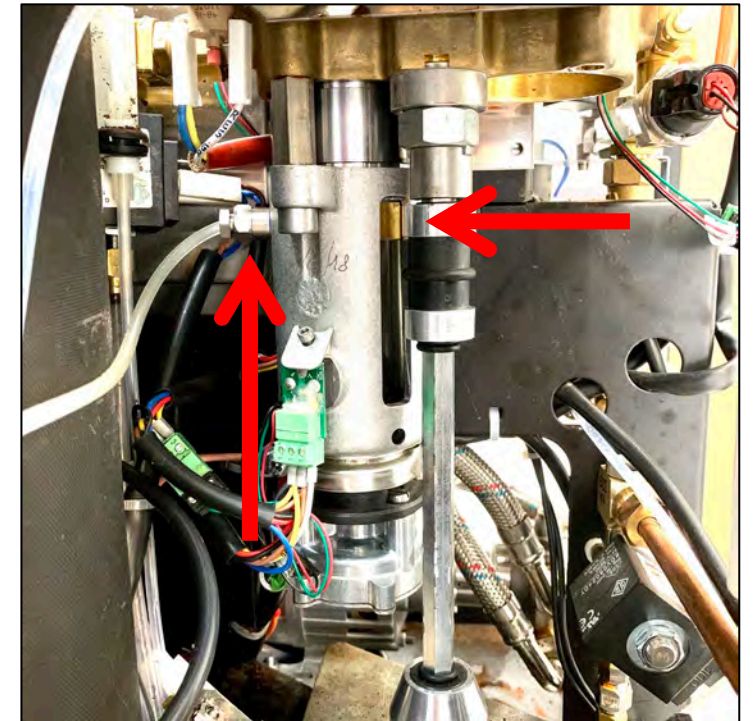
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Coffee Grinds into Piston



Turntable rotates to Closed Position



Piston Raised to Tamp Coffee

Drink Cycle 3

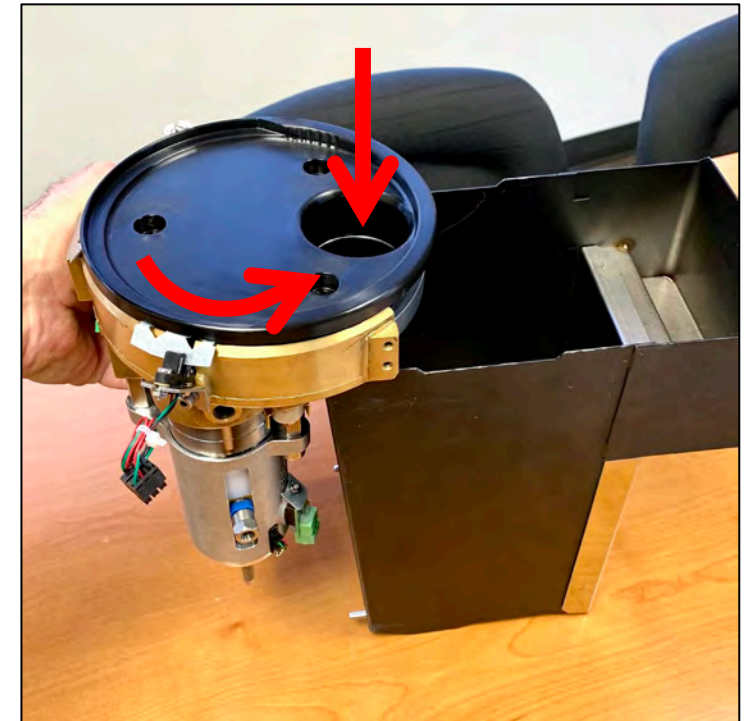
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Brew Valve send Water
Through Coffee



Turntable rotates to Open Position
Piston Raises Puck
Turntable Rotates to Front



Puck Fall into Drawer
Assisted by Knock-out Bell

Automatic Milk Steaming:

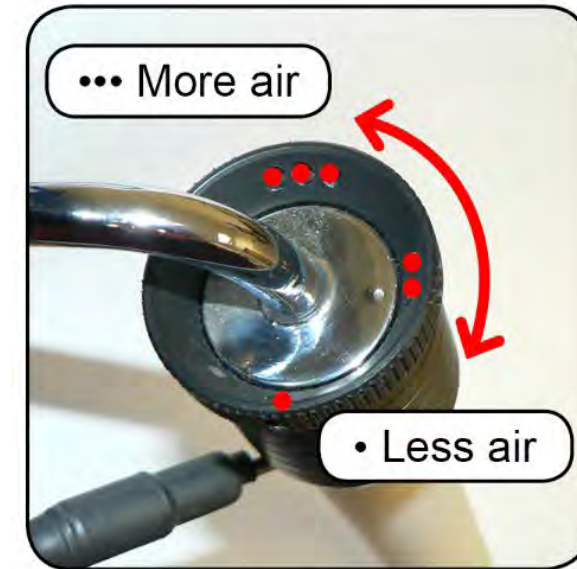
More air creates lighter foam with larger bubbles
Less air creates denser foam with smaller bubbles



Steam Wand should be centered in the pitcher
Tip must be at least 1" below surface of milk



Press SteamAir Button
Steam will automatically shut OFF at the pre-set temperature



Turn the adjusting collar to vary the amount of air in the milk

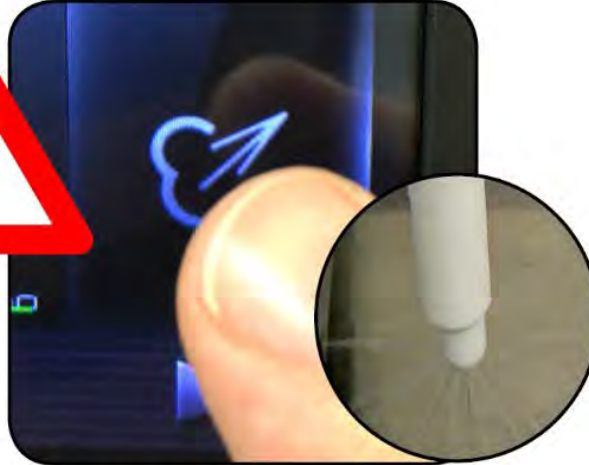
SteamAir

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The SteamAir wand MUST be wiped and purged after each use to prevent milk build-up



Remove the pitcher and wipe the wand and tip with a clean, damp towel.



Press the Steam or the SteamAir Button ON then OFF to purge

*Steam or Water leaking from the top of the wand ?
No Foam in milk?*



*Steam tip is clogged with milk
See next page for cleaning instructions*

Remove and clean the steam tip daily!



Waster Drawer

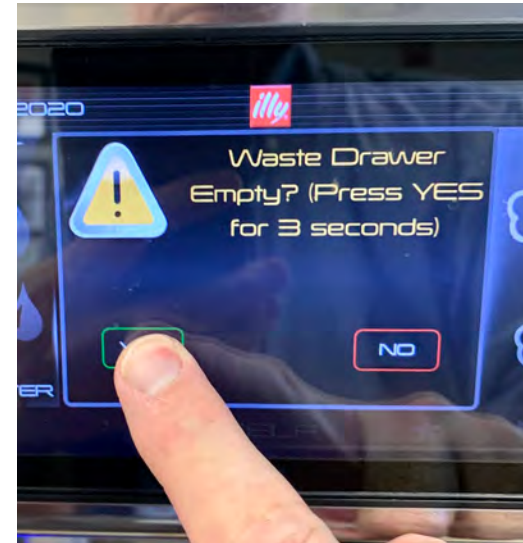
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Waste Drawer Full
Holds up to 90 Pucks
Best Set at 45



Empty Drawer



Confirm Empty Message
Must Hold for 3 seconds



20 Second
Brew Piston &
Spout Rinse

Bean Hopper Empty

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Early Warning
Still able to make drinks



After 6 more Drinks
Hopper must be Re-filled

Hopper Sensors OFF



Hopper Sensors can be disabled
Water dispenses when hoppers
empty

Bean Hopper Empty

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Make Sure Hoppers are Open
Right & Forward



Stir beans
Oily Beans Don't Feed Evenly



Optical sensor

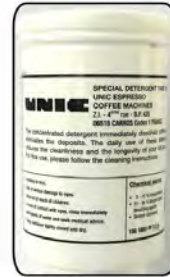
Coffee Cleaning



Clean coffee with tablet everyday

The Tango has an advanced cleaning system that requires specially formulated tablets

Use only UNIC cleaning tablets.
UNIC #92060 100 tablets/jar



UNIC #92060



Remove Waste Drawer



Unscrew Cleaning Cover



Insert 1 Unic Tablet
2 Tablets for Duo Version



Replace Cleaning Cover
Do Not Over-tighten!



Replace Drawer



Confirm Drawer Empty
Press YES for 3 seconds



Cleaning Starts Automatically
The cycle lasts
10 minutes

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SteamAir Cleaning

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Clean the Steam Tip everyday or if steam leaks from the top of the wand

The SteamAir Wand may be removed for cleaning if it has heavy milk build-up

Switch the machine OFF before removing the Wand!



NEVER soak in cleaner!



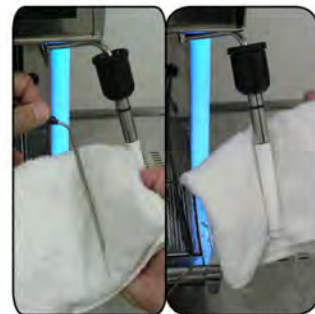
Uncrew Steam Tip



Remove Outer wand



Remove Temperature Probe

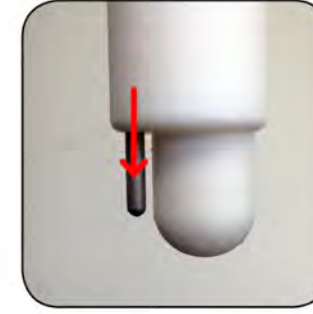


Wipe Temperature Probe and Inner wand



Clean Outer Wand and Steam Tip in sink

Make sure steam tip holes are clear!



Make sure the probe tip is pushed all the way down when reassembling

LC Milk

Venturi Daily

Cleaning

Shipped with 1 or 2 additional foamers for continuous operation



Remove the magnetically mounted spout



Unlock the Foamer by twisting it to the right



Remove the Foamer by pulling down



Soak the foamer parts in Rinsa cleaner
Follow label mixing directions

Clean the nozzles with Unic cleaning Brush



See other side for cleaning details!

LC Milk Venturi Daily Cleaning



UNIC #12RAF32



Unscrew the Foamer
Cover Tube



Pull out the Nozzle



Push the Insert out of
the Center Tube



Soak the parts in
Rinza solution for 5
minutes



Use the brush to clean
the Nozzle



Also clean the Main
Milk Jet



Rinse all parts
before re-assembling



Rinse the Spout

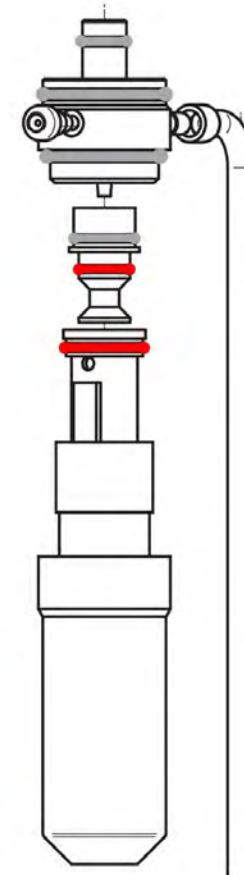


Re-assemble and
re-install the Foamer
and Spout



Every
Day!

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Installation

Remove from pallet & Install legs



Install Allen screw with the
socket facing down.
Easier to remove in the future!

Water, Power, Drain

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Water Specifications

Warranty for scale problems not valid unless water treatment installed

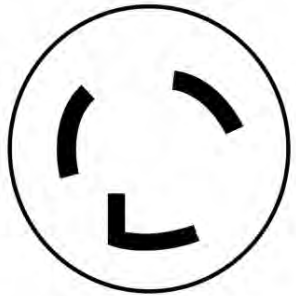


Water:	Minimum	Maximum
<i>Pressure</i>	<i>45 PSI</i>	<i>100 PSI</i>
<i>Flow Rate</i>	<i>1 Gallon/ Minute</i>	
TDS	50 ppm	125 ppm
Total Hardness	3 GPG	5 GPG
PH	6.5	7.5
Free Chlorine	na	0.5 ppm
Total Chlorine	na	1 ppm

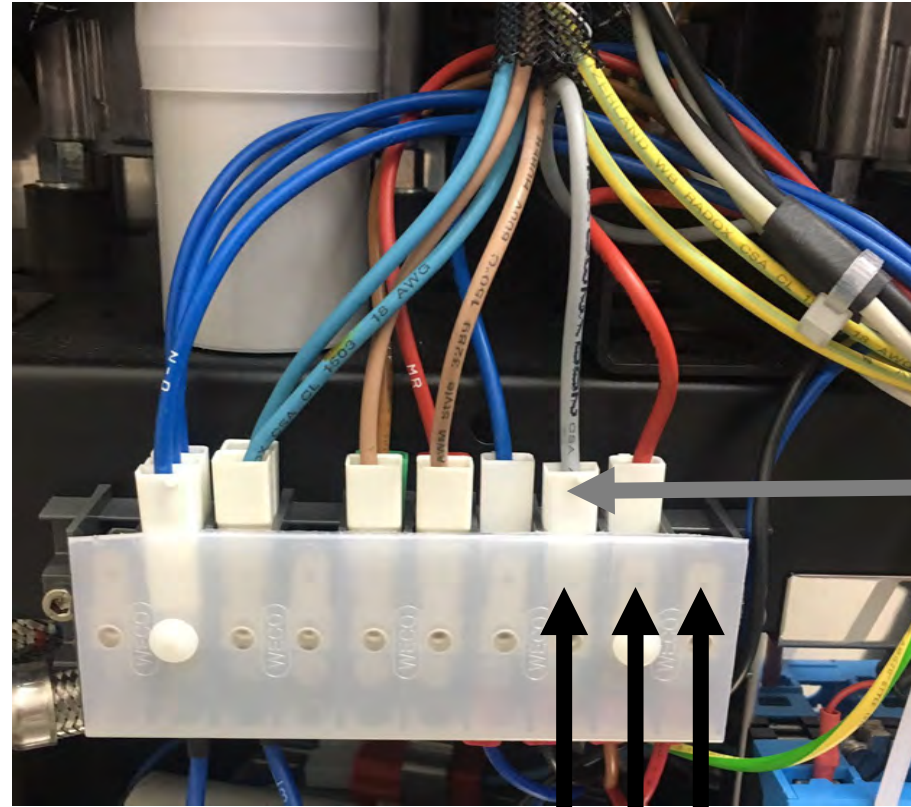
Power Requirements

Set Voltage Jumper on Transformer

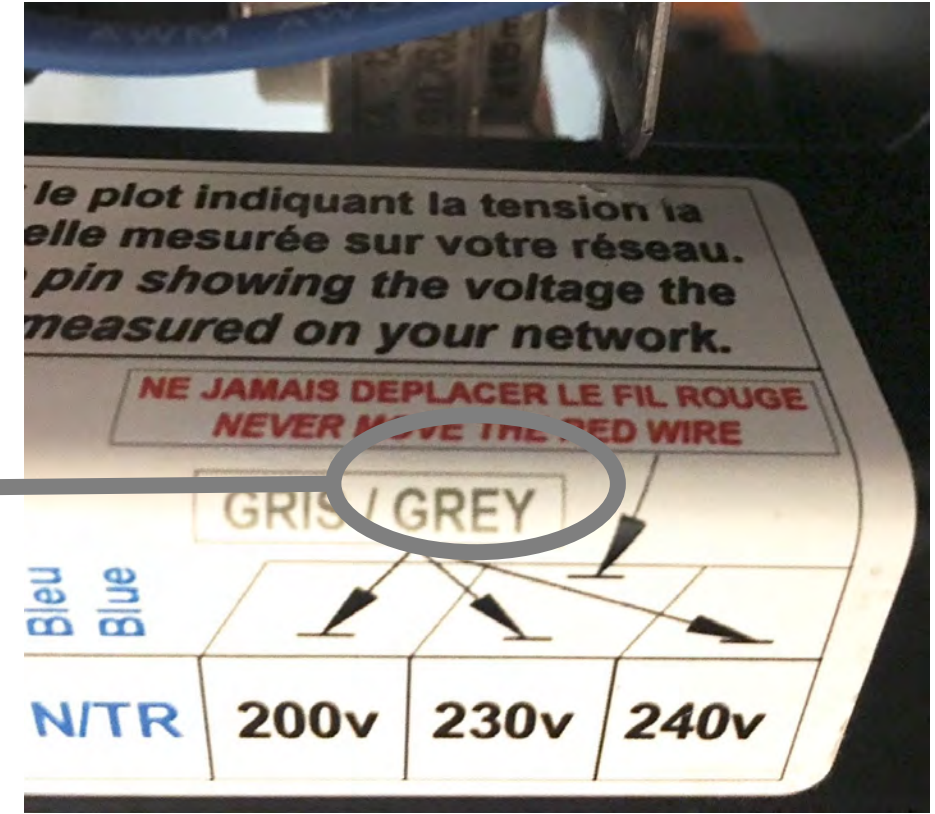
220 Volts
30 Amps



NEMA L6-30



200 Volts
230 Volts
240 Volts



Move Grey wire to the terminal that best matches the incoming voltage

Drain Hookup

Back pressure in the drain line will cause problems with the brewing system

Suitable drain must be within 6' of machine

Supplied with a wire reinforced drain line 6' long

Use the provided shims on the rear legs if needed



Tango must be level or angled slightly forward!

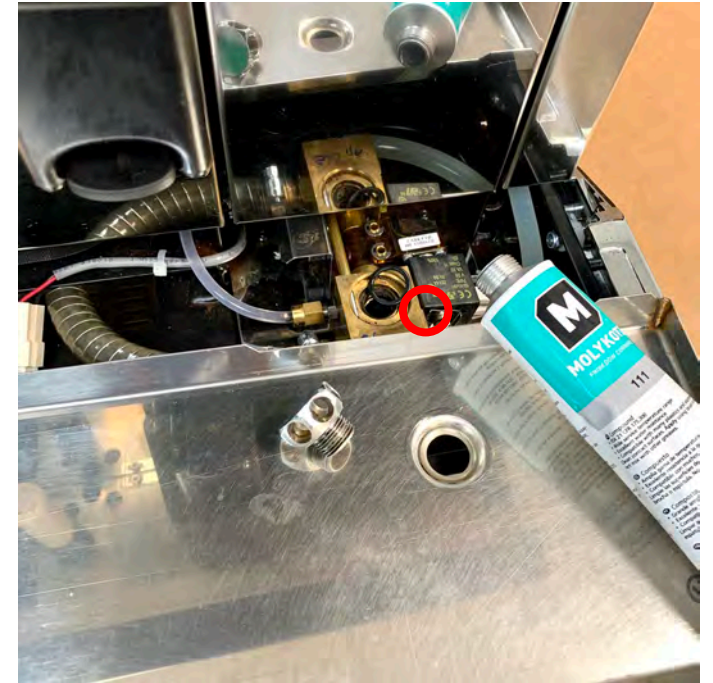


The Drain Line must run continuously downward with no "trap"

Drain Hookup

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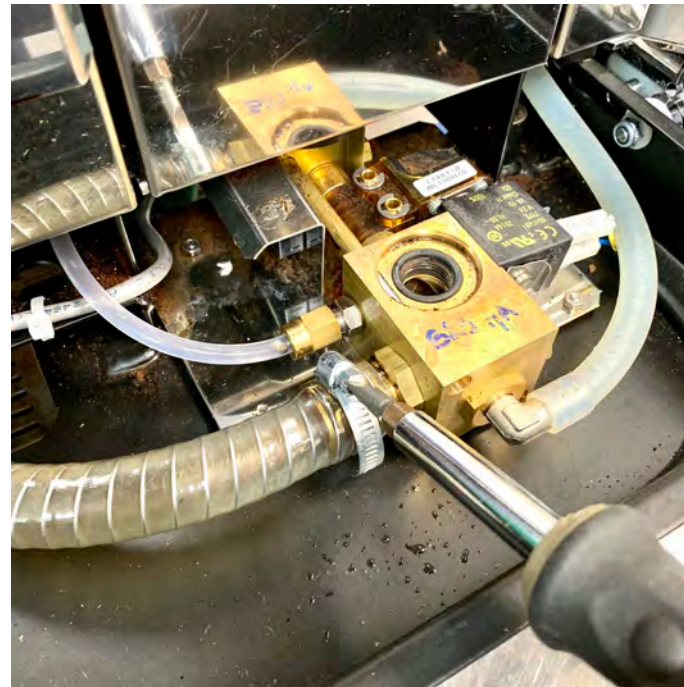
Remove Driptray



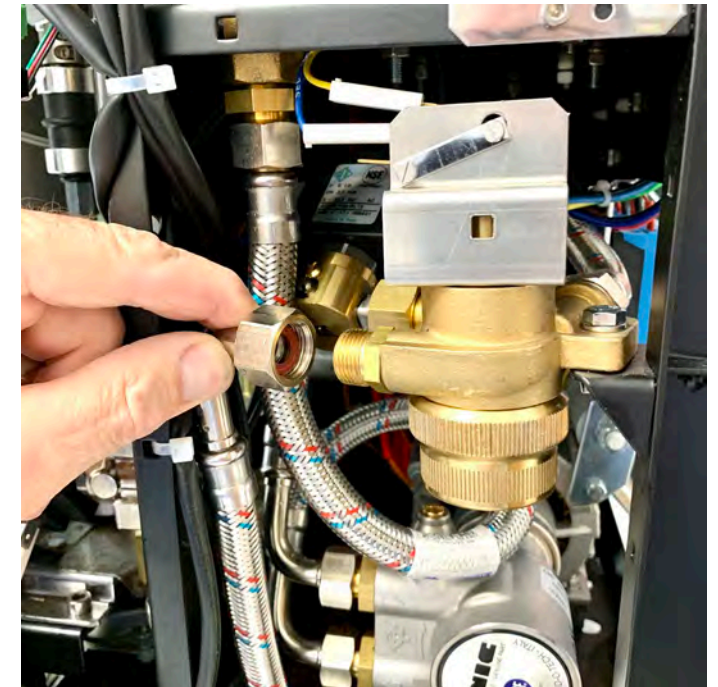
Drain line & water hookup

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Expand drain line



Attach water line with fiber washer



Start-up

Start-up Screen

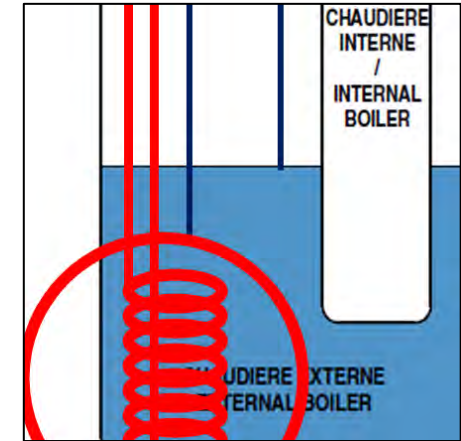
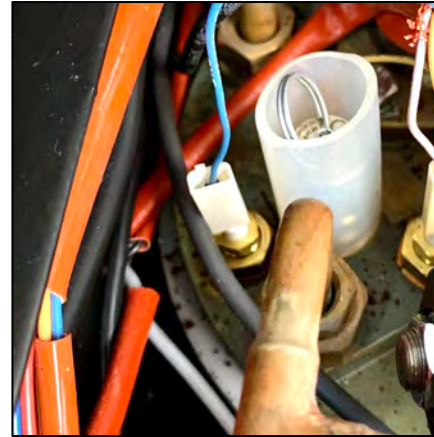


ON – OFF Switch



Heating Safeties

Electronic safeties reduce the possibility of damage to the heating elements due to lack of water



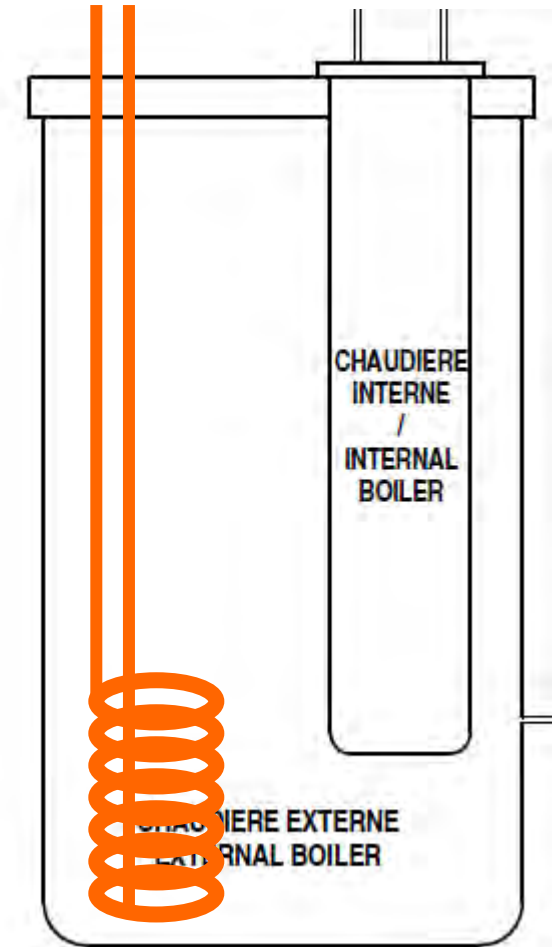
A new machine may be started with empty boilers!

Boiler Filling & Heating Safety

1. Machine must have supply Water Pressure.

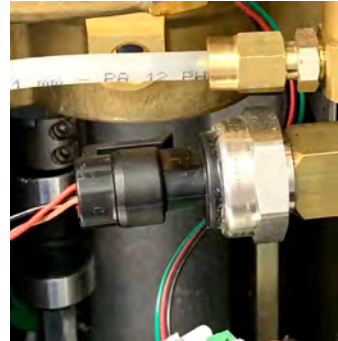


TANGO

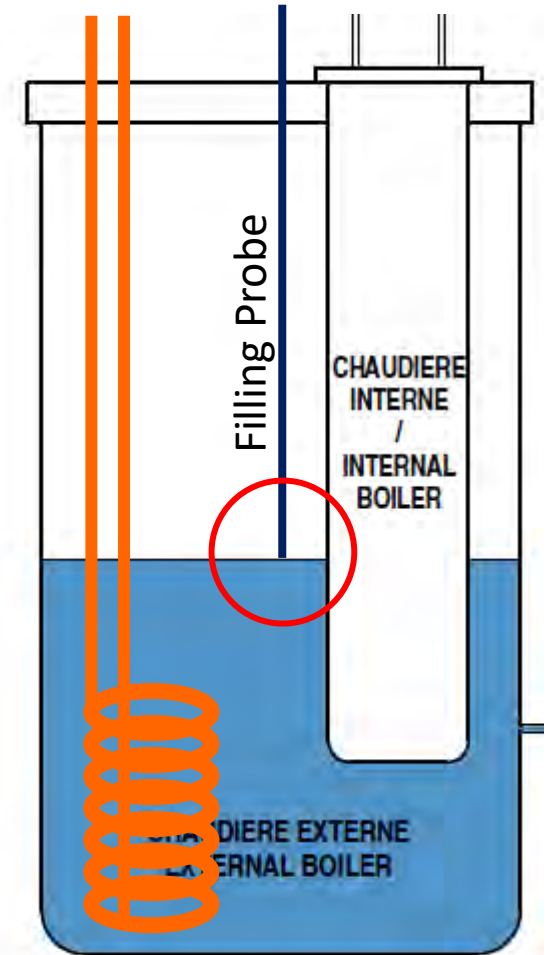


Boiler Filling & Heating Safety

1. Machine must have supply Water Pressure.
2. Boiler Filling Probe must be wet.

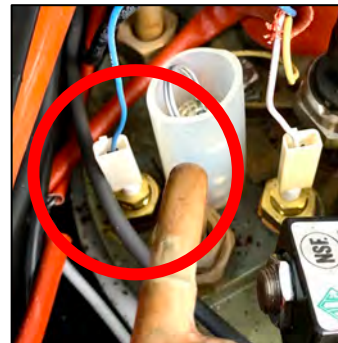
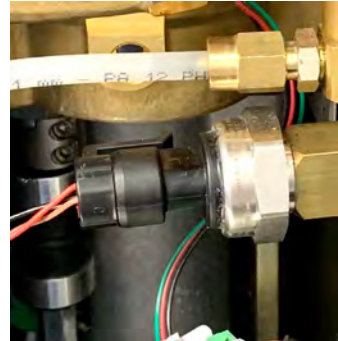


TANGO

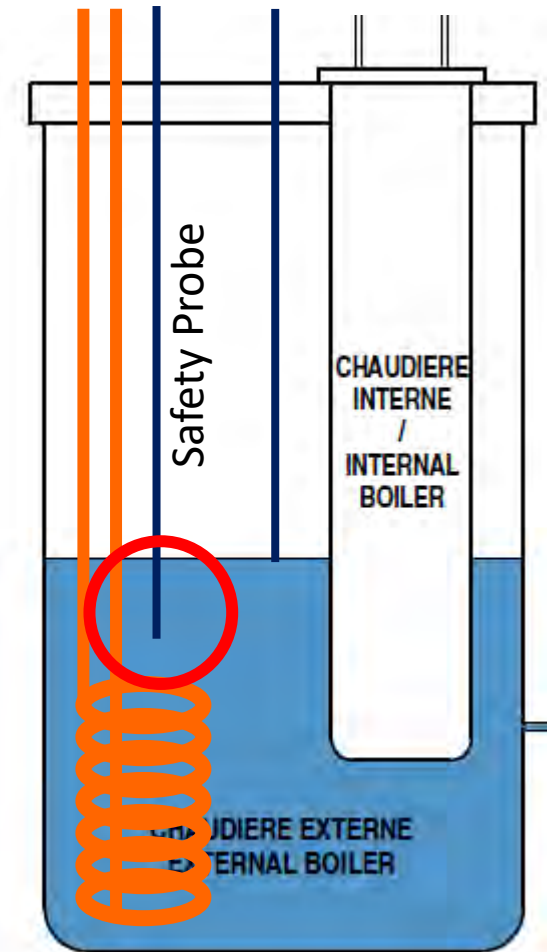


Boiler Filling & Heating Safety

1. Machine must have supply Water Pressure.
2. Boiler Filling Probe must be wet.
3. Element Safety probe must be wet.

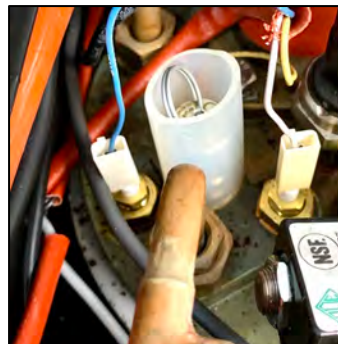
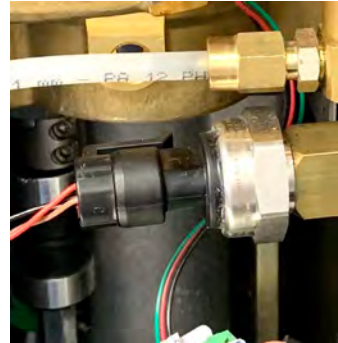


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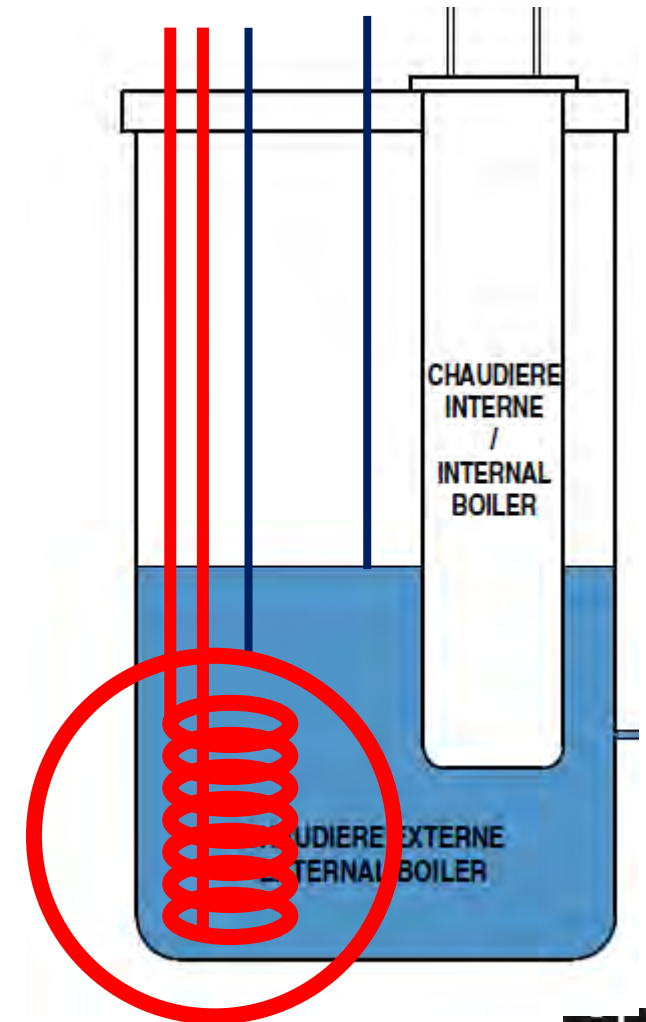


Boiler Filling & Heating Safety

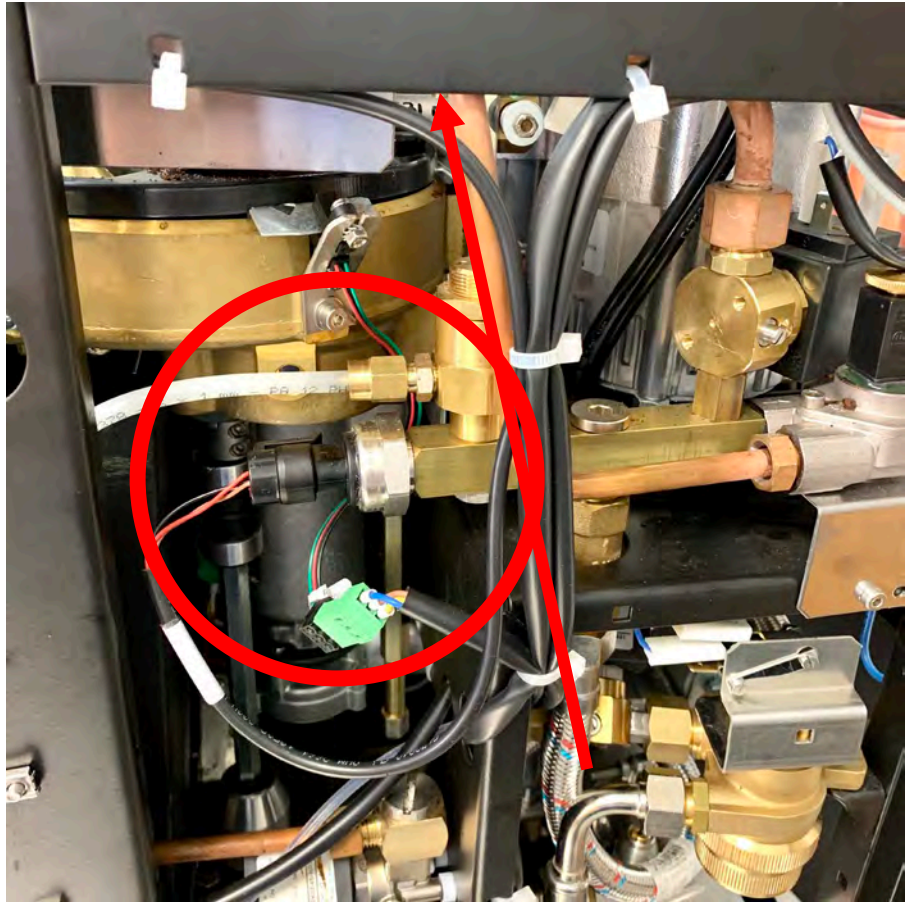
1. Machine must have supply Water Pressure.
2. Boiler Filling Probe must be wet.
3. Element Safety probe must be wet.
4. Power applied to Element



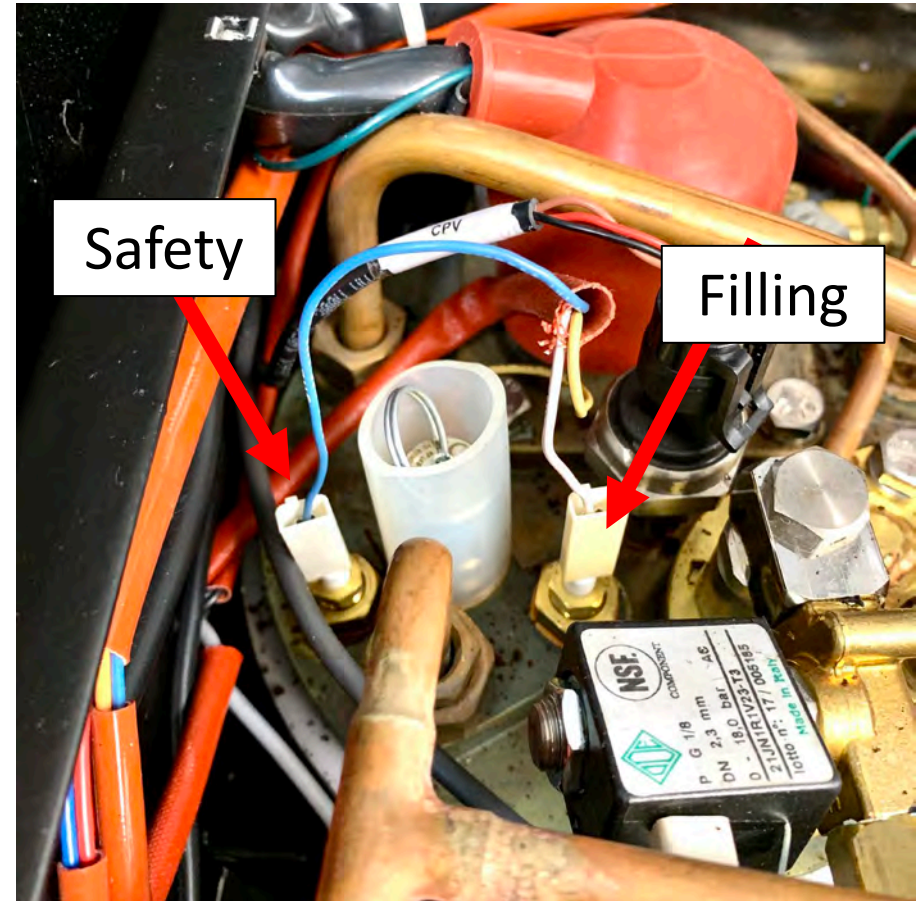
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Boiler Sensor & Probes

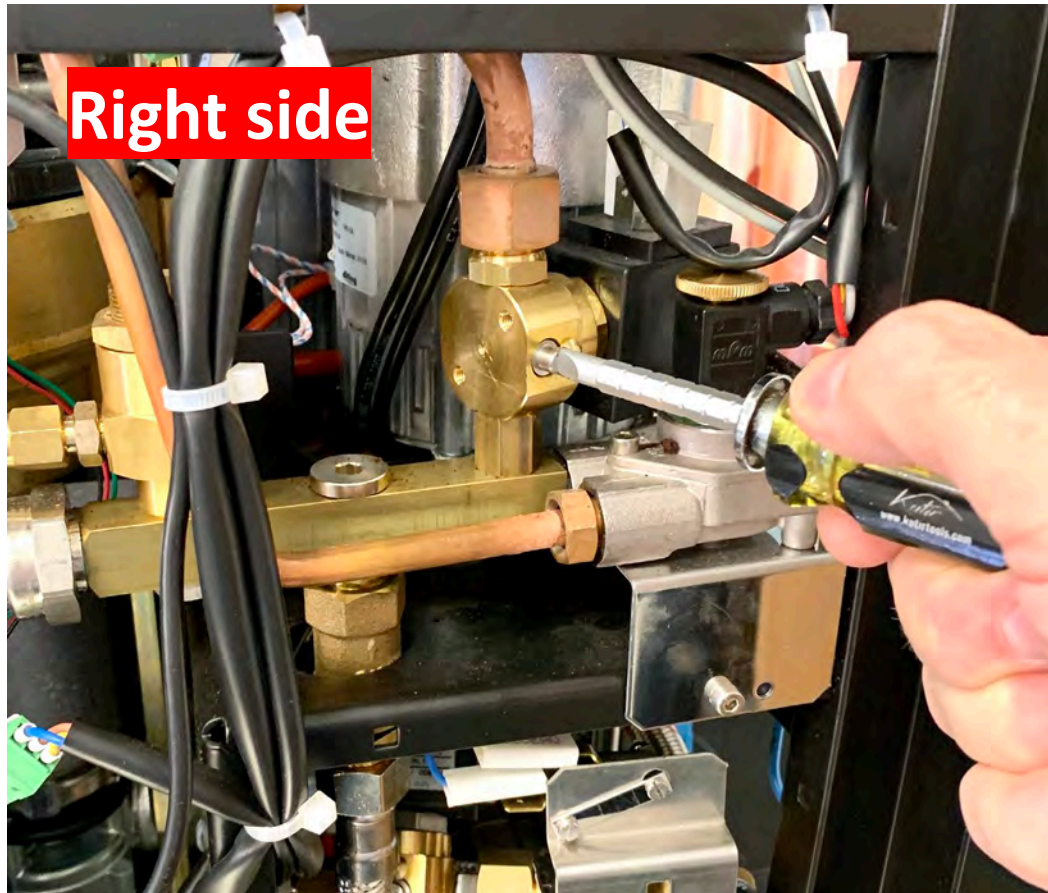


Water Pressure Sensor
Right side of machine



Safety & Filling probes
Top of boiler

Adjust Filling Valve for faster boiler filling



Open 3 full turns from closed

Overuse of Hot water Wand:
It is possible to take hot water out of the boiler faster than it can refill

Open screw on filling valve 3 turns for faster refilling

Steam Boiler Heating

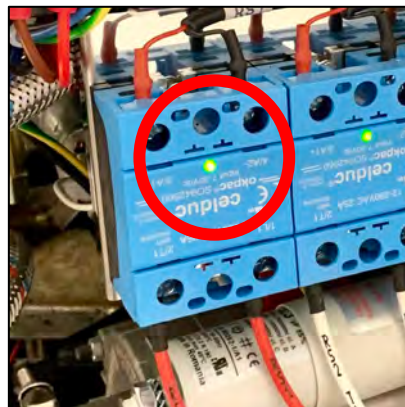


Steam Boiler Heater 0.141 bar
Coffee Group 40.1 C
WARMING UP

Steam Boiler is usually set to 1.1 bar



Controlled by Pressure Sensor (Transducer)



Solid State Relay
Low Voltage signal



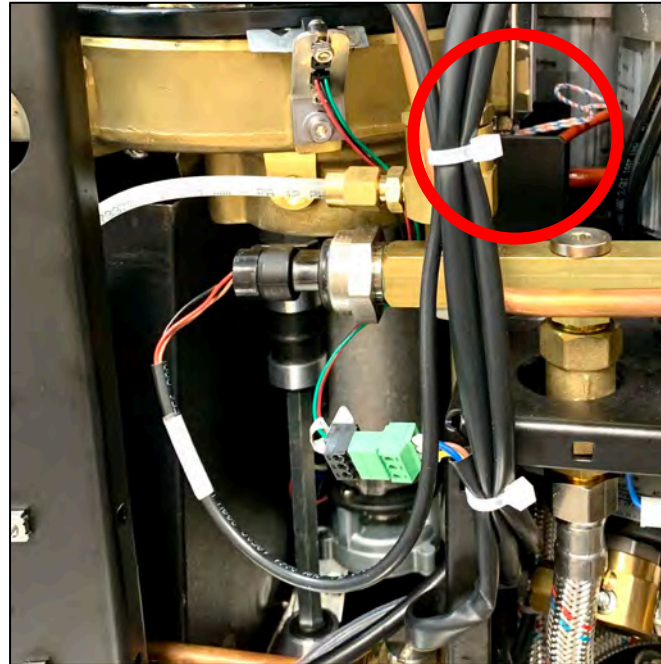
Check for power through all 3 elements
More important for older machines

Brew Group Heating

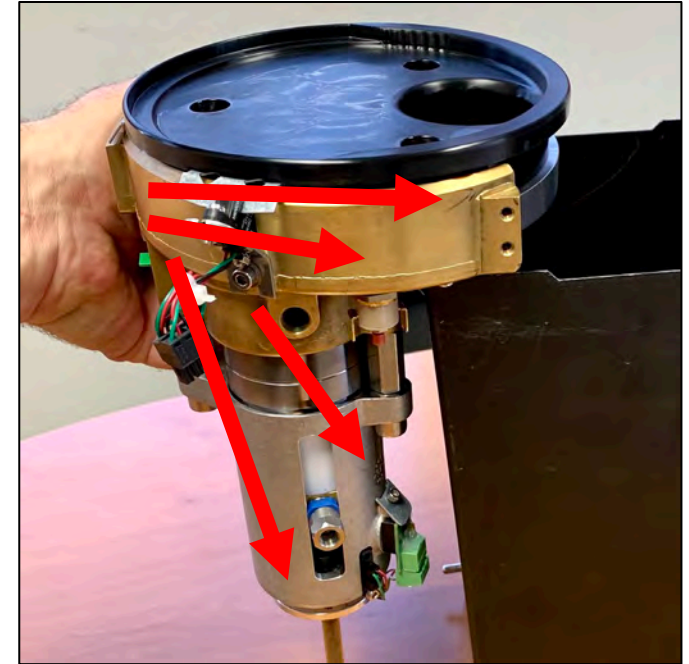
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Steam Boiler Heater 0.141 bar
Coffee Group 40.1 C
WARMING UP



200 Watt
Group Heating Element



Group starts getting warm



Group Temperature is usually set to 94C (201F)

Brew Group Heating Element



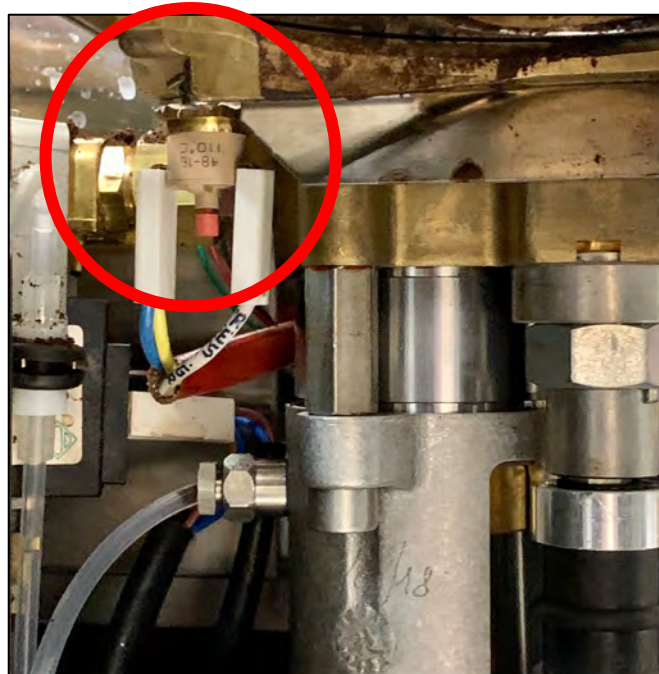
Heating Element



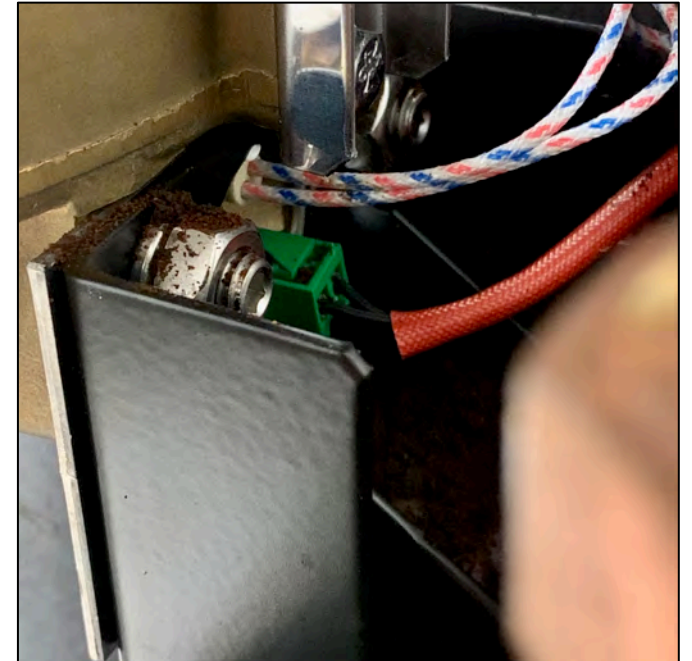
High Limit Klixon



Temperature Probe



High Limit Klixon on
underside of turntable



Heating Element &
Temperature Probe at rear
of turntable

These components rarely need service!

Automatic Boiler Venting on Startup

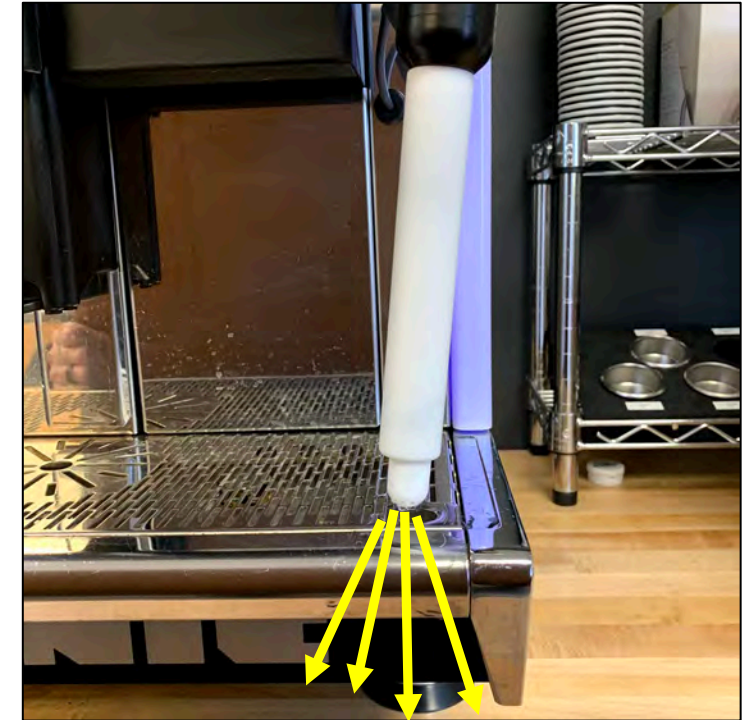
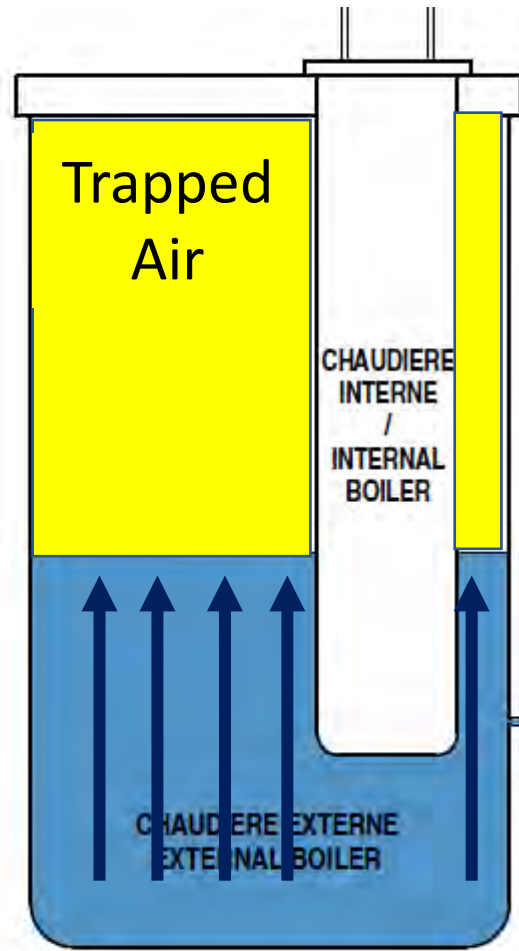
Purges air from boiler



Steam Boiler Heater 0.250 bar
Coffee Group 94. C
WARMING UP

The boiler is automatically vented as soon as some pressure starts to build up

This purges any trapped air out of the boiler

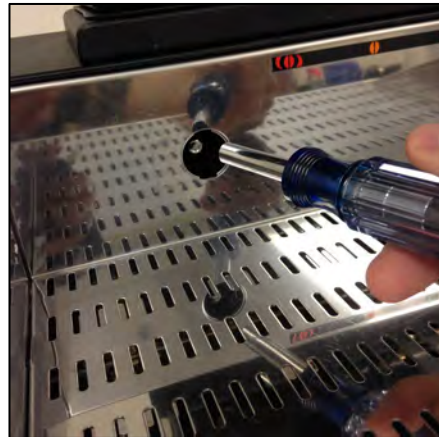


Whoosh!!!!

Calibration

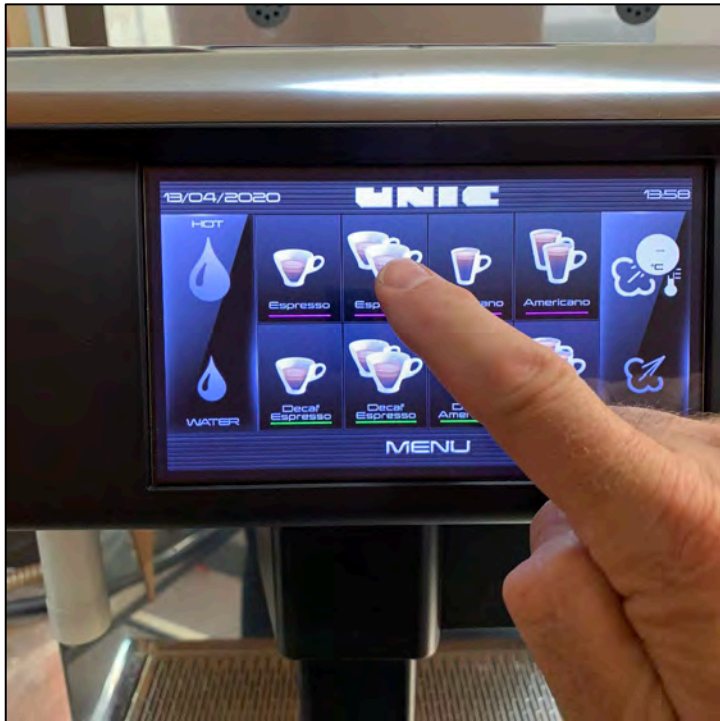
Calibration

1. Set pump pressure to 9 bar
2. Adjust grinders fine/coarse for good extraction time
3. Calibrate grinders with a scale to ensure an accurate grinder dose



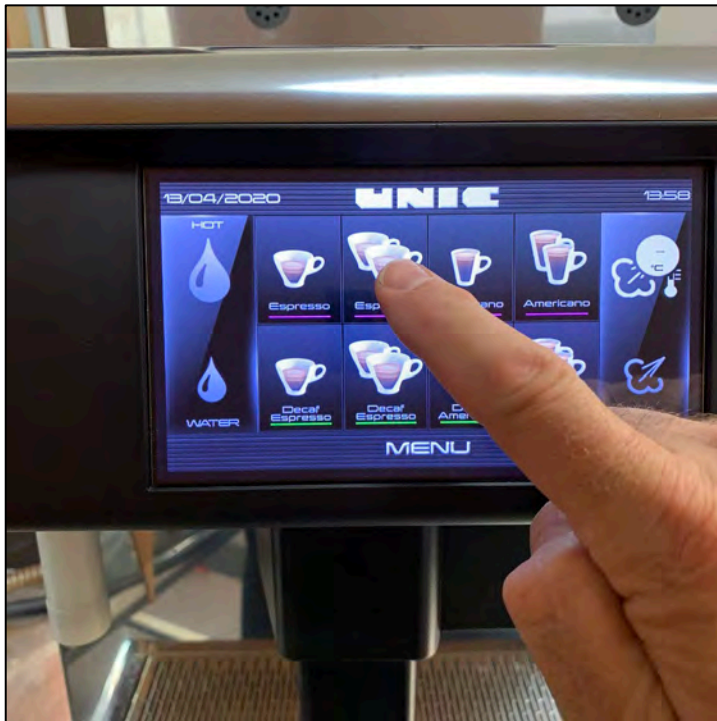
Customer Dispensing Screen

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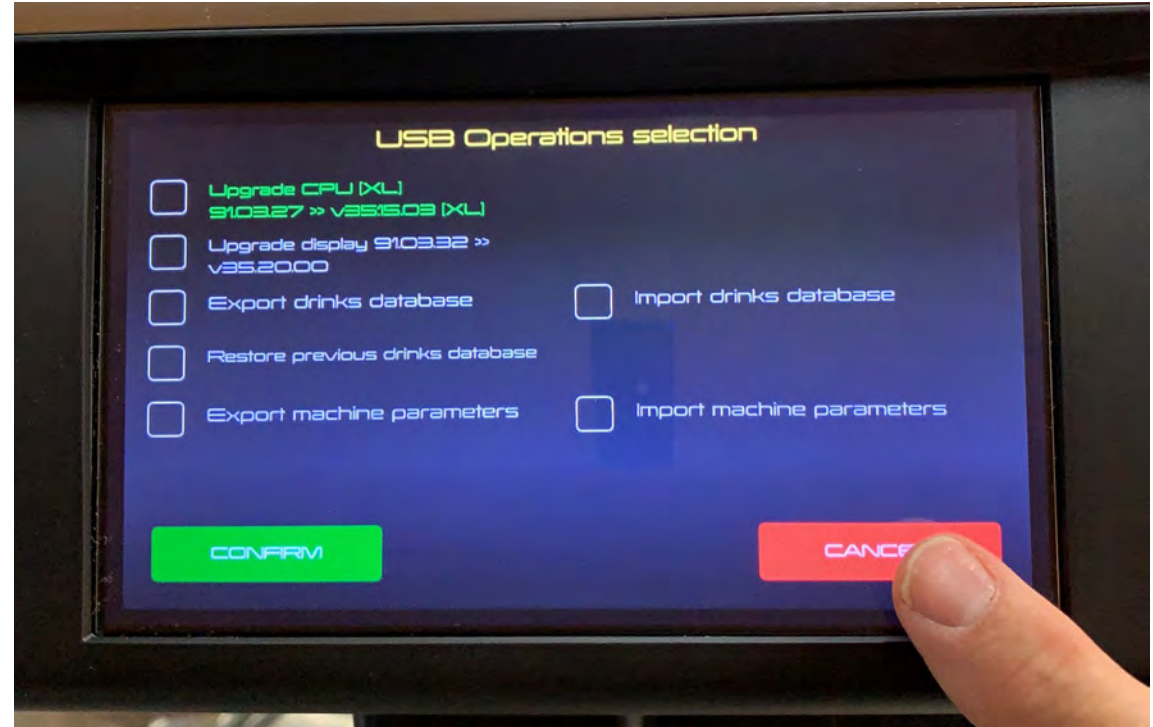
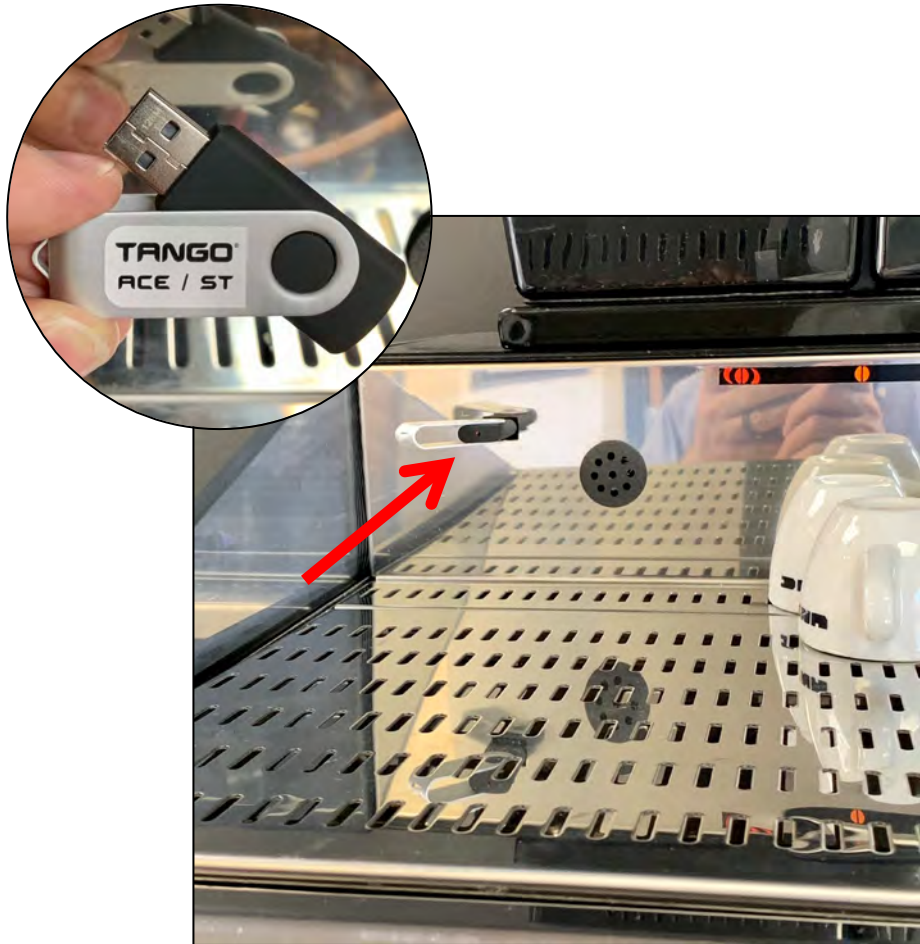
Dispensing Screen Technical Information

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Information about the drink is displayed w the USB inserted

USB Service Key

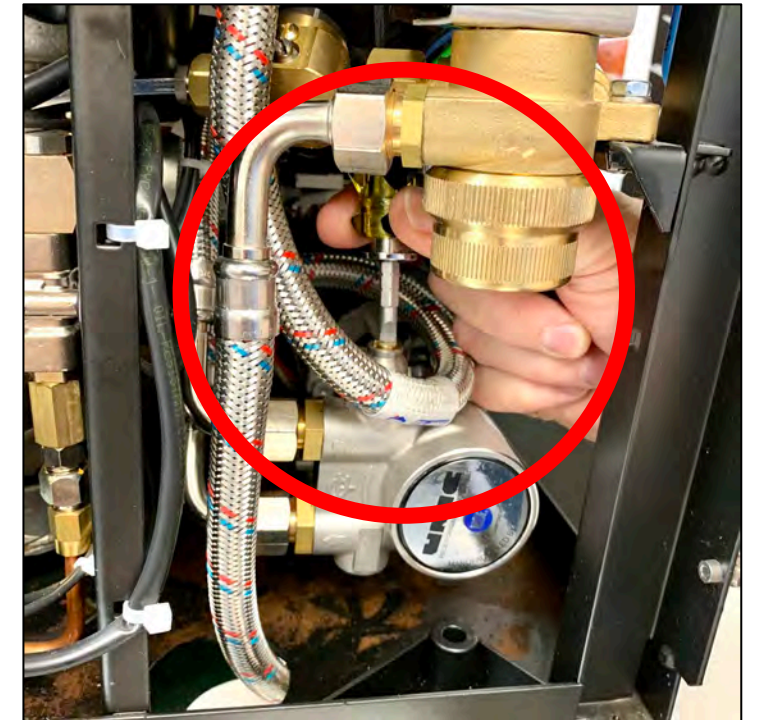
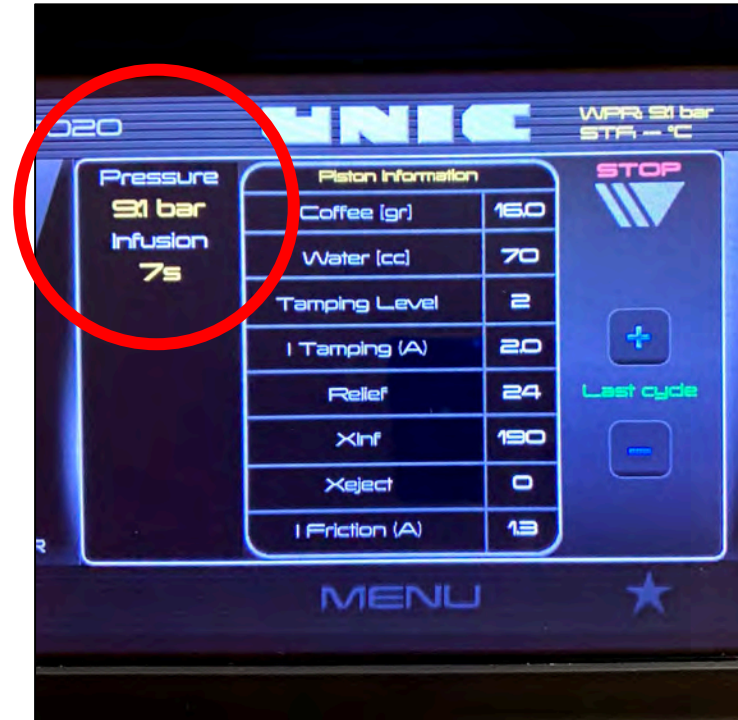


Press Cancel

Software and other function will be covered in another section

Set Pump Pressure

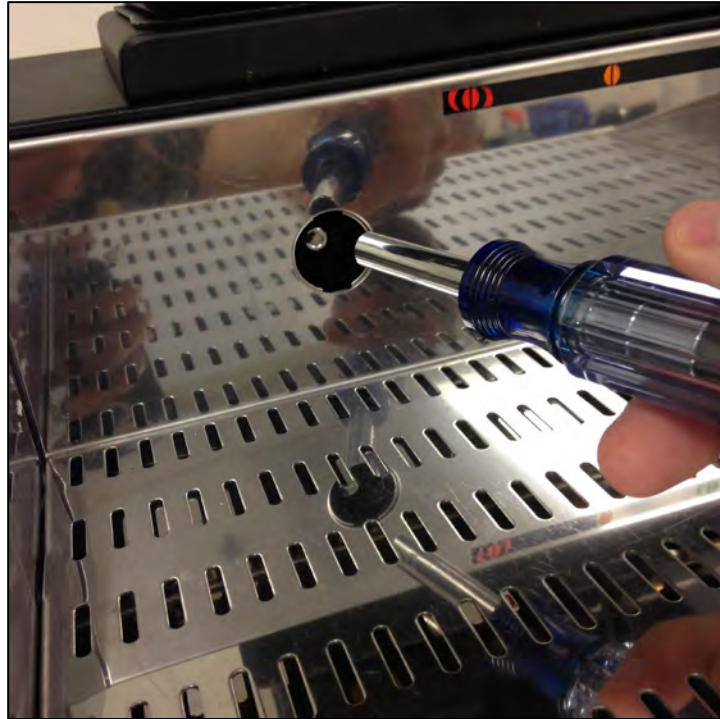
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Adjust Grinders

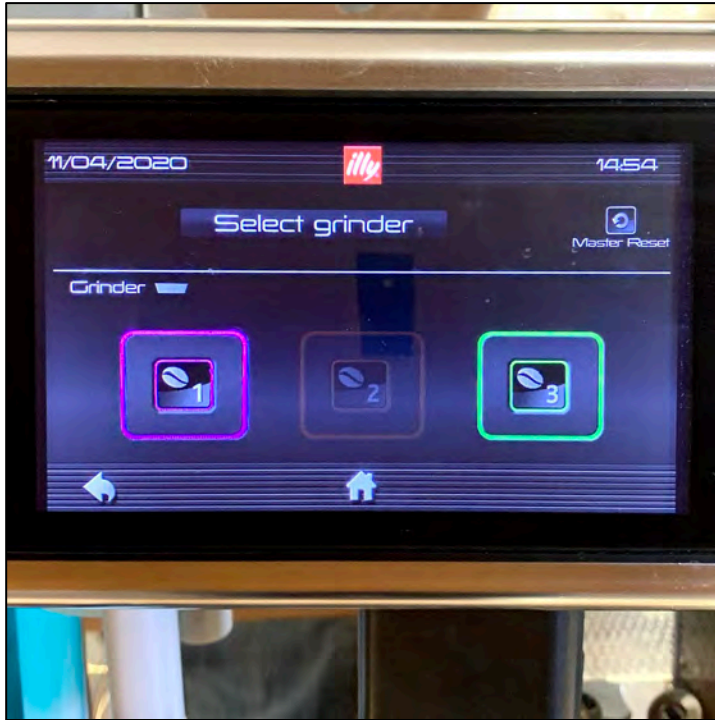
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Ensures accurate coffee dosing for every drink



Calibrate Grinder dose

Ensures accurate ground coffee dosing for every drink



Step by step
instructions
in PM Guide

Calibrate Grinder dose

Step 1: Adjust the grinders fine or coarse for best extraction time. Typically done with the double espresso drink. Adjust both grinders.

Step 2: Capture a sample of the dry ground coffee. Weight the sample and enter the amount into the calibration programming. (2 sample cycles)

Adjust Grinders for best extraction: Each PM visit



Run a test drink (Double shot)



Note coffee flow time



Adjust grinder fine or coarse as needed



Run 2-3 drinks after each adjustment.



Re-run and time test drink (Double shot)
18-26 seconds is usually the target time
Adjust grinder *finer* for *longer* extraction
Adjust grinder **coarser** for **faster** extraction
Repeat test and adjust as needed until extraction is in range



Weigh & Calibrate Grinder Output

Weigh and enter coffee amount of
2 sample cycles during calibration



Tools needed:
Scale accurate to 0.1
grams
2 Paper cups



Optional:

Unic magnetic tray
holder and sampling
tray



Press menu



Enter 9191 - Press OK



Select
Setup



Select
Other
Settings



Select
Grinder
Calibration



Select Purple (left) or Green (right)
grinder



Select Calibrate Weigh



Select "Calibrate Weight" to start coffee weighing process



Follow screen instructions
Remove drawer



"0" the scale with an empty cup



Tape a 2nd cup in the back of the drawer about 1" below the top



Insert the empty cup into the taped cup



Replace the drawer with both cups in place



Press confirm to start



Grinds Tamps, and Ejects



Remove and weight the cup with grounds

See next page for 2nd grind cycle





Remove and weight the cup with grounds from the 1st cycle



Enter the weight
Press confirm to save



Empty and replace the measuring cup



Replace the drawer with both cups in place



Press confirm to start 2nd grind cycle



Weight the grounds from the 2nd cycle:

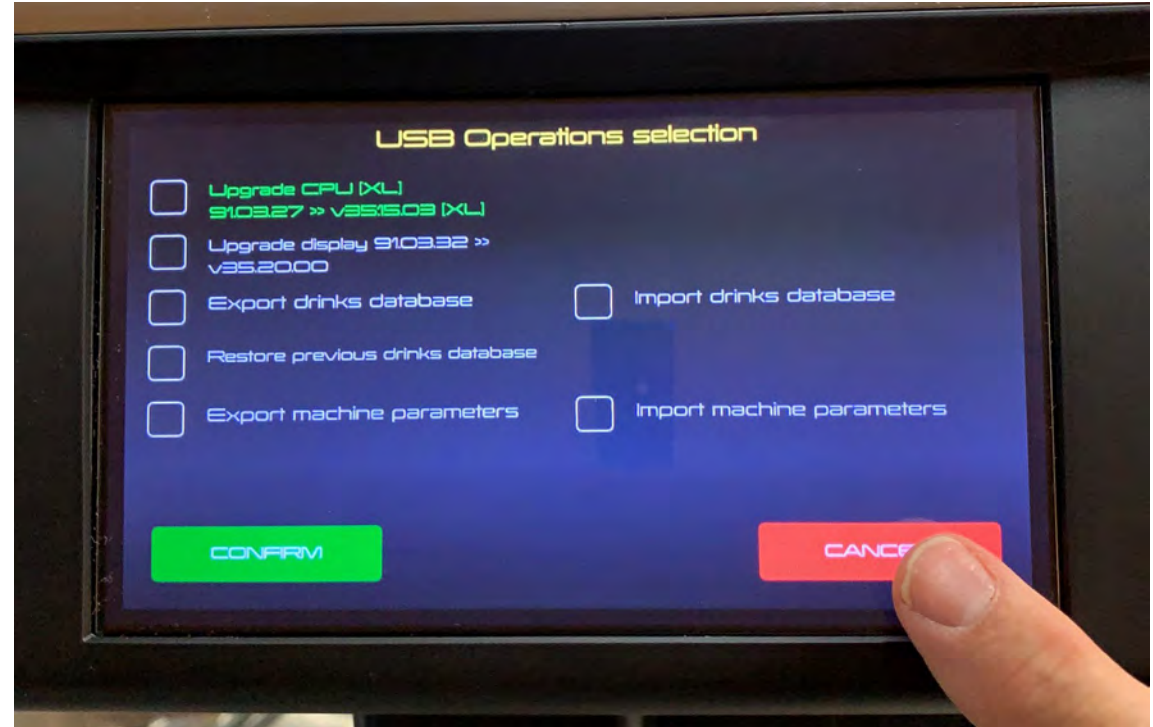
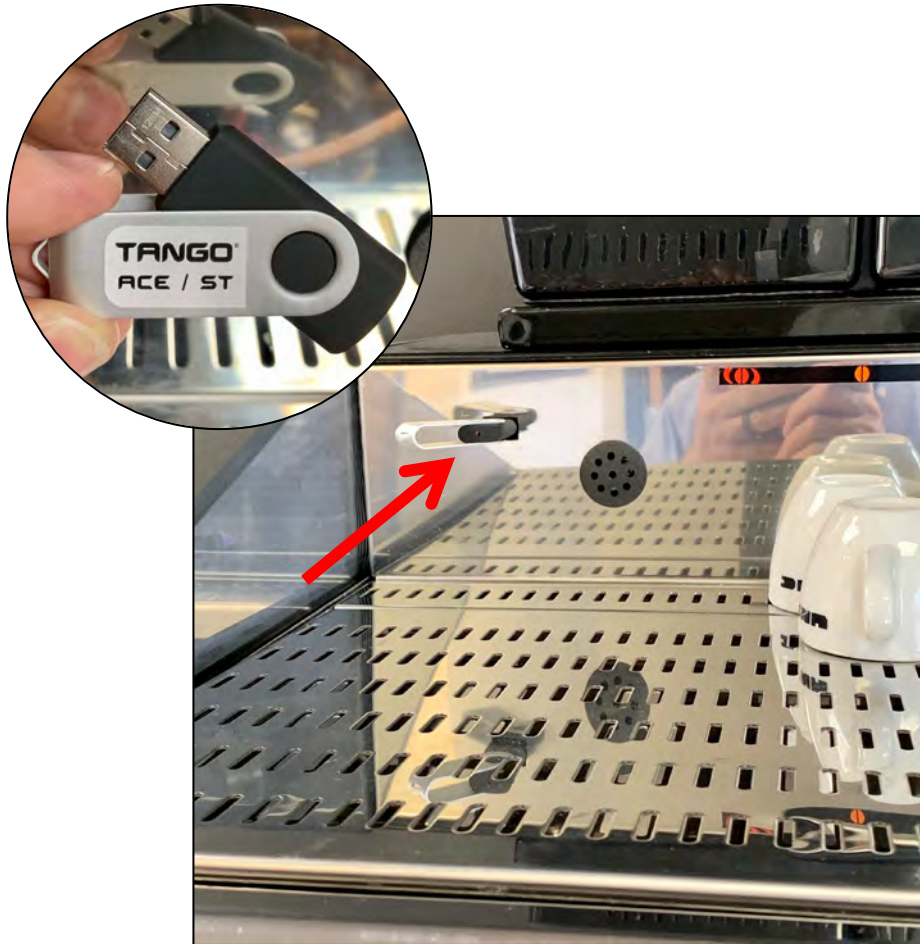


Enter the weight
press confirm to save



Done!
Press check mark confirm & save

USB Service Key



Press Cancel

Software and other function will be covered in another section

Program Drinks

Products Section of Menu



Select **OK**

Select **Products**

USB or enter password 9191

Adjust Existing drinks in Specific Programming

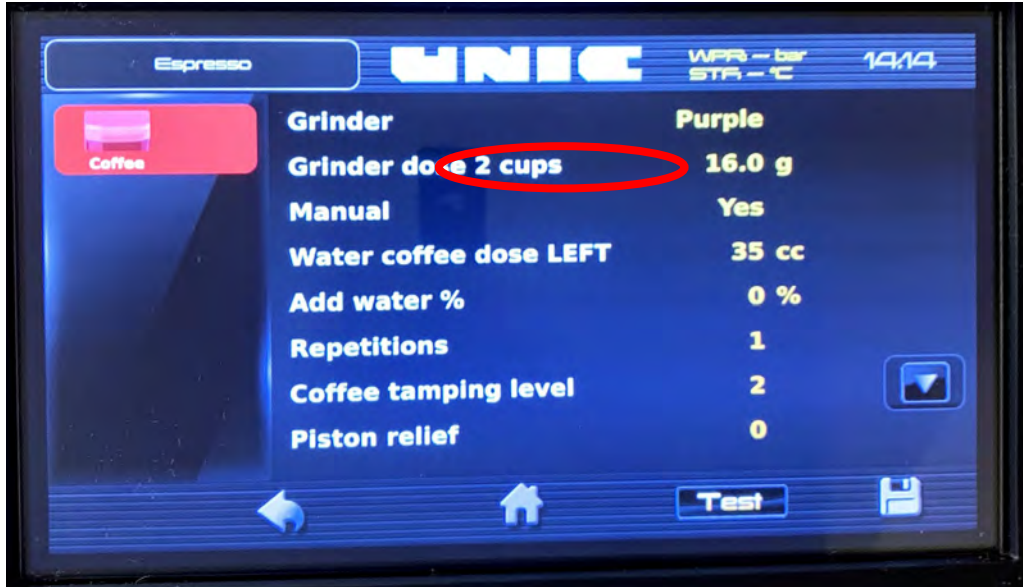


Select *Specific Programming*



Select desired drink to adjust

Adjust Existing drinks in Specific Programming



Coffee programming screen

Tap desired line to select



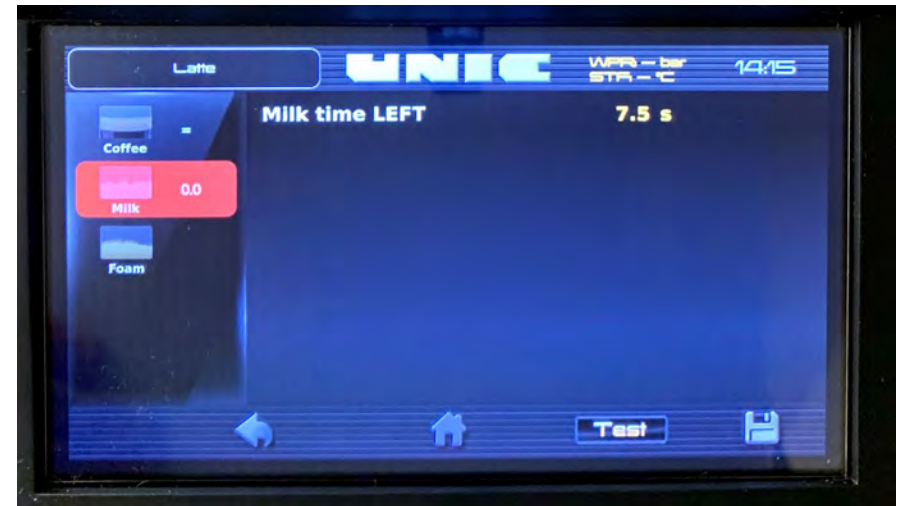
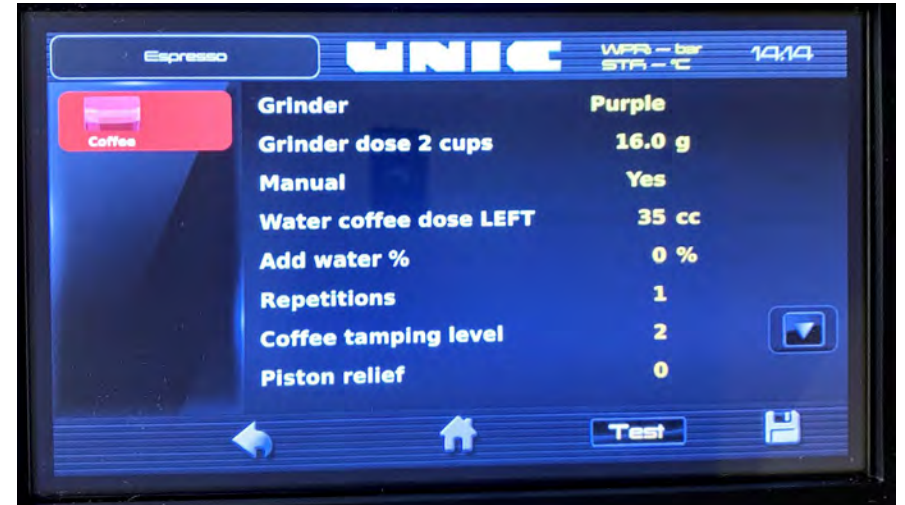
Adjust value with +/- or slider

Press ✓ to save value

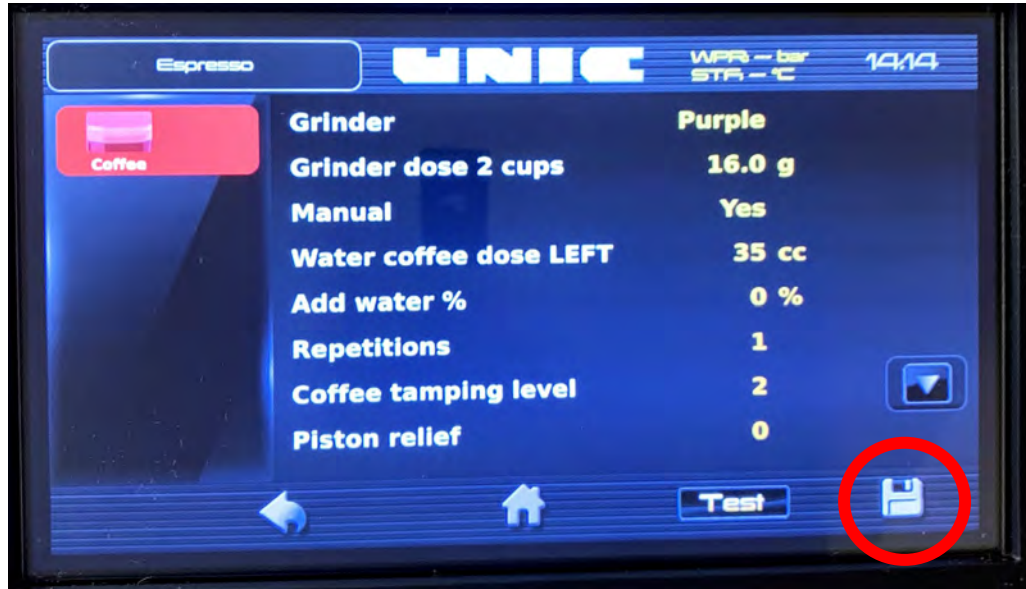
Drink Programming

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Grinder -----	Left Purple / Right Green
Grinder Dose -----	Total Grams
Manual	not used
Water coffee dose LEFT	ml water (x 2 for Double)
Add water % -----	For Americano
Repetitions -----	Repeat cycle
Coffee tamping level ----	1= low, 4 = high
Piston relief	Special use
STI	Special use
Milk time LEFT -----	Select for milk drinks
Foam time LEFT -----	Select for milk drinks



Save Drink Changes



Press **Save Icon**



Confirm with

Add New Drinks

TANGO



1. Create drink in **Drink Management**
2. Place that drink on the screen in **Key Assignment**
3. Program recipe in **Specific Programming** section

