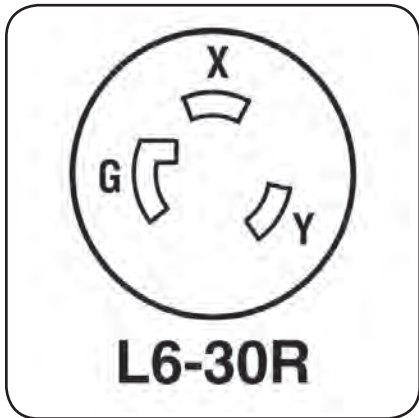


TANGO®

ACE-ST DUO



Install.....	3
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Power:

**NEMA L6-30
30 Amps**

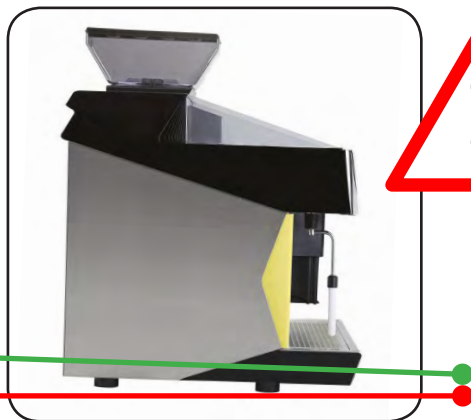
**Minimum 200 Volts
Maximum 242 Volts**



The transformer MUST be adjusted to match the incoming voltage! (See next page)



Water:	Minimum	Maximum
<i>Pressure</i>	45 PSI	100 PSI
<i>Flow Rate</i>	1 Gallon/ Minute	
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



Use the provided shims on the rear legs if necessary to level the Tango. Angled slightly forward is also OK



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

Drain:

Tango must be installed level or angled slightly forward!

Install the drain line running continuously downward so that no “trap” is formed.

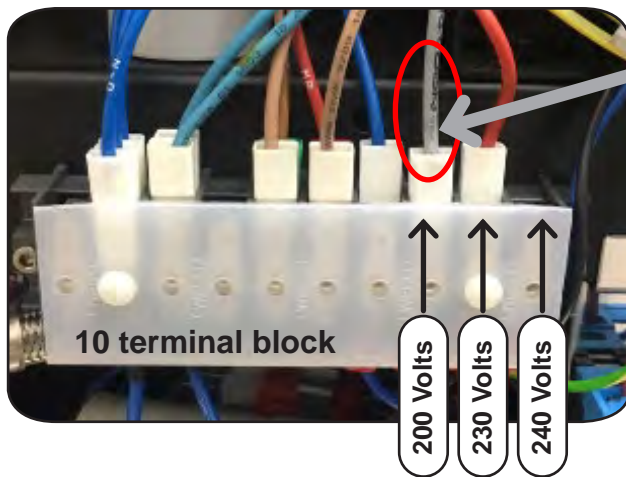
Voltage Setting

The jumper wire at the rear of the machine must be set to match the incoming voltage.



Incorrect voltage can cause problems with the touchscreen and valves.

All 2019 machines and some older machines



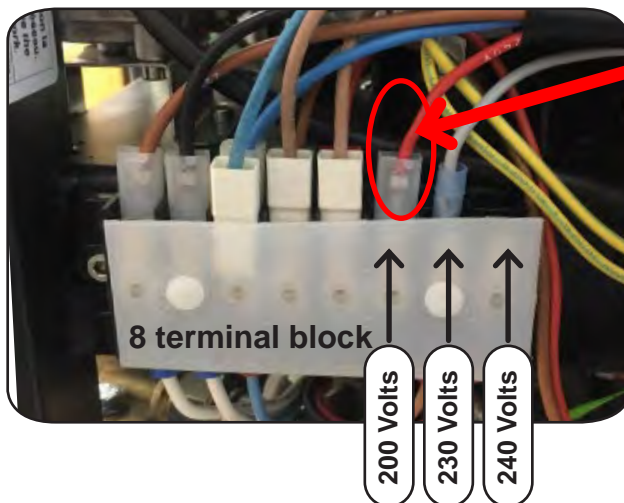
Move the GREY wire to the terminal that best matches the incoming voltage

(Red wire stays on 230 volt center terminal)

Sticker on rear frame



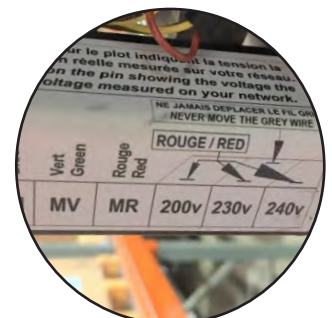
Different configuration for older machines



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

(Grey wire stays on 230 volt center terminal)

Sticker on rear frame



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

Turn counter-clockwise
for finer left (red) grinder.



Adjustments are opposite for each grinder

Turn clockwise
for finer right (green)
grinder.

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



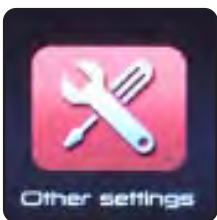
Press menu



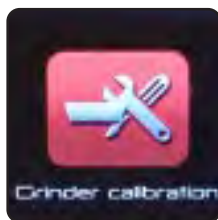
Enter 9191 - Press OK



Select
Setup



Select
Other
Settings



Select
Grinder
Calibration



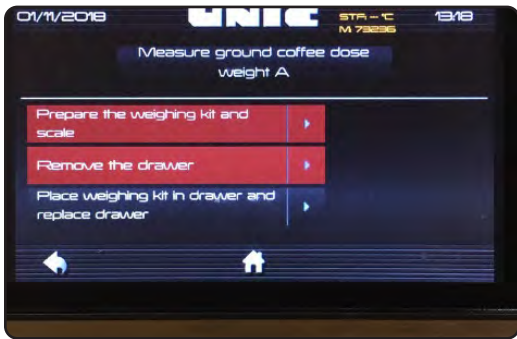
Select Purple (left) or Green (right)
grinder



Select Calibrate Weight



Select "Calibrate Weight" to start coffee weighing process.
(Adjust grind fine or coarse first, see previous pages)



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

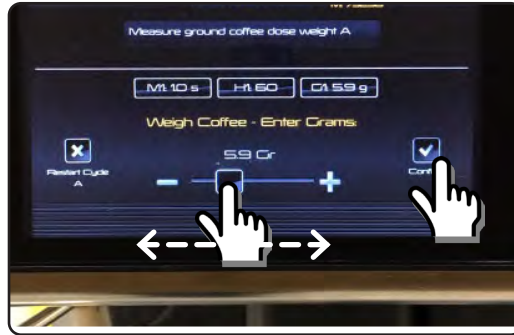


Calibrate Grinder Dose

Continued from previous page



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



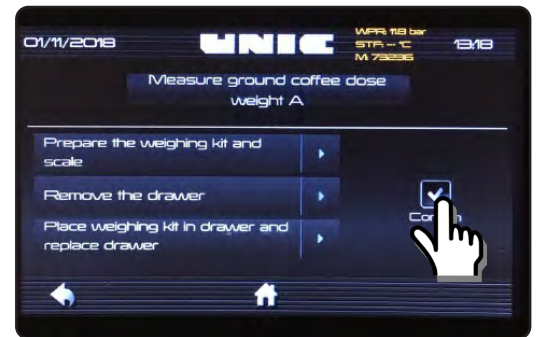
Enter the weight
Press confirm to save



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

Repeat the process for the Green (right, decaf) grinder!



Tango ACE-ST PM Schedule

Mar-21

Tango ACE-ST PM	Unic Parts listing Description from ACE Parts Manual TG9060	Part #	Parts Manual Page	Quantity	6 Months	Odd Years	Even Years	6-Year Rebuild
Calibration & Adjustments								
Calibrate Grinder	Average 3 cycles each test	N/A			✓	✓	✓	✓
Adjust Turntable Tension	150-180 milliseconds	N/A			✓	✓	✓	✓
Test Coffee System Water Flow	200 ml in 20 seconds	N/A			✓	✓	✓	✓

Brewing Piston (Not part of PM kits, order separately)								
Piston Rebuild Kit	N/A	FR-1919	425	1		✓		
Coffee Brew Piston wo/motor	PISTON ASSEMBLY WITHOUT MC	FR-1010	425	1			✓	✓

Coffee Service Parts								
Turntable Rebuild Kit	N/A	FR-1551	420	1			✓	✓
Coffee Dosing Funnel Assembly	FUNNEL MOBILE KIT	FR-1006	410	1			✓	✓
Turntable Cover	PLASTIC TURNTABLE	FR-7000	420	1			✓	✓

4 MONTH Venturi Milk Service Parts (1 step only)								
Venturi Milk Foamer O-rings	(Not in PM Kit)	DV-1617	611	1	✓			
Venturi Milk Foamer Assembly	LC SET	FR-1046	611	1		✓	✓	✓

Gicleur Metering Jets Parts								
Copper Gasket for Pipe Fitting	N/A	CN-618	420	1			✓	✓
Gicleur Filter Screen	FILTER	25400	420	1			✓	✓
Gicleur Holder	JET HOLDER	23773	420	1			✓	✓
Gicleur Metering Jet (0.7mm)	JET DIAM. 0.7	23117	420	1			✓	✓
Gicleur O-ring - 1.78x2.9mm	GASKET 1.78 X 2.90 FKM	TC-80	420	1			✓	✓

Steam/Water Wands Service								
Steam Wand Swivel O-ring	O RING - 9.13 X 2.62	PH-78	201;241	1	✓	✓	✓	✓
Copper Spacer Washer	N/A	AG-14	201;241	1	✓	✓	✓	✓
Wand Spring	SPRING	PA-43	201;241	1	✓	✓	✓	✓
Wand Spring Holder	BRASS END	RR-67	201;241	1	✓	✓	✓	✓
Upper O-ring for Steam/Water Wands	O RING - 13.95 X 2.62	PH-54	201;241;251	2	✓	✓	✓	✓

Tango ACE-ST PM	Unic Parts listing Description from ACE Parts Manual TG9060	Part #	Parts Manual Page	Quantity	6 Months	Odd Years	Even Years	6-Year Rebuild
SteamAir Autosteam Service								
12 Hole Steam Tip	12 HOLES END PIPE	25909	241	1		✓	✓	✓
O-ring - 2x9.5mm	GASKET 2 X 9.5	28134	241	2		✓	✓	✓
O-ring - 8.73x1.78mm	GASKET 8.73 X 1.78	CN-436	241	1		✓	✓	✓
O-ring - 9.13x2.62mm	O RING - 9.13 X 2.62	PH-78	241	1		✓	✓	✓
Set-screw - M5x8mm	POINT END SCREW	PC-38	241	1		✓	✓	✓
Spring Inserts	THRUST BALL BEARING	RO-58	241	2		✓	✓	✓
Other PM Parts								
Drip Tray O-ring	O RING - 2.62 X 17.13	27845	361	1		✓	✓	✓
Cleaning Cap O-ring	GASKET 3.53 X 34.52 EPDM	27907	361	1		✓	✓	✓
Cleaning Cap Flat Seal	GASKET	28700	361	1		✓	✓	✓
Vacuum Break Plunger O-ring	GASKET 6.07 X 1.78	CN-198	201	1		✓	✓	✓
Complete Vacuum Break Kit	VACUUM VALVE KIT	27224	201	1			✓	✓
Steam Boiler Safety Valve	LP VALVE 3.5 BARS	27200	340	1			✓	✓
Water Inlet Filter 80 Microns	FILTER CARTRIDGE 80 MICRONS	CN-96B	620	1			✓	✓
Water Inlet filter Cap O-ring	GASKET 3.53 X 29.75	83501	620	1			✓	✓

General Service Parts								
Hot Water/Coffee Flow Meter Impeller	TURBINE	CN-829	251;330	2				✓
Hot Water/Coffee Flow Meter O-ring	GASKET - DOSING DEVICE	CN-828	251;330	2				✓
High-Level Probe Assembly	HIGH LEVEL PROBE	26526	340	1				✓
Low-Level Probe Assembly	LOW LEVEL PROBE	26527	340	1				✓
Americano Valve	ELECTROVALVE 2 WAYS 24V D2.3	35500	345	1				✓
Americano Valve O-ring - 2x9.5mm	GASKET 2 X 9.5	28134	345	2				✓
Grinder Burrs 64mm	GRINDING WHEEL SET	37516	401	2				✓

Heat Exchanger Service Parts								
Heat Exchanger O-ring - 1.78x17.17mm	O RING 1.78 X 17.17	27716	345	1				✓
Heat Exchanger Teflon Seals	PTFE FLAT GASKET	28720T	345	2				✓
Brew Valve Pipe O-ring - 1.78x12.42mm	O RING - 1.78 X 12.42	27796	345	2				✓
Americano Valve Banjo O-ring - 2x9.5mm	GASKET 2 X 9.5	28134	345	2				✓
Copper Crush Washer 1/2	JOINT CUIVRE RECUIT 1/2	CH-17	345	2				✓

Complete PM Kits	
Tango Ace/ST 2 Step 6 Month	250-00365
Tango Ace/ST 2 Step Years 1-3-5	250-00367
Tango Ace/ST 2 Step Years 2 & 4	250-00366
Tango Ace/ST 1 Step 4 Month	250-00362
Tango Ace/ST 1 Step Years 1-3-5	250-00364
Tango Ace/ST 1 Step Years 2 & 4	250-00363

www.unic-usa.com
www.grindmaster.com
www.electroluxprofessional.com

Piston Water flow test



Measure the water flow through the Piston during the spout rinsing cycle.

Clean or replace the Piston if the flow is restricted.

Remove and replace grounds drawer to start the rinsing cycle.



Press and Hold YES for 3 seconds to start the rinsing cycle



Ace / STP:
20 Second Flow
~225 ml rinse
←

180-250 ml = Normal flow

150-200 ml = Slight restriction, run a cleaning cycle and test again

Less than 150 ml = Piston clogged. Remove piston to clean or replace.

The piston should be replaced if it draws more than 2.3 amps.

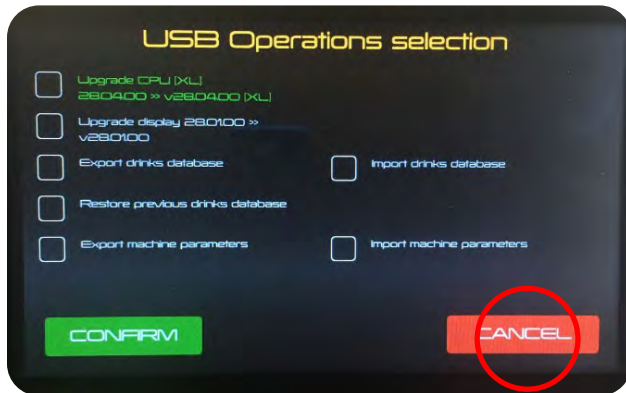


Insert USB key

Piston Information	
Coffee (gr)	165
Water (cc)	50
Tassage Level	2
I Tassage [A]	20
Recul	28
XInf	91
Xject	123
I Frotements [A]	14

Insert Technicians USB

Piston information is displayed while each drink is pouring with the USB is in place



Insert USB, Press Cancel



Press Single or Double to run a test cycle



Piston Information Screen

Piston Friction
Range: 0.8Amps - 2.3 Amps

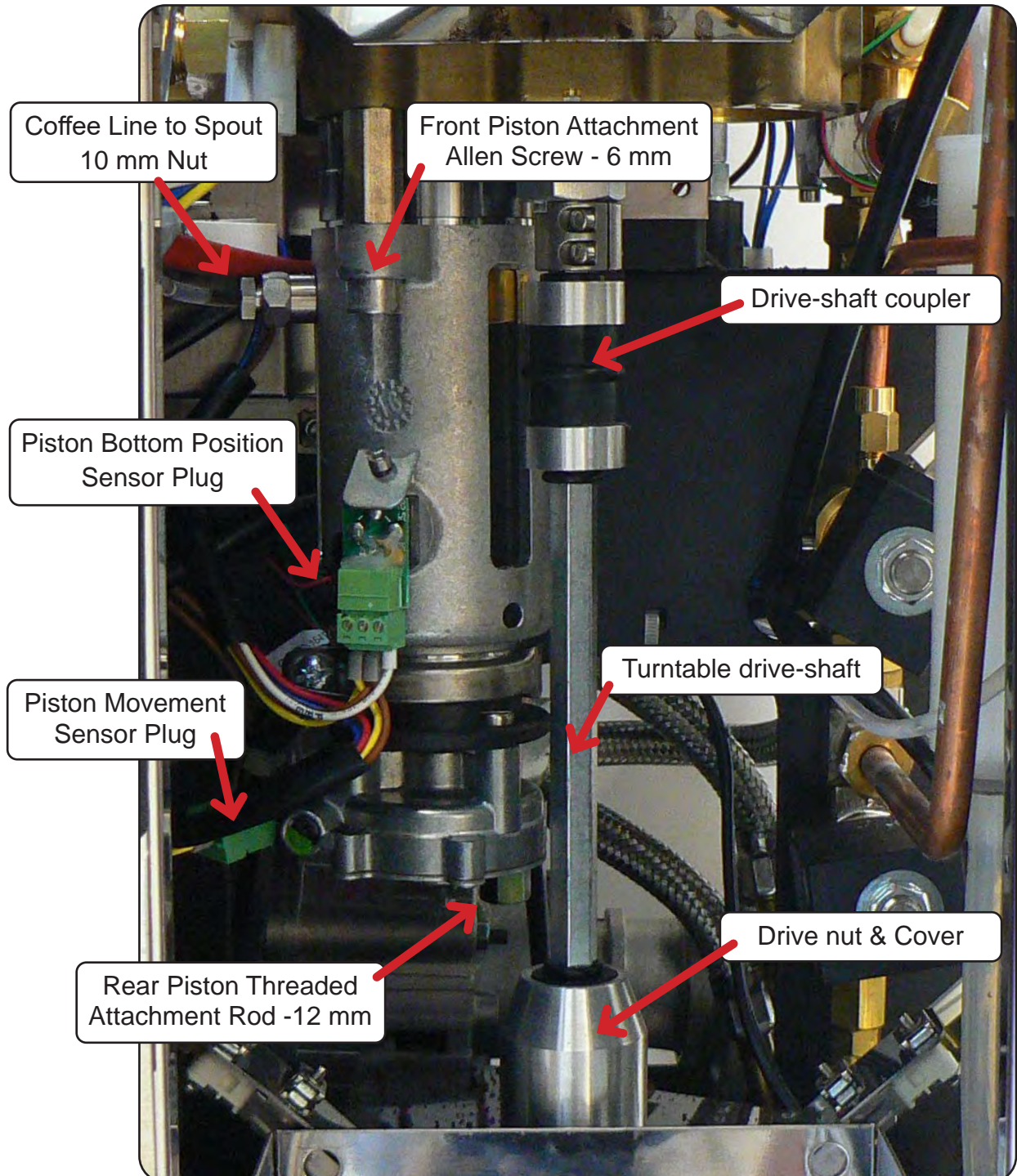
1.4 Amps shown

Tango Brewing Piston Exchange

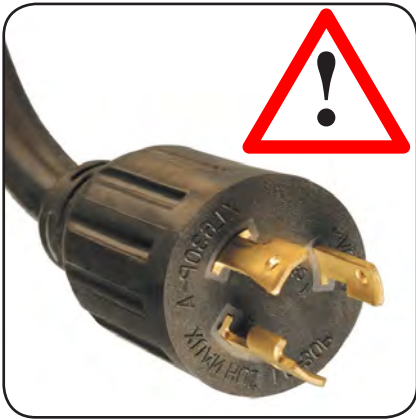
Tango UNO/SOLO - ACE/ST

Tools needed:

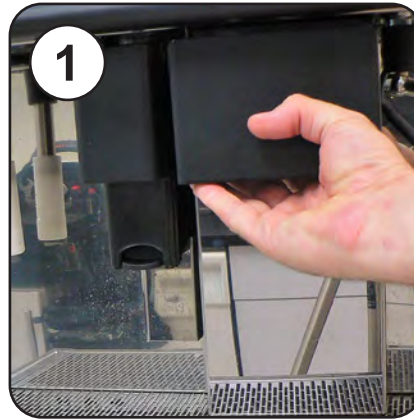
- Flat Blade Screwdriver
- 10 mm wrench
- 12 mm wrench
- 6 mm Allen Wrench



Tango Brewing Piston Exchange



Unplug Machine



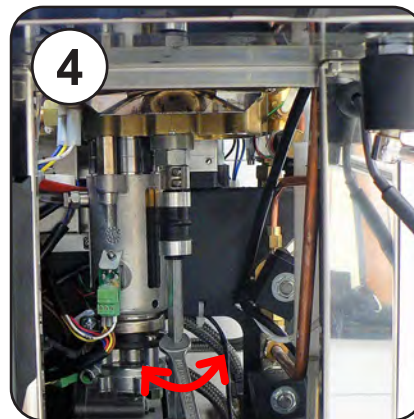
Remove Grounds Drawer



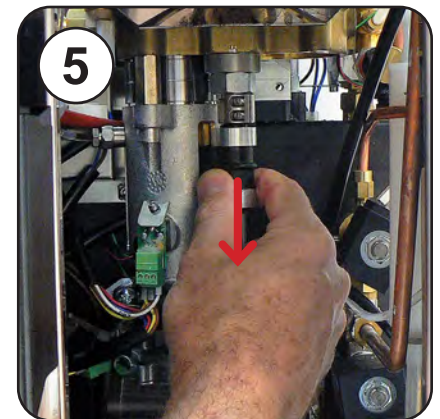
Remove the 4 side screws from the Inner panel



Remove the Inner Panel



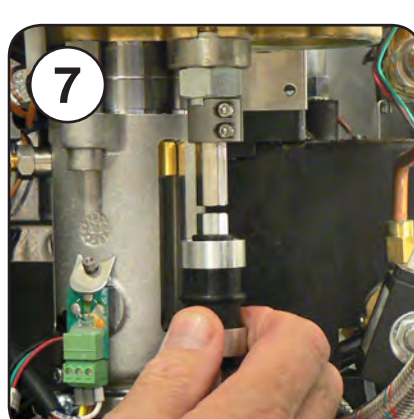
Relieve tension on Turntable shaft by rocking it with a 10 mm wrench



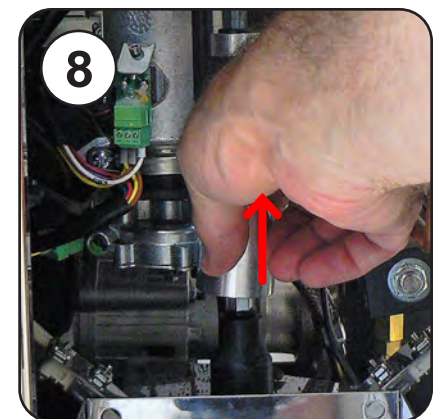
Slide upper coupling down



Use a flat screwdriver to push coupling down if necessary

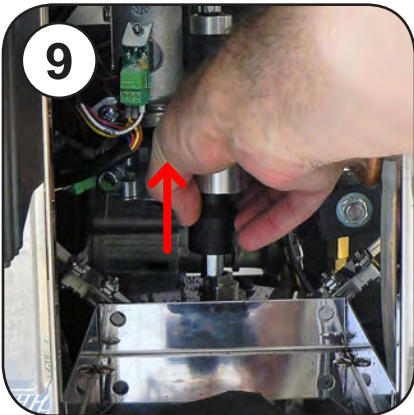


Turntable shaft released



Lift aluminum reinforcement cover from lower coupling

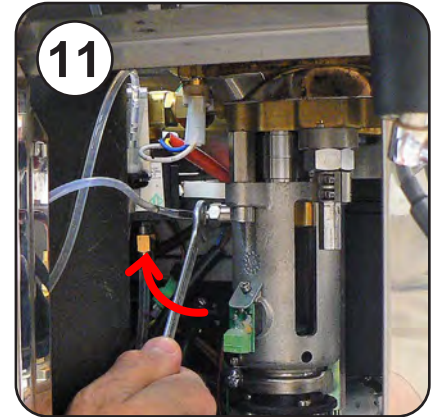
Tango Brewing Piston Exchange



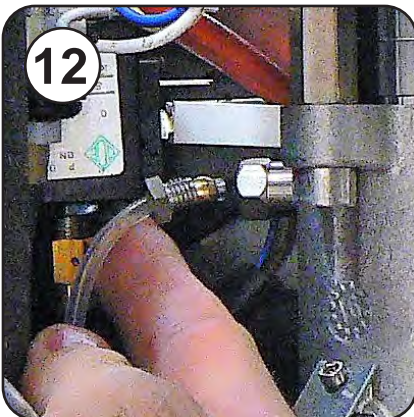
9 Lift nylon drive nut from lower coupling



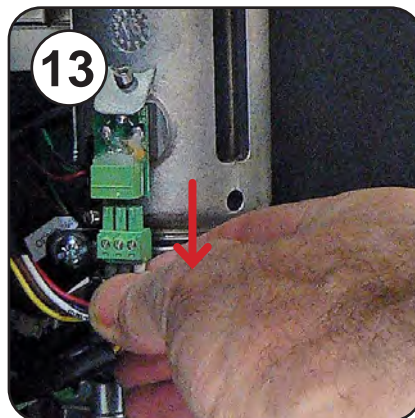
10 Remove Turntable drive-shaft



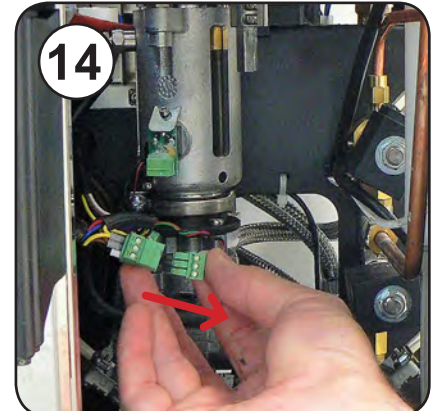
11 Remove line to spout
10 mm compression fitting



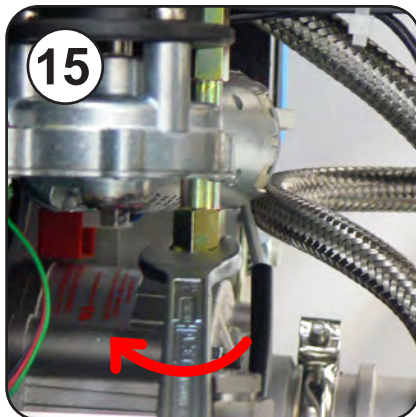
12 Coffee output line to spout



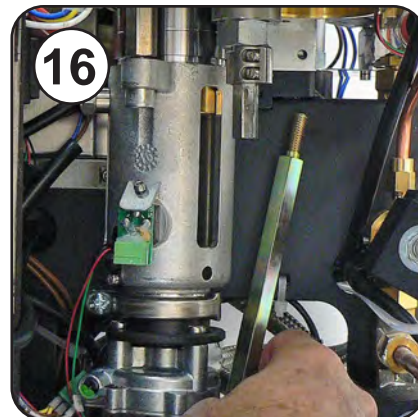
13 Unplug Piston lower position sensor



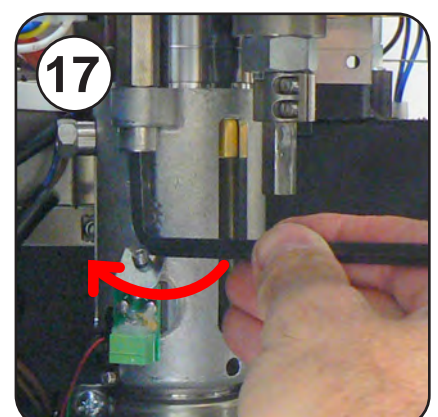
14 Unplug Piston Movement Sensor Plug



15 Unscrew rear mounting post - 12 mm wrench

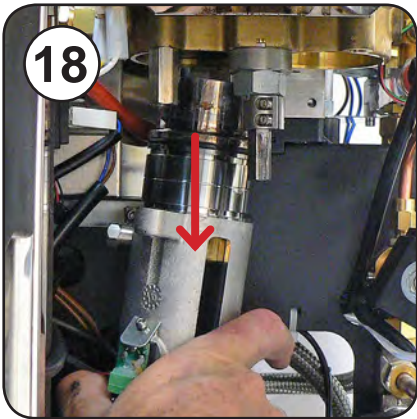


16 Remove rear mounting post

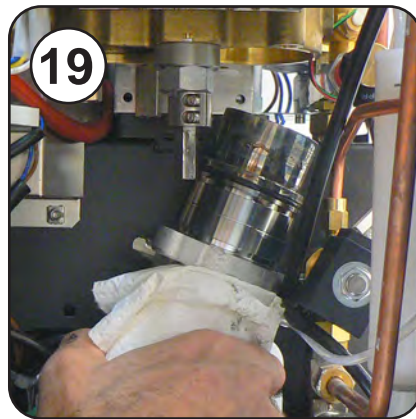


17 Remove front mounting bolt - 6 mm Allen

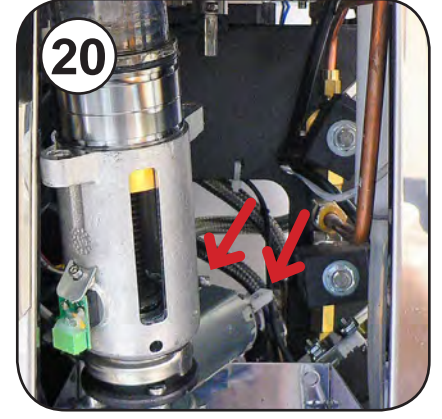
Tango Brewing Piston Exchange



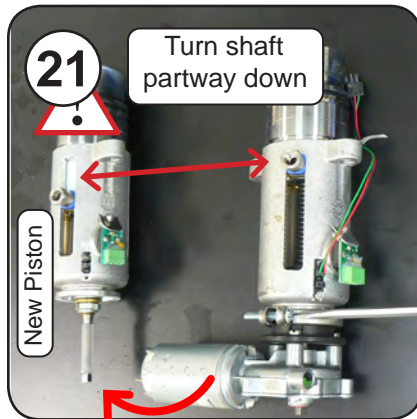
Slide piston down



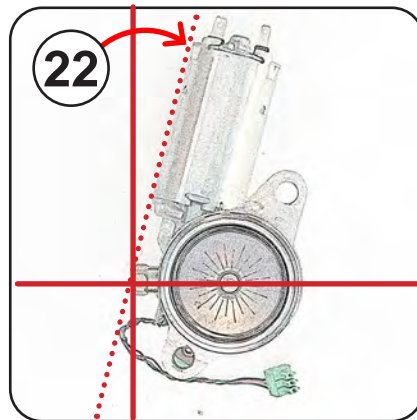
Rotate to the right to remove



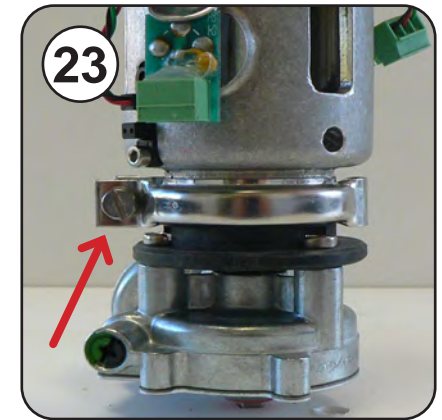
Remove piston halfway
Unplug piston motor wires



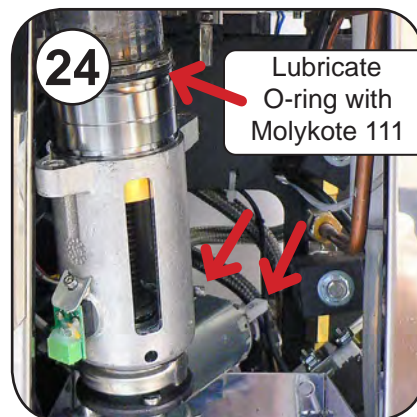
Transfer Motor
*Rotate shaft of new Piston
part-way down first!*



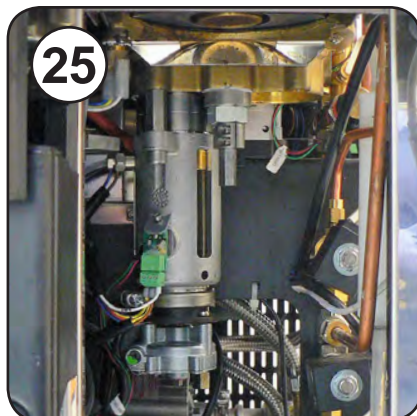
Orient motor at this angle



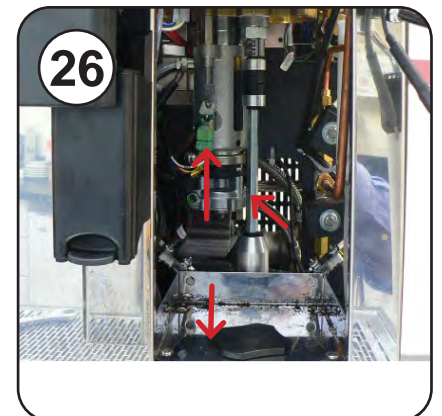
Clamp must be on the left
with the screw facing out
Tighten screw firmly



Reattach motor wires!
Polarized 1/8" & 1/4" plugs



Reinstall Piston
Tighten screws, Attach
plugs & Coffee Line



Replace Turntable shaft
Slide coupler up
Slide O-ring up to notch

Brewing Piston Field Service for coffee clogs

- Limited field rebuild
- Clean areas of coffee contact
- Replace Seals and O-rings
- Replace filter screen

Allowed substitute for a piston change if the lower bearing is OK and the electronic sensors are in good condition



IKV-Fluor
UNIC turntable
grease

Dow Molykote 111 grease

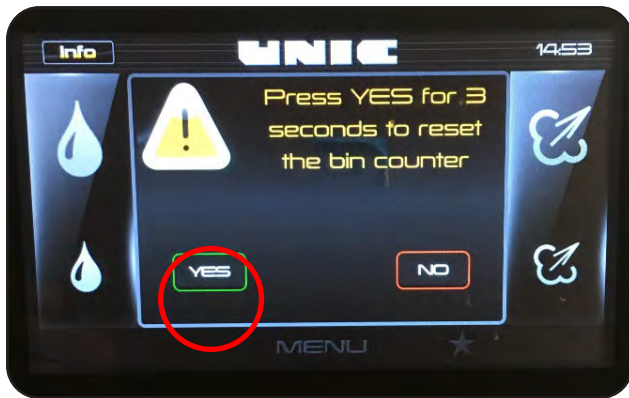
Piston Water Flow Test

Tango all versions

**Measure the water flow through the Piston during the spout rinsing cycle.
Consider a Field Rebuild if the flow is restricted.**



Remove and replace grounds drawer to start the rinsing cycle.



Press and Hold YES for 3 seconds to start the rinsing cycle



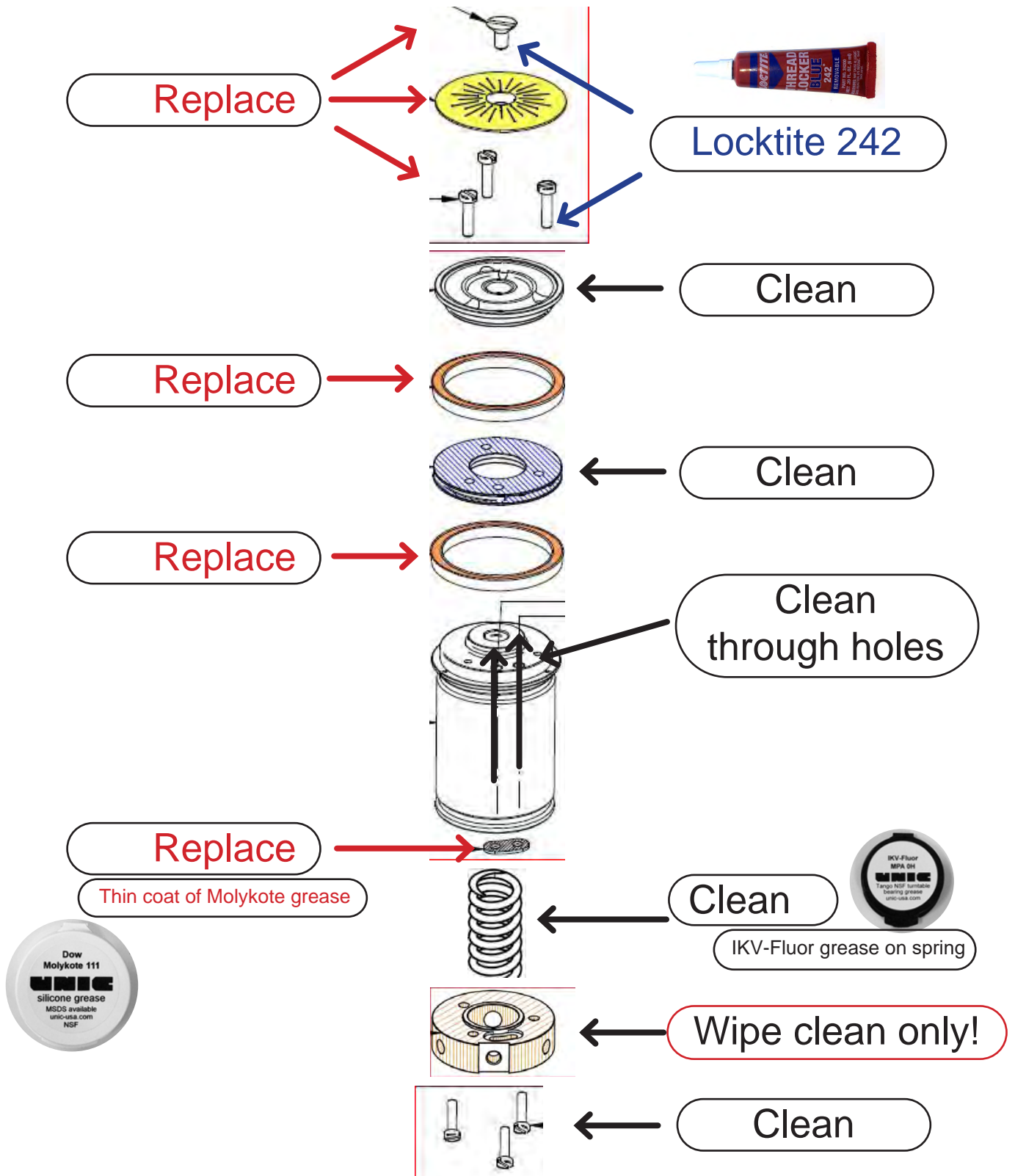
**Ace / STP:
20 Second Flow
~225 ml rinse**

180-250 ml = Normal flow

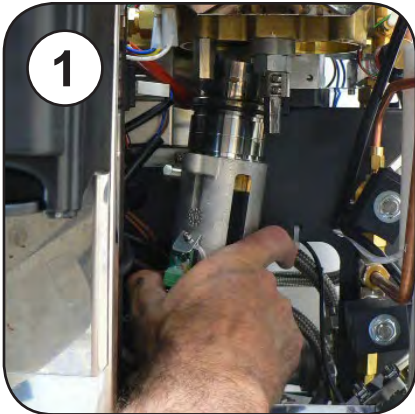
150-200 ml = Slight restriction, run a cleaning cycle and test again

Less than 150 ml = Piston clogged. Remove piston to clean or replace.

Tango Brewing Piston Field Service Overview



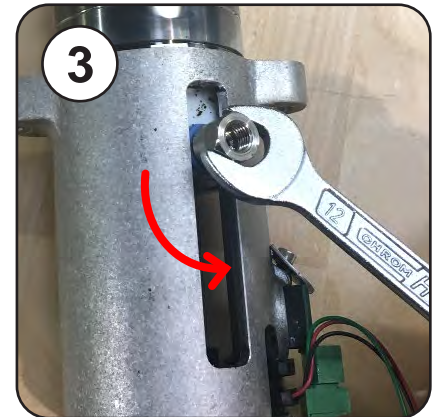
Tango Brewing Piston Field Service



1 Remove the piston from the machine



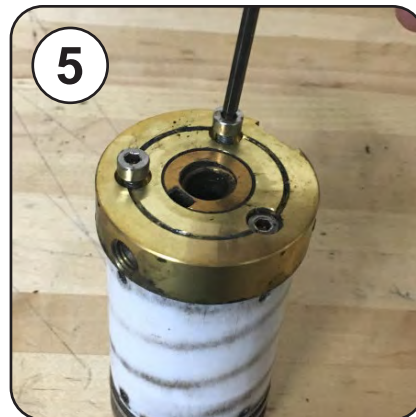
2 Pull the brew chamber off of the piston



3 Remove outlet nipple
12 mm wrench



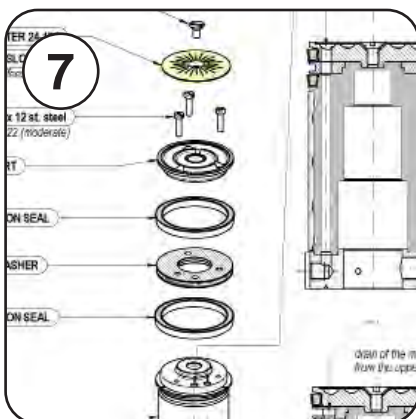
4 Unscrew the inner piston from the jack-screw
Left hand threads!



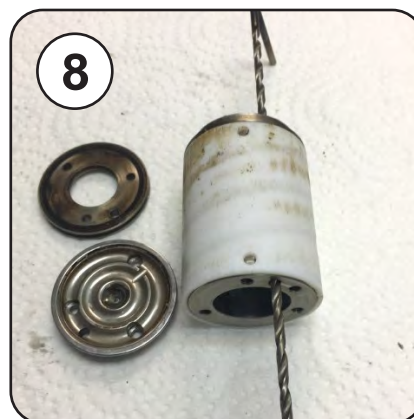
5 Remove the 3 mm Allen screws from the lower plate
The spring will decompress!



6 Remove the Bottom Plate, Threaded Follower, and Spring



7 Remove Screen, Seals, and Spacers



8 Use a 1/8" drill bit to clear coffee pathways



9 Soak the dirty parts in coffee cleaner

Tango Piston Re-Assembly



DO NOT soak in cleaner



Magnets

DO NOT soak the lower ring in cleaner. It has 2 press-fit magnets!



Apply a thin coat of Molykote grease to the new lower seal



Install the seal



Apply a small amount of IKV-Fluor grease to the ends and SIDES of the spring



Assemble the spring and lower plate



Make sure the holes in the seal line up with the holes in the piston!



Reinstall the 3 Allen screws
The screws will compress the spring; no locktite needed.



Install the new seals with the orange side up



Rotate the pieces until all 4 holds line up

Tango Piston Re-Assembly



18

Apply a small amount of Locktite to each screw



19

Install the 3 screws



20

Apply a small amount of Locktite to the screen screw



21

Install the screen



22

Apply a the remaining IKV-Fluor grease to the jack-screw shaft



23

Re-attach inner piston
Left hand threads!



24

Align screw hole with the left side slot
(For single piston machine)



25

Lube new outlet seal



26

Apply a small amount of Locktite to the threads

Tango Piston Re-Assembly



Re-install outlet



Apply a thin layer of Molykote grease to the brew chamber



Push the inner piston straight down into the brew chamber



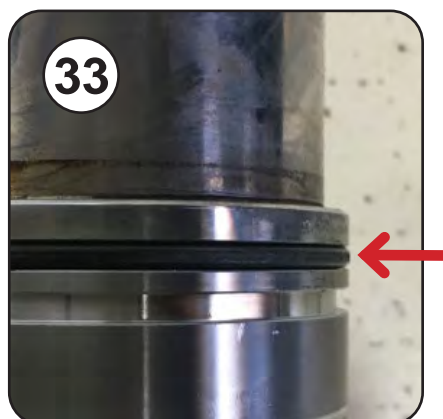
Be very careful not to pinch or roll under the seal edge!
(A damaged seal will cause the piston to leak and the Amp draw will be high)



Coat the outer O-ring with Molykote grease



Install the O-ring on the outside of the brew chamber



O-ring in upper groove!



Re-install piston

The field rebuilt piston must be tested in the machine!

See the [Piston Evaluation / Exchange Instructions](#) for the following tests:

Water Flow:

Measure rinsing water flow through piston

(~225 ml ACE/ST ~60 ml UNO/SOLO)

Amp Draw (Friction of movement):

Verify piston Amp draw is in range (0.8 Amps - 2.3 Amps)

Cleaning:

Run a cleaning cycle to sanitize the piston and remove assembly grease

Tango Turntable Service

Every 2 years

(Or if leaking from underside of Turntable)

(Adjust Turntable Bearing Tension every 6 months, see next section)

Tango UNO/SOLO - ACE/ST

FR-1551
Turntable PM kit

Tools needed:

Flat Blade Screwdriver
7 mm wrench
10 mm wrench

22 mm wrench
6 mm Allen wrench
2.5 mm Allen wrench

1. Remove the Brewing Piston
2. Remove the Turntable
3. Clean the Coffee Dosing & Turntable area
4. Install new Seals and Friction Pads under the Turntable
5. Repack the Turntable Bearing Grease
6. Adjust the tension on Turntable Bearing (turntable speed)



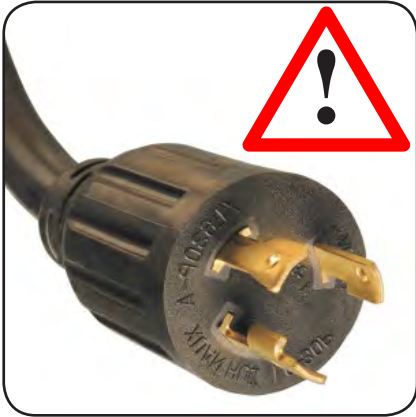
ACE / ST

UNO / SOLO

The Turntable speed (TT) should be between 140ms -180ms

Tango Turntable Service

Access Turntable



Unplug Machine



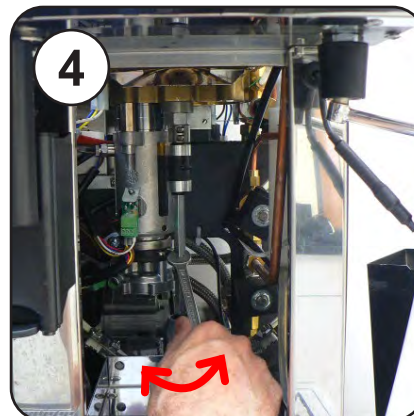
Remove Grounds Drawer



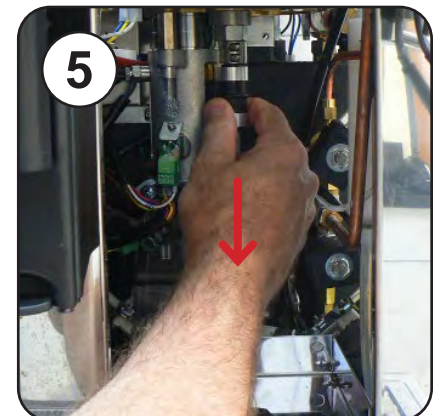
Remove the 4 side screws from the shroud panel



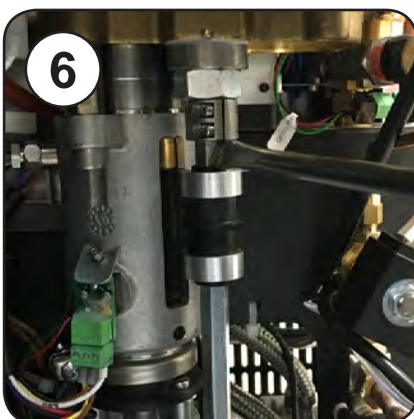
Remove the Inner Panel



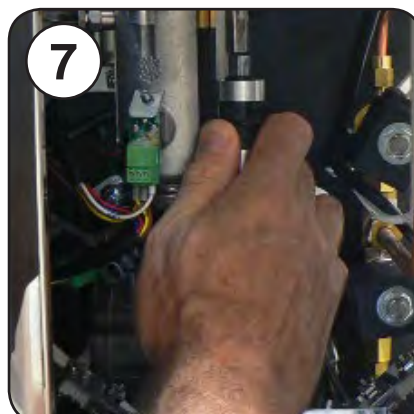
Relieve tension on Turntable shaft by rocking it with a 10 mm wrench



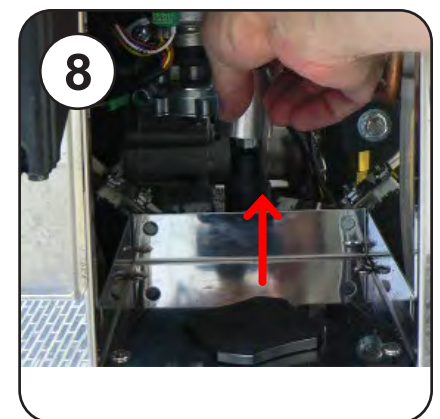
Slide the upper coupling down



Use a flat screwdriver to push coupling down if necessary



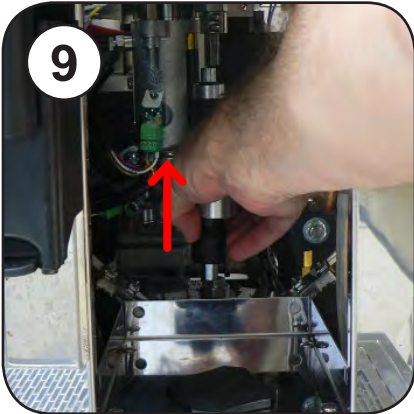
Turntable shaft released



Lift aluminum reinforcement cover from lower coupling

Tango Turntable Service

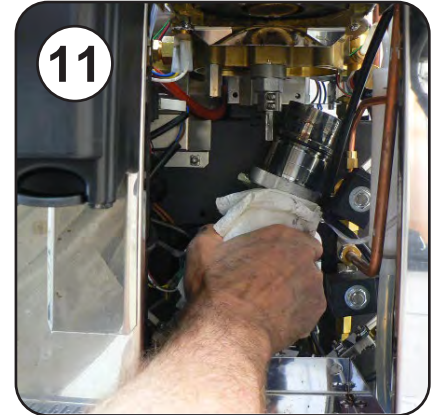
Access Turntable



9
Lift lower coupling from gearbox



10
Remove Turntable drive shaft



11
Remove the piston at this time to allow better cleaning if needed.
See Piston Exchange Instructions



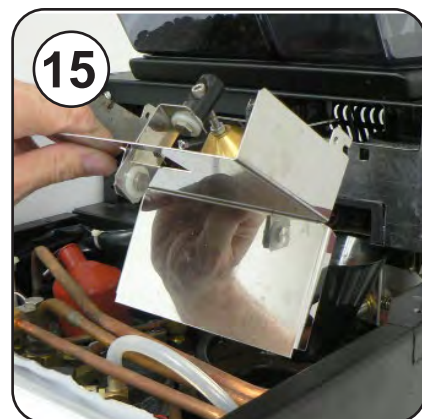
12
Remove Coffee Funnel
Press spring latch in while pulling funnel straight out



13
Remove side shrouds
Loosen 7 mm bolt first
Do Not remove bolt



14
Lift both side shrouds straight up



15
Remove Ejector bell assembly



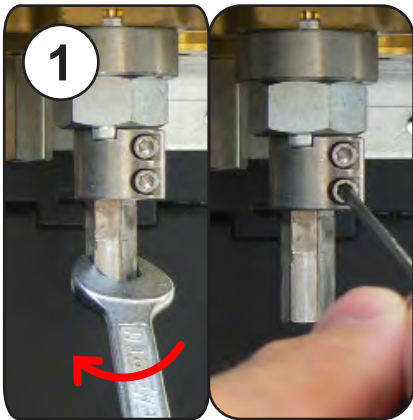
16
Remove the three 6 mm Allen screws from the turntable cover



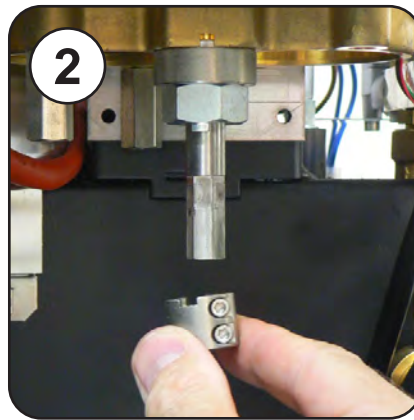
17
Lift Turntable cover off
Clean cover with soapy water

Tango Turntable Service

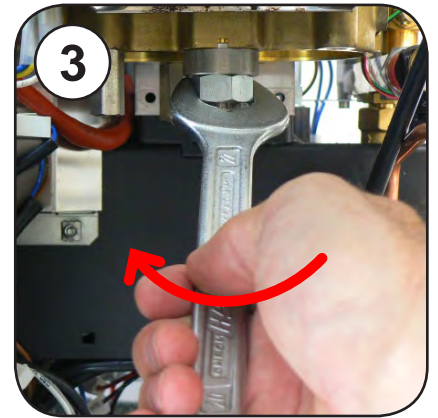
Remove Turntable



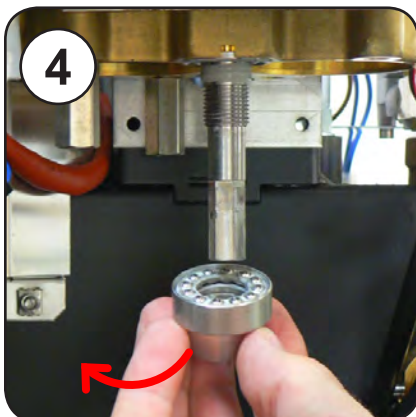
1
Loosen 2.5 mm turntable lock screws
(Rotate shaft first if needed)



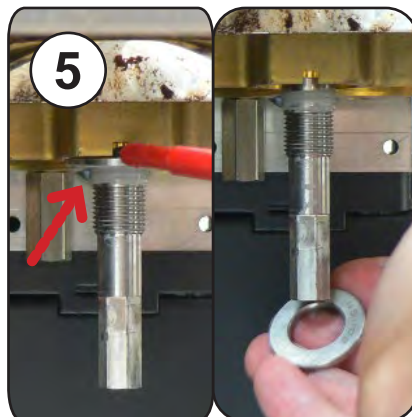
2
Remove locking collar



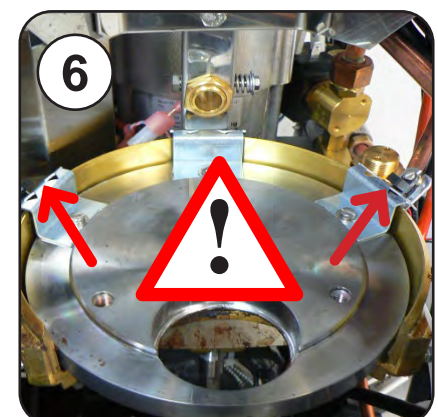
3
Remove 22 mm adjustment nut



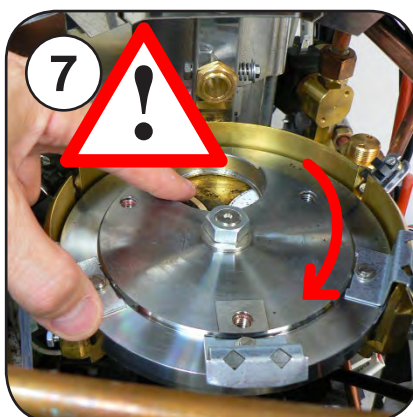
4
Remove Nut and Bearing assembly



5
Pry the top bearing race out if it stayed on the shaft



6
Do not damage position sensors when removing Turntable!



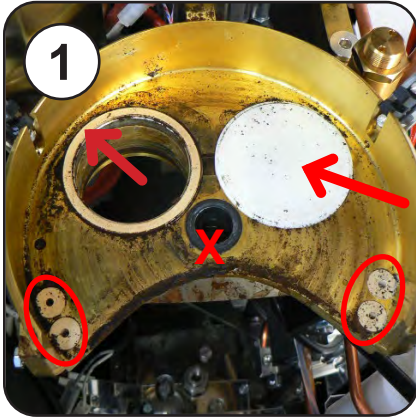
7
Rotate Turntable so the tabs are not inside the sensor slots



8
Lift Turntable out
Caution, it may be hot!

Tango Turntable Service

Clean Turntable Area



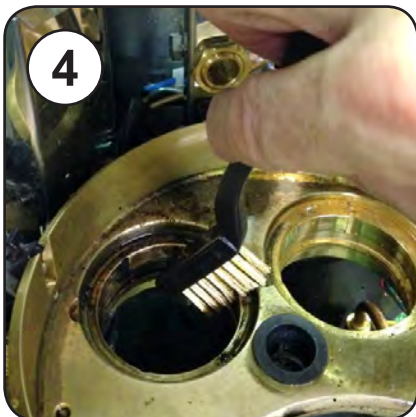
1
Remove and discard old
Seals, O-rings, and Pads
Do not remove center Bushing



2
Clean the area thoroughly



3
For deep cleaning, place a
container under the turntable
to catch runoff



4
A brass or nylon brush
may be necessary



5
Scrub the base with coffee
cleaner. Rinse thoroughly.



Tango Turntable Service

Install new Seals



Install new O-rings with Molykote 111 grease



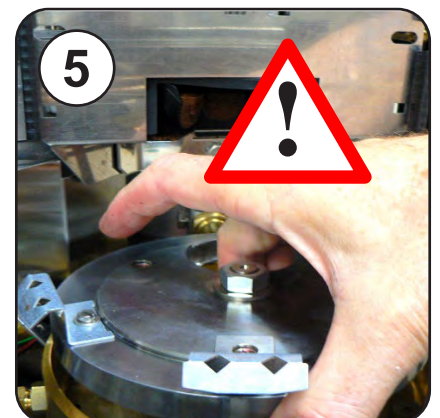
Install seal, 4 support pads, and white plug.
No grease!



Replace O-ring under Turntable
Use Molykote 111



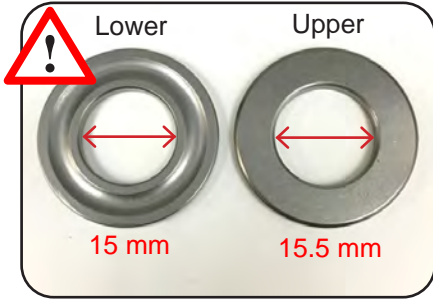
Place a small amount of IKV-Fluor grease on the turntable shaft



Carefully install Turntable with eject hole to the rear.
Do not damage sensors!

Tango Turntable Service

Repack and Install bearing



The upper bearing race has a larger hole.
Test fit the upper race first



Upper race MUST recess into turntable holder.



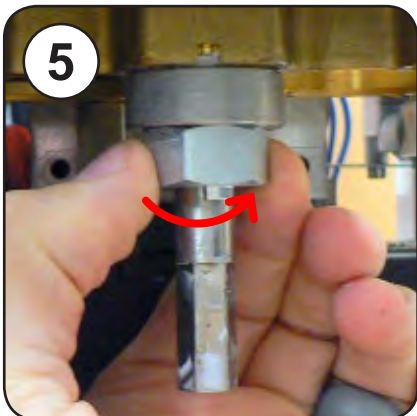
Place the lower race (groove up) in the cup and apply a small amount of grease



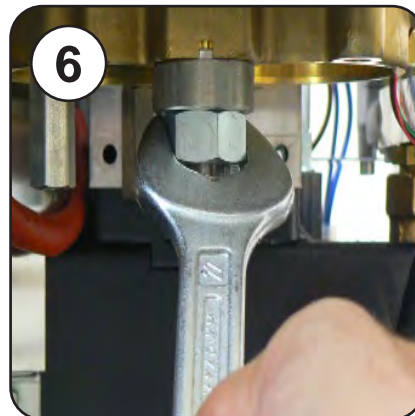
Install the bearing open side up. Apply IKV-Fluor grease



Place the top race (larger hole) groove down
Markings may be different than shown!



Hand tighten bearing and nut onto shaft
(Note top race fits into recess)

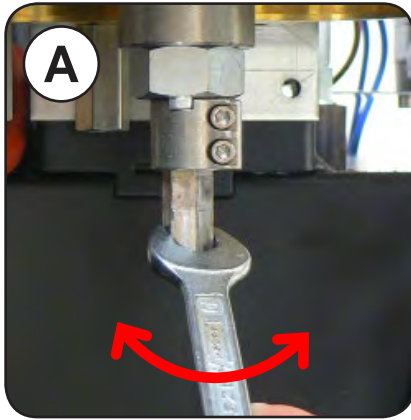


Tighten nut until firm

See next page for proper bearing tension setting

Tango Turntable Service

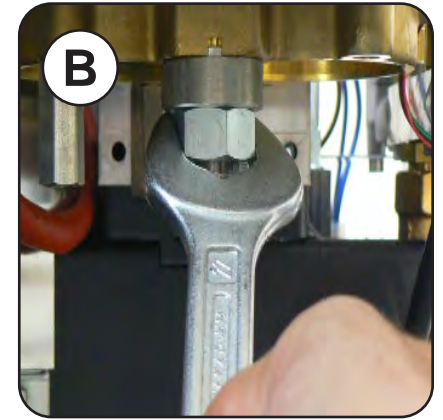
Bearing Tension Initial Adjustment



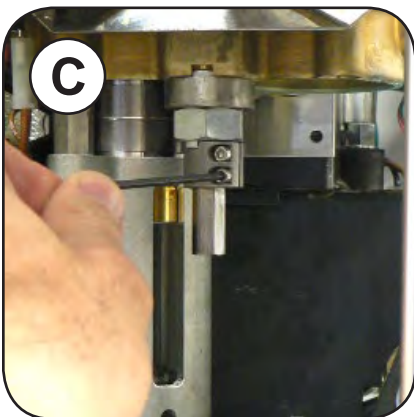
Check tension of Turntable

Check tension of Turntable
Re-adjust 22mm nut until tension is very firm

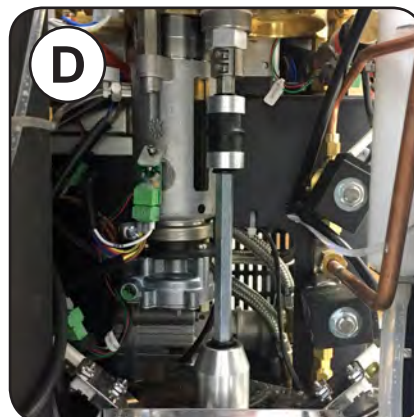
Can not move by hand, takes some effort to turn with wrench



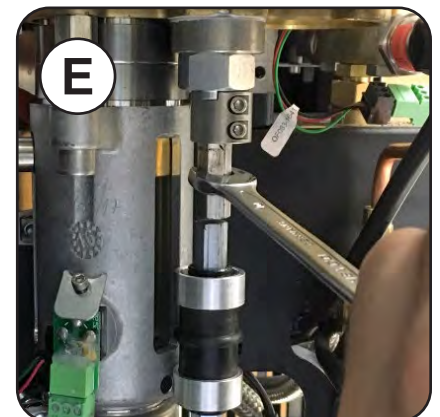
Re-adjust if needed



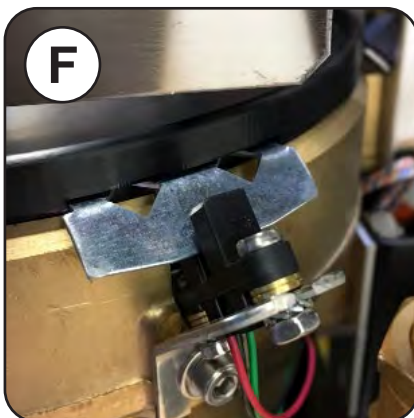
Install locking collar
Don't over tighten, final tension adjustments are made after machine is ON



Reinstall Turntable drive-shaft



Rotate Turntable to align shafts before sliding coupler up

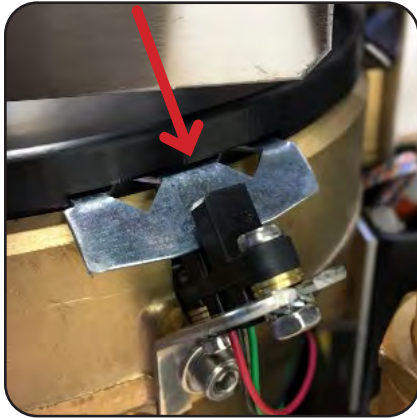


Note: If the Initial tension setting is too tight or loose, final adjustment will not be possible.

The metal tab will not stop inside the sensor when switched ON.
Fault Code 4 will display.
Re-adjust tension as above if this occurs.

Tango Turntable Service

Bearing Tension Final Adjustment



The Position Sensor should stop between the diamond cutouts



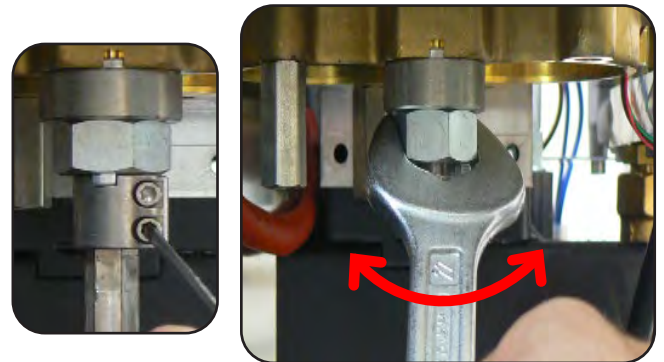
ACE / ST

UNO / SOLO

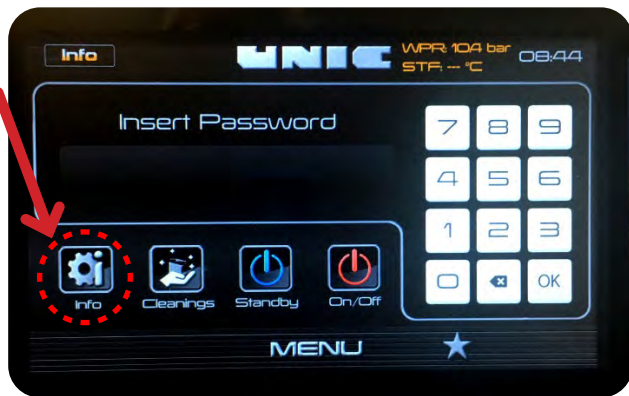
The Turntable speeds (Tt):
2 numbers = left and right rotation
170ms -190ms for newly installed seals
140ms -180ms machine already in use

Change the speed numbers by adjusting the tension of the Main Bearing

Loosen 2.5 mm turntable lock screws
(Rotate shaft first if needed)

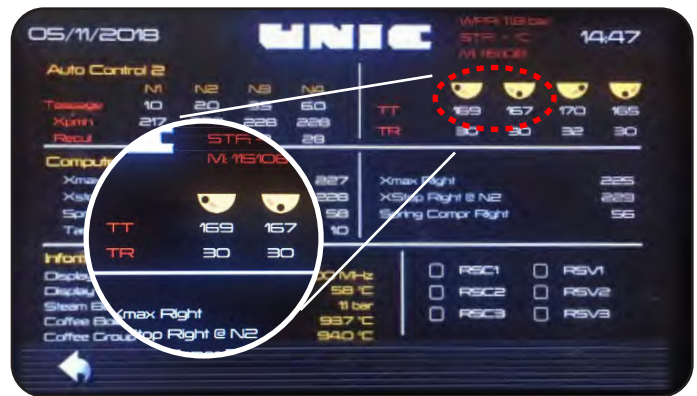


To display turntable speed:



ACE / ST

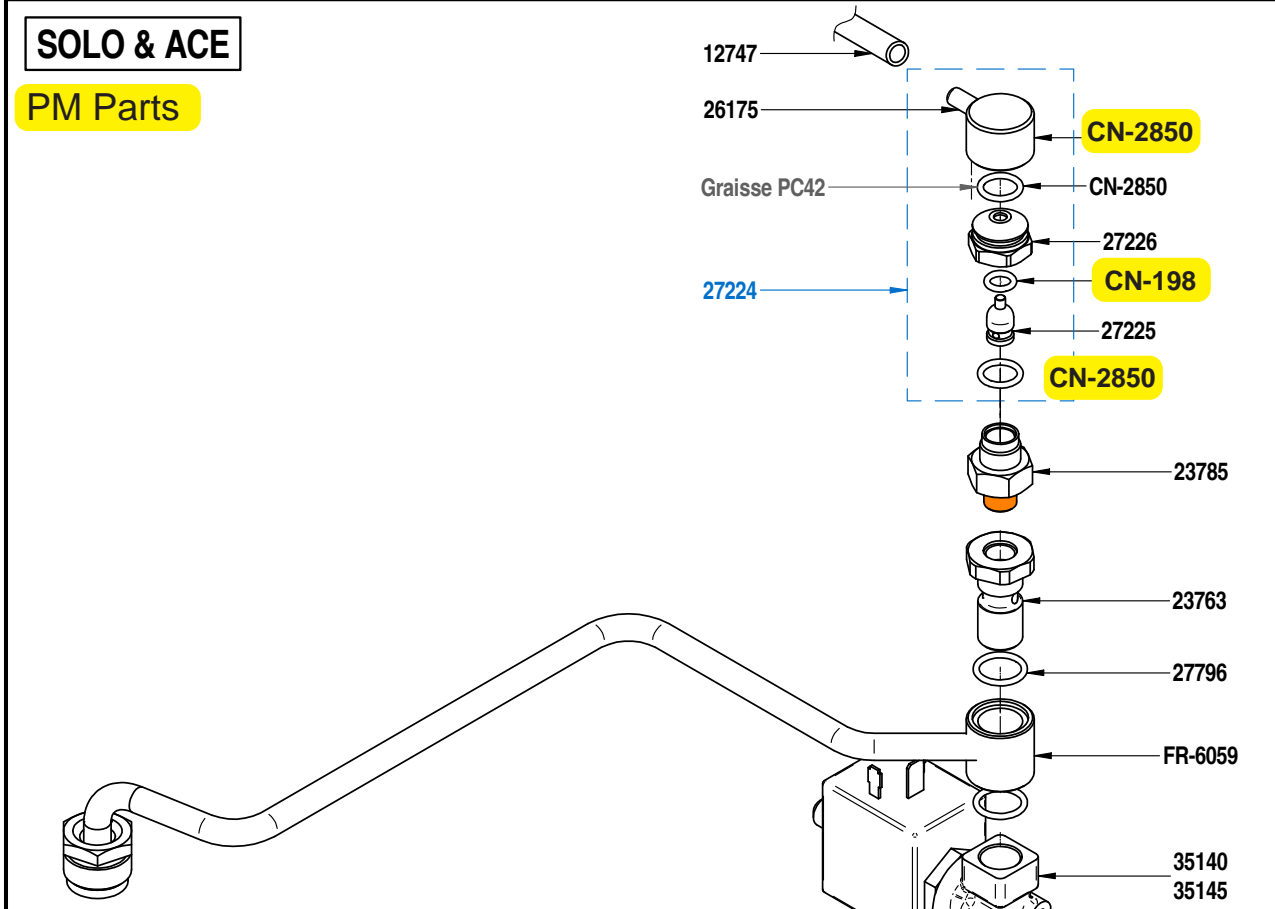
Switch machine OFF and ON with the Technician's USB in place. Then press *Info*.



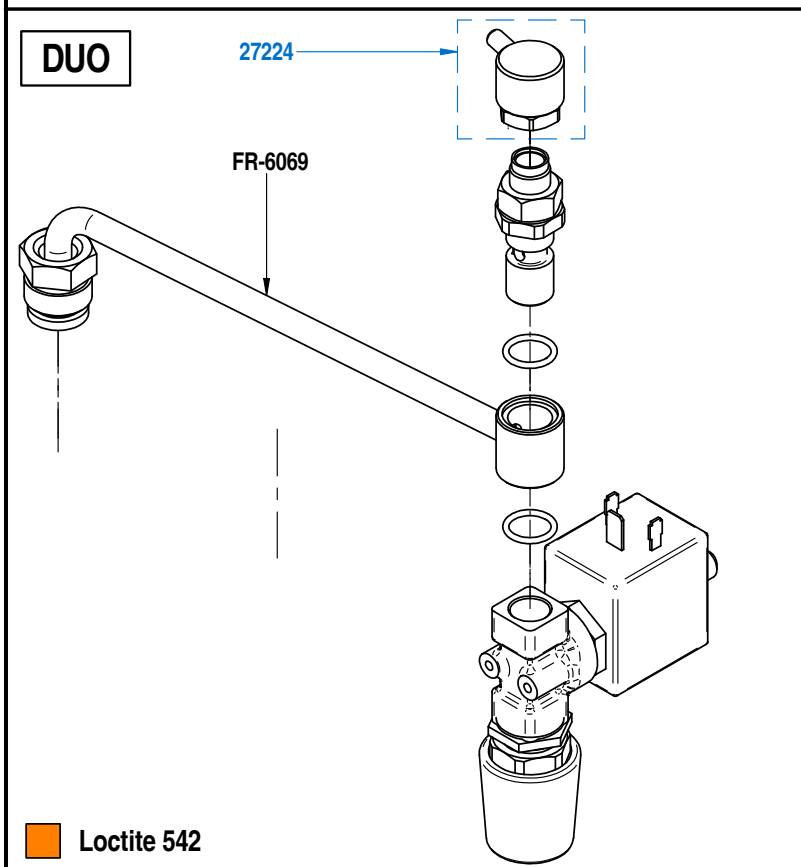
TT is turntable speed

SOLO & ACE

PM Parts



DUO



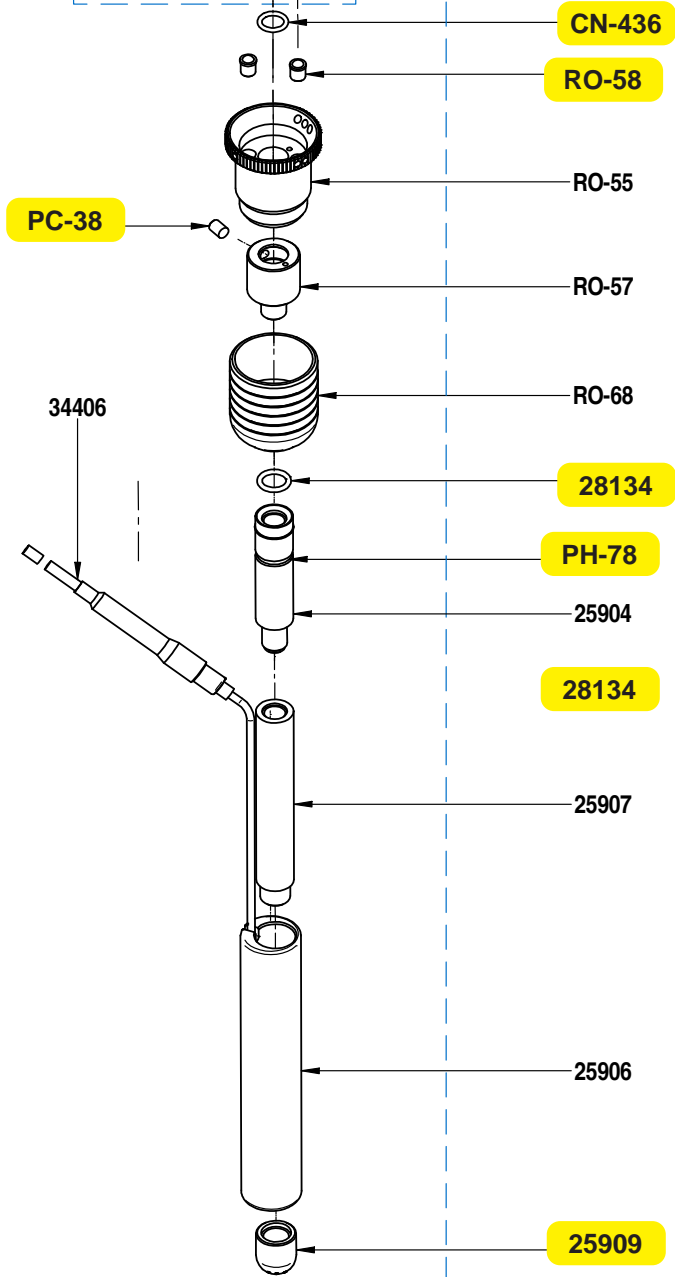
 Loctite 542

12/18	<p>ENSEMBLE TUBE & EV SORTIE VAPEUR <i>SET TUBE & EV STEAM OUTLET</i></p>		201
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PM Parts

FR-1038

RO-59A

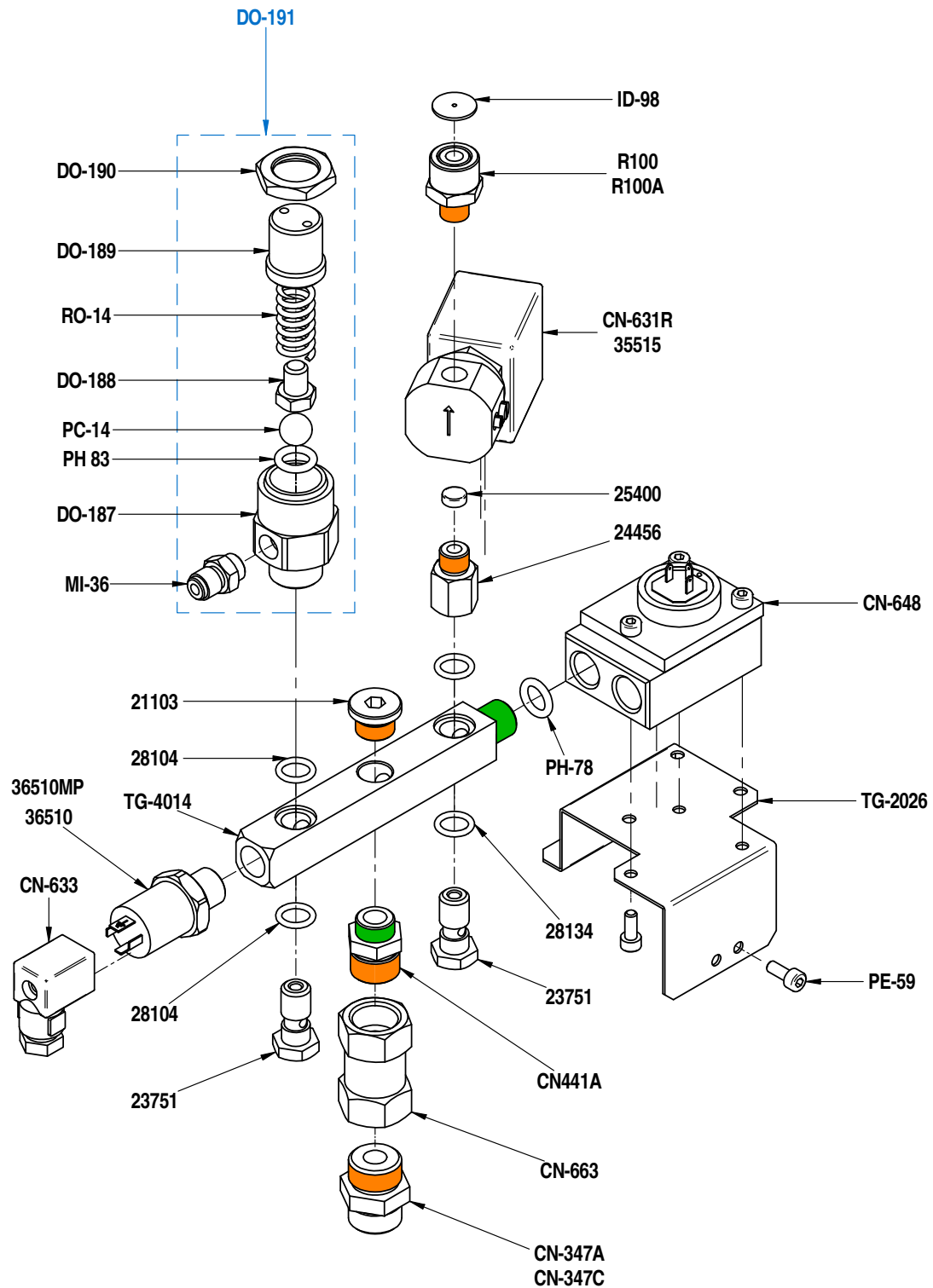


12/18

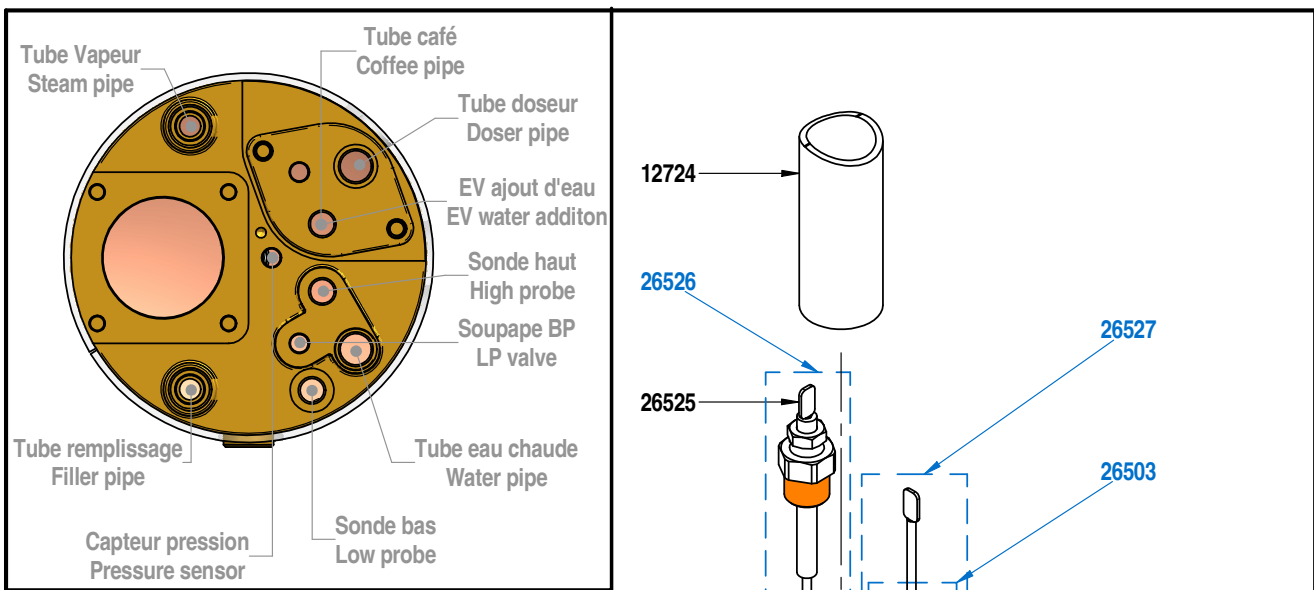
SORTIE STEAMAIR V+
STEAMAIR V+ OUTLET



241



- Loctite 601
- Loctite 542



Replace C7 Harness to fit MP
 style connectors
 TG-8017MP

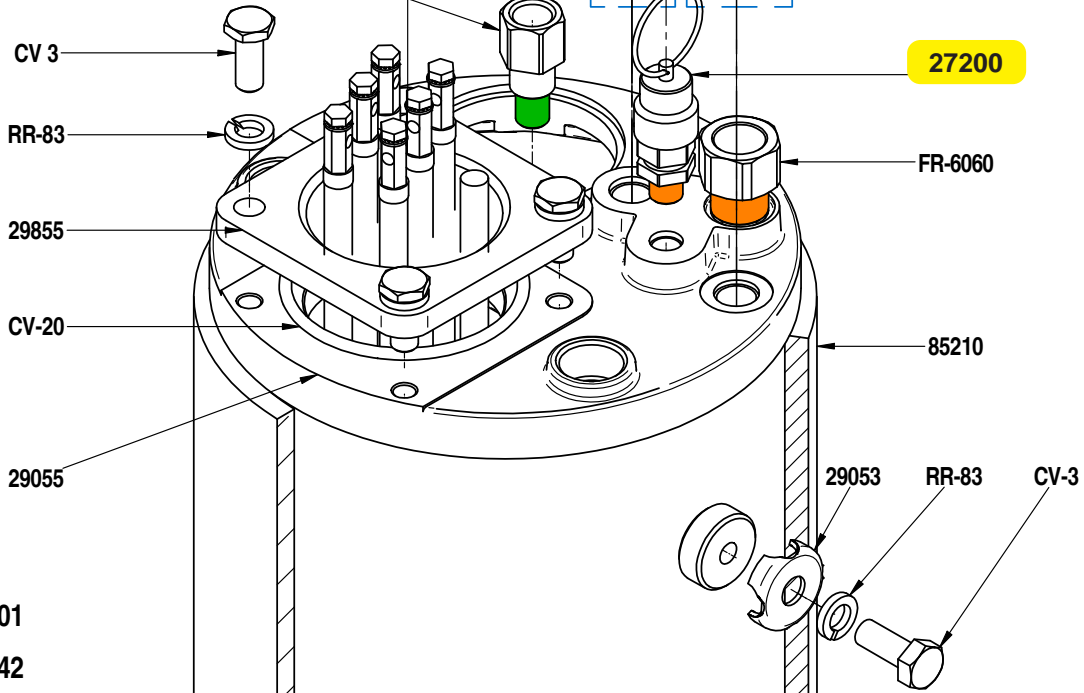


36510MP Pressure
 Transducer Metripack
 29815



36510 Pressure
 Transducer Danfoss

36510MP
 TG-4015



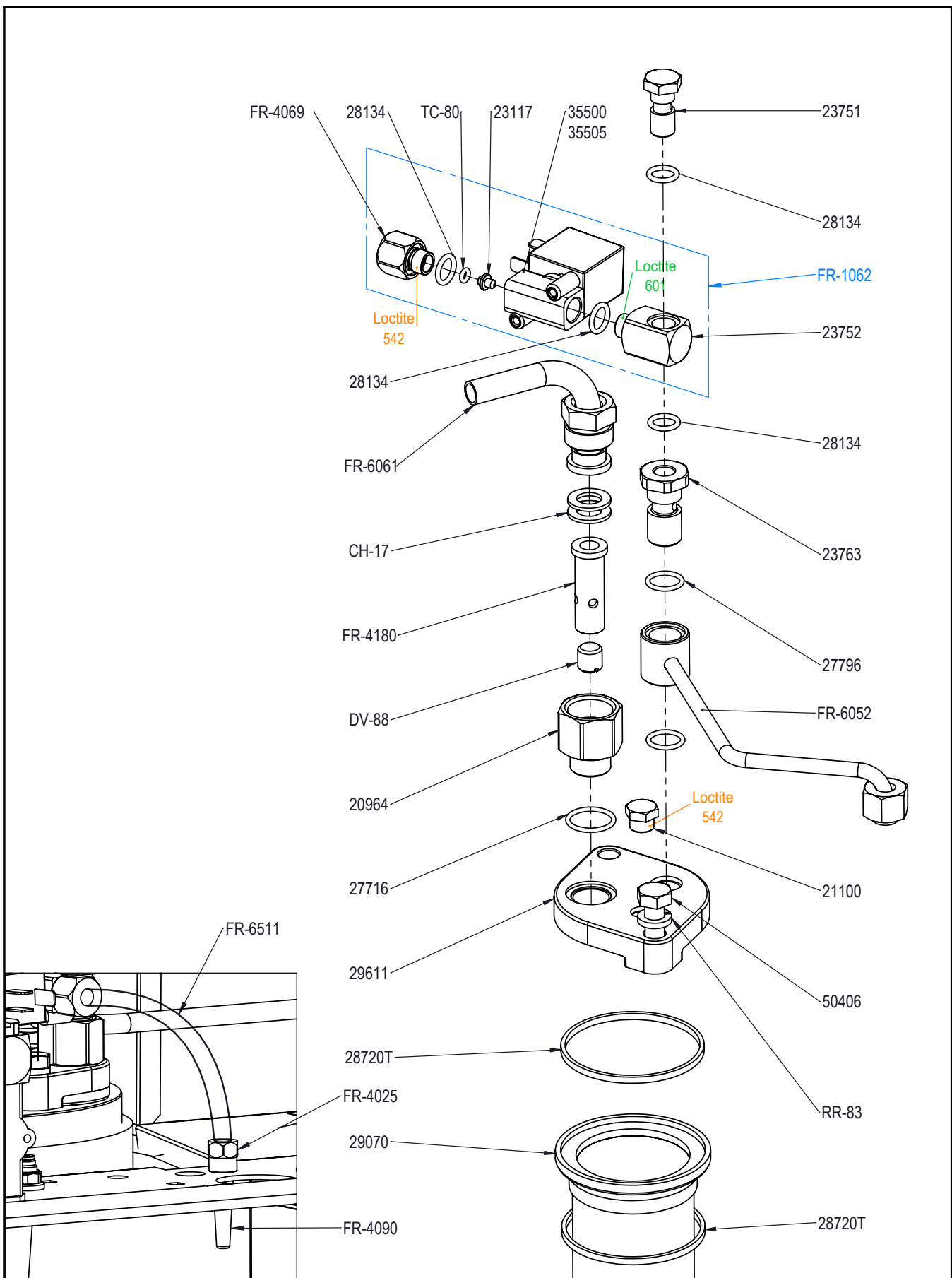
 Loctite 601
 Loctite 542

12/18

CHAUDIERE VAPEUR-CAFE STANDARD
STANDARD STEAM-COFFEE BOILER

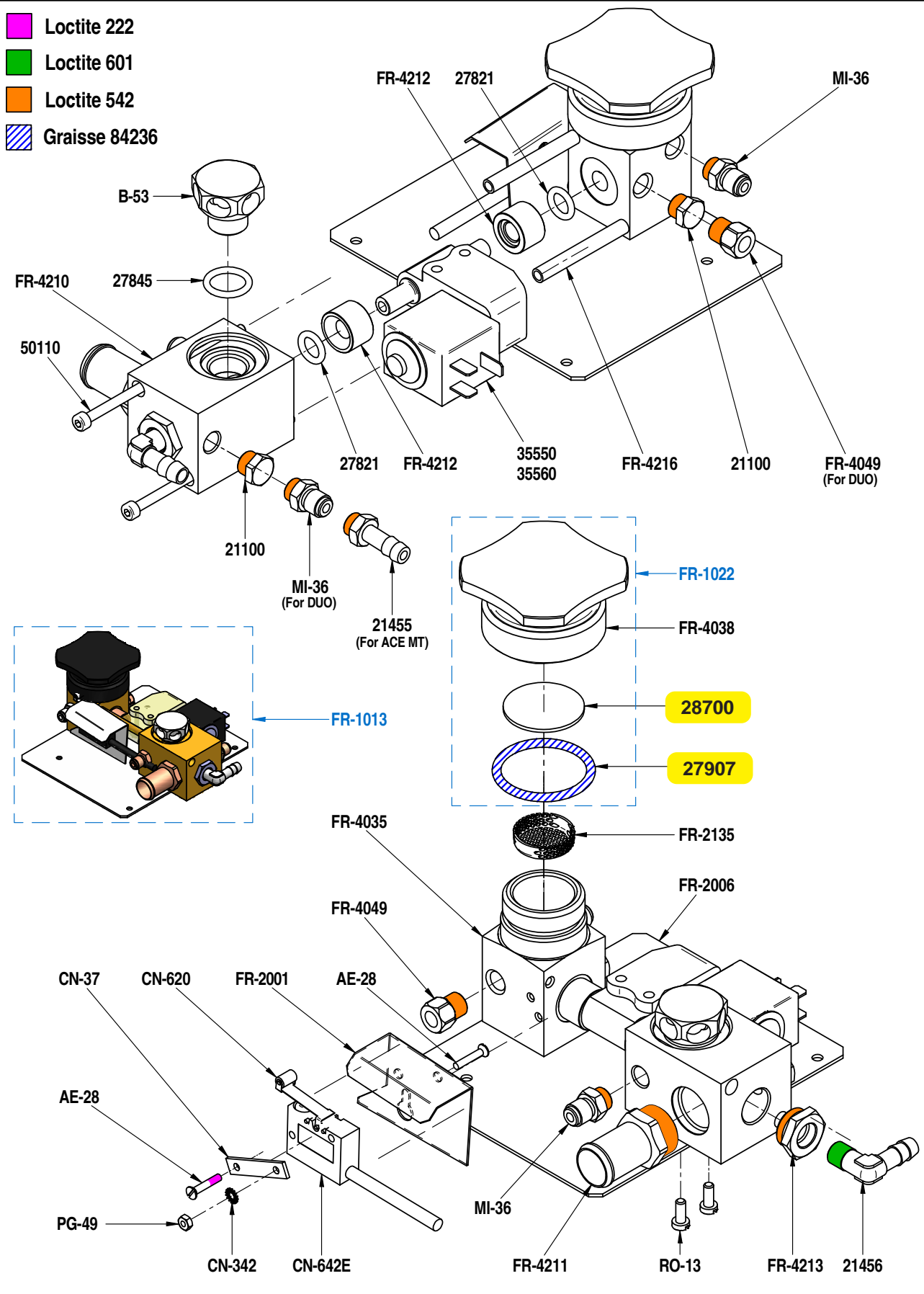
UNIC

340



12/18	CHAUDIÈRE INTERNE 1GR 1 UNIT INTERNAL BOILER	UNIC	345
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- Loctite 222
- Loctite 601
- Loctite 542
- Graisse 84236

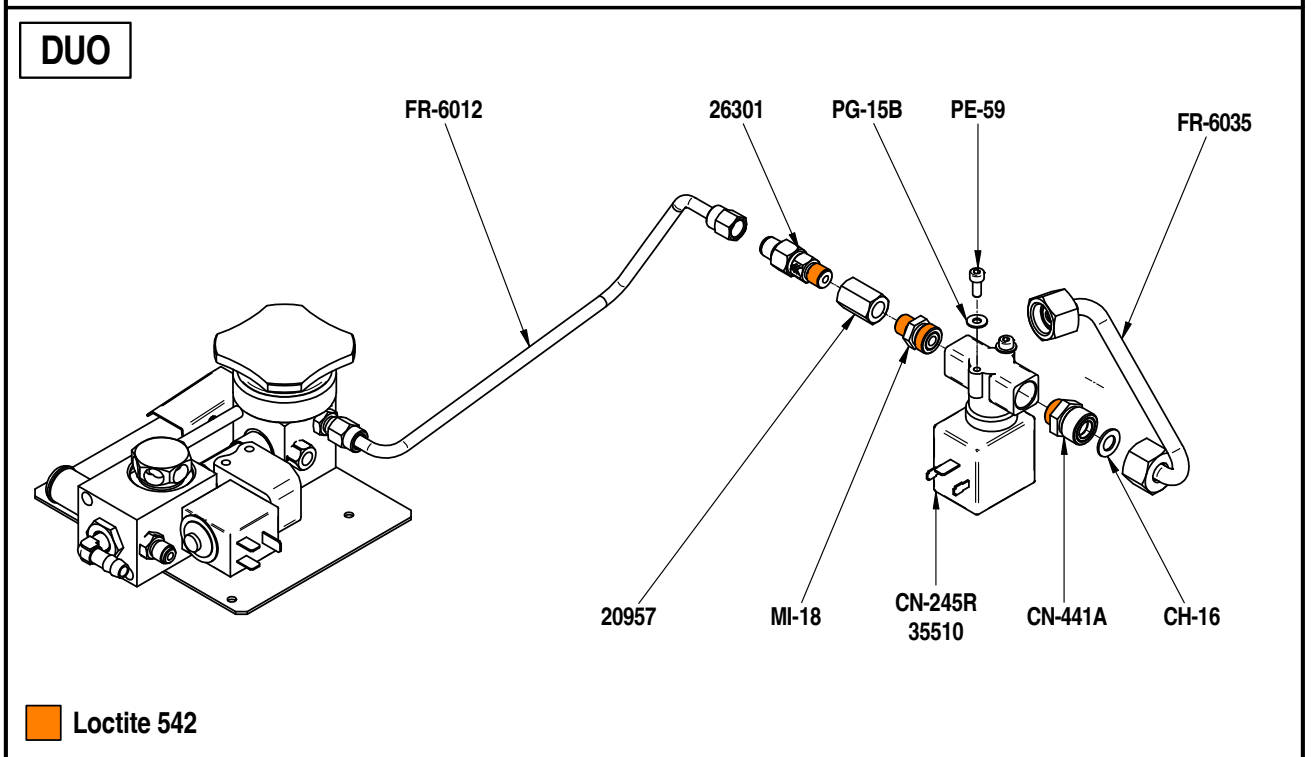


12/18

BLOC NETTOYAGE & VIDANGE
CLEANING DEVICE & DRAIN



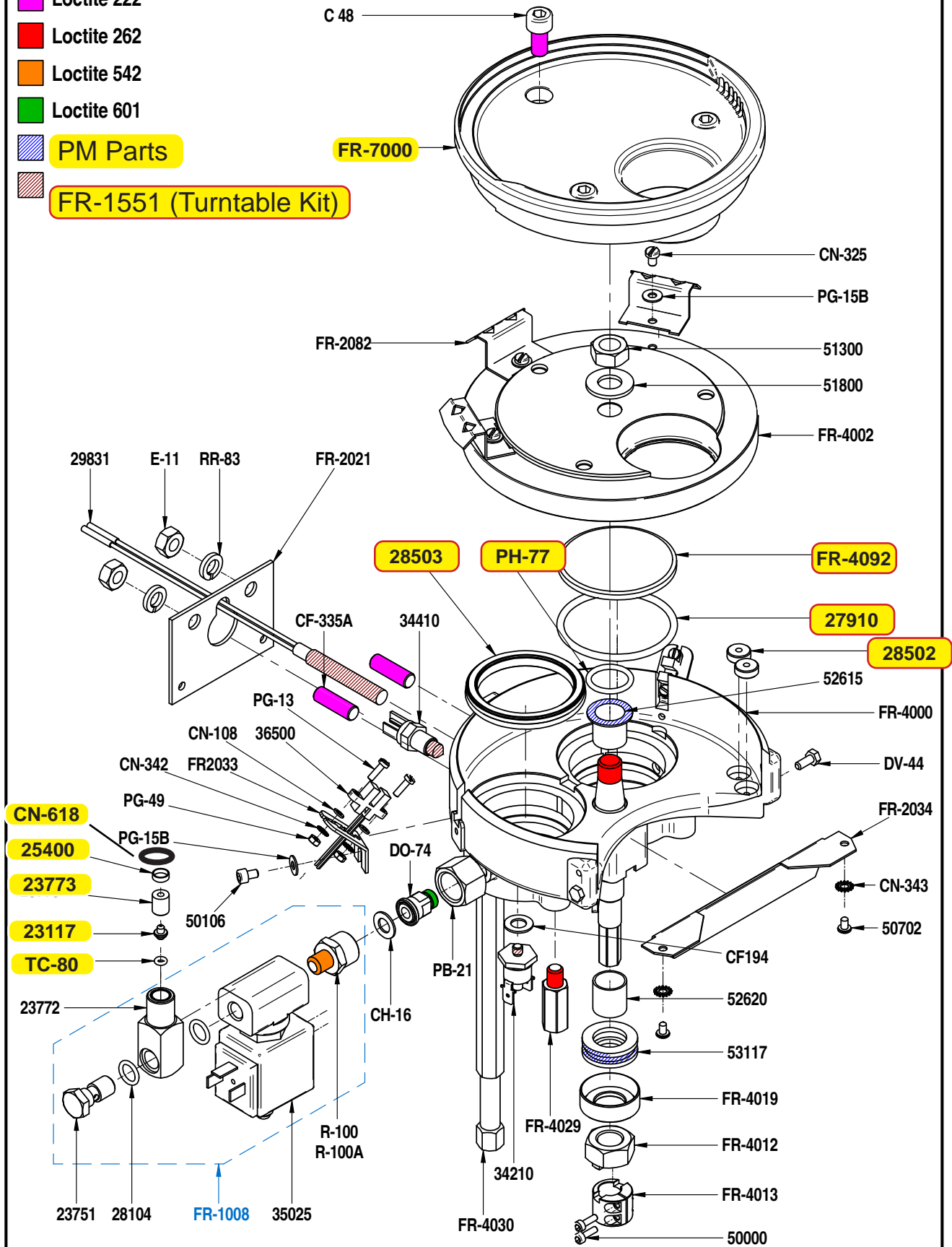
361





- Loctite 222
- Loctite 262
- Loctite 542
- Loctite 601

PM Parts

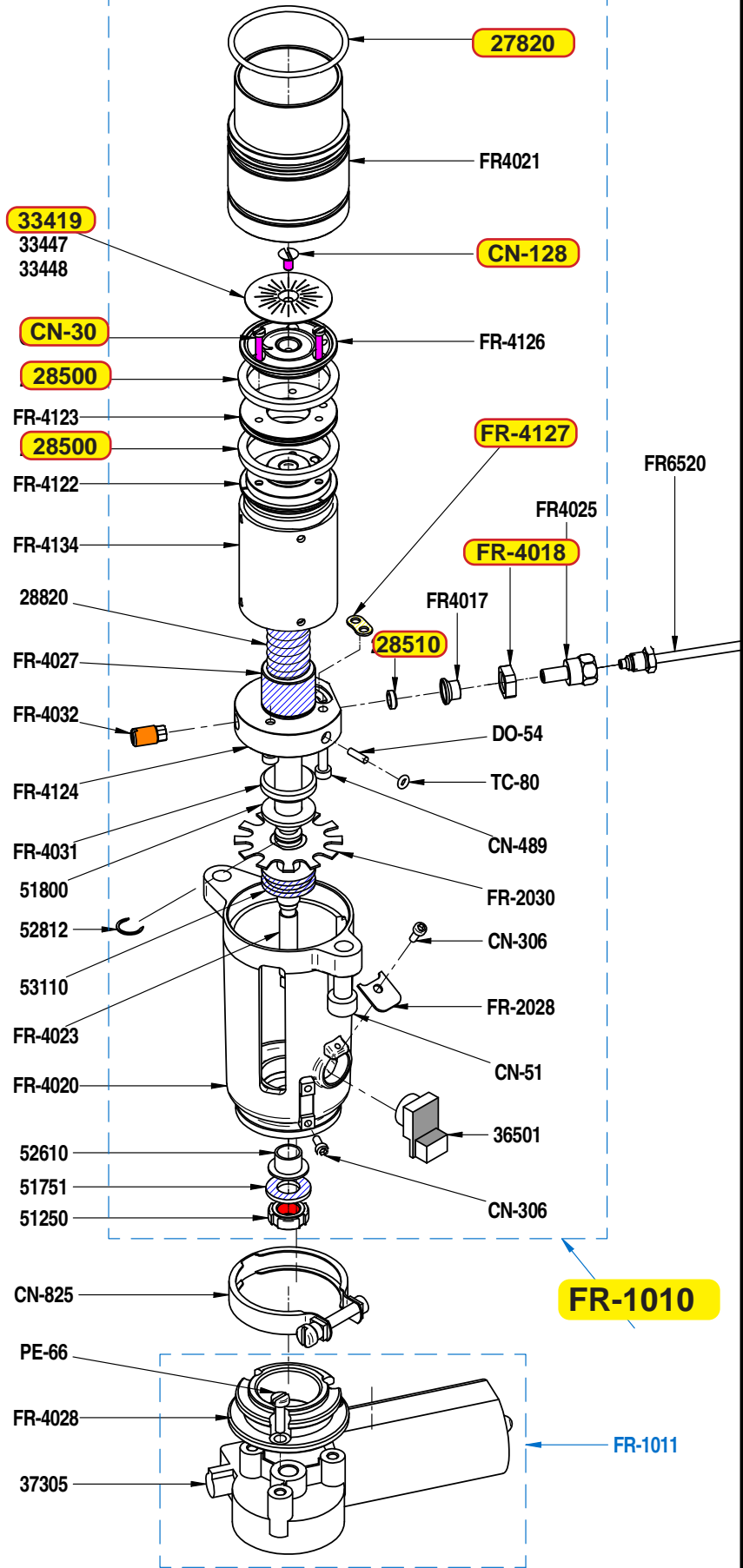
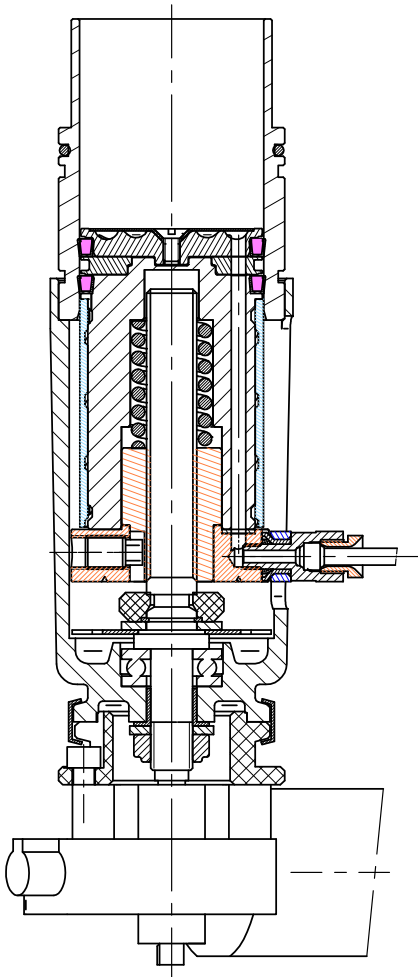
FR-1551 (Turntable Kit)



-  Graisse 84236
-  Graisse 8104
-  Loctite 222
-  Loctite 262
-  Loctite 542
-  Loctite 5366

FR-1919 (Piston Kit)

PM Parts

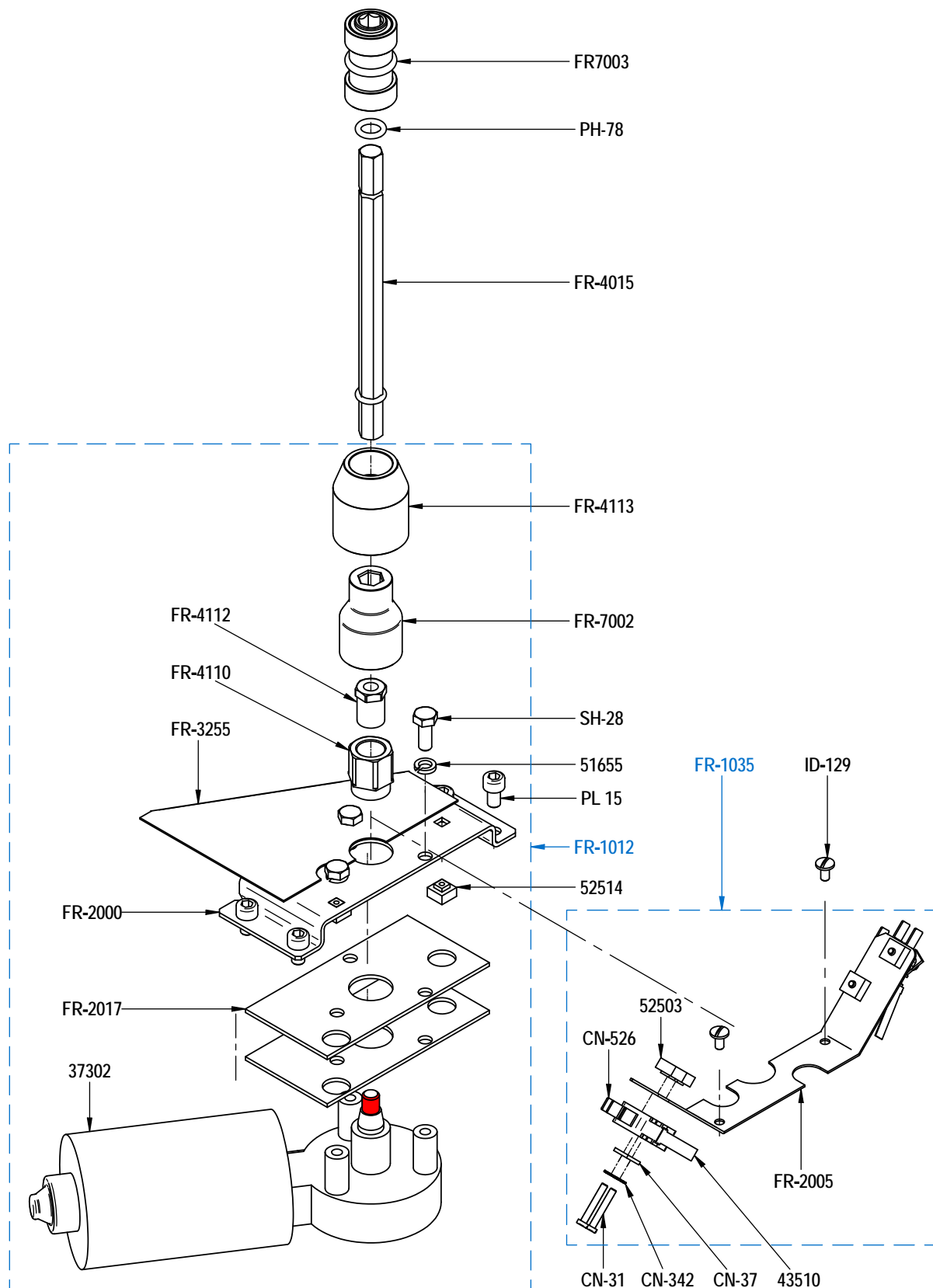



12/18

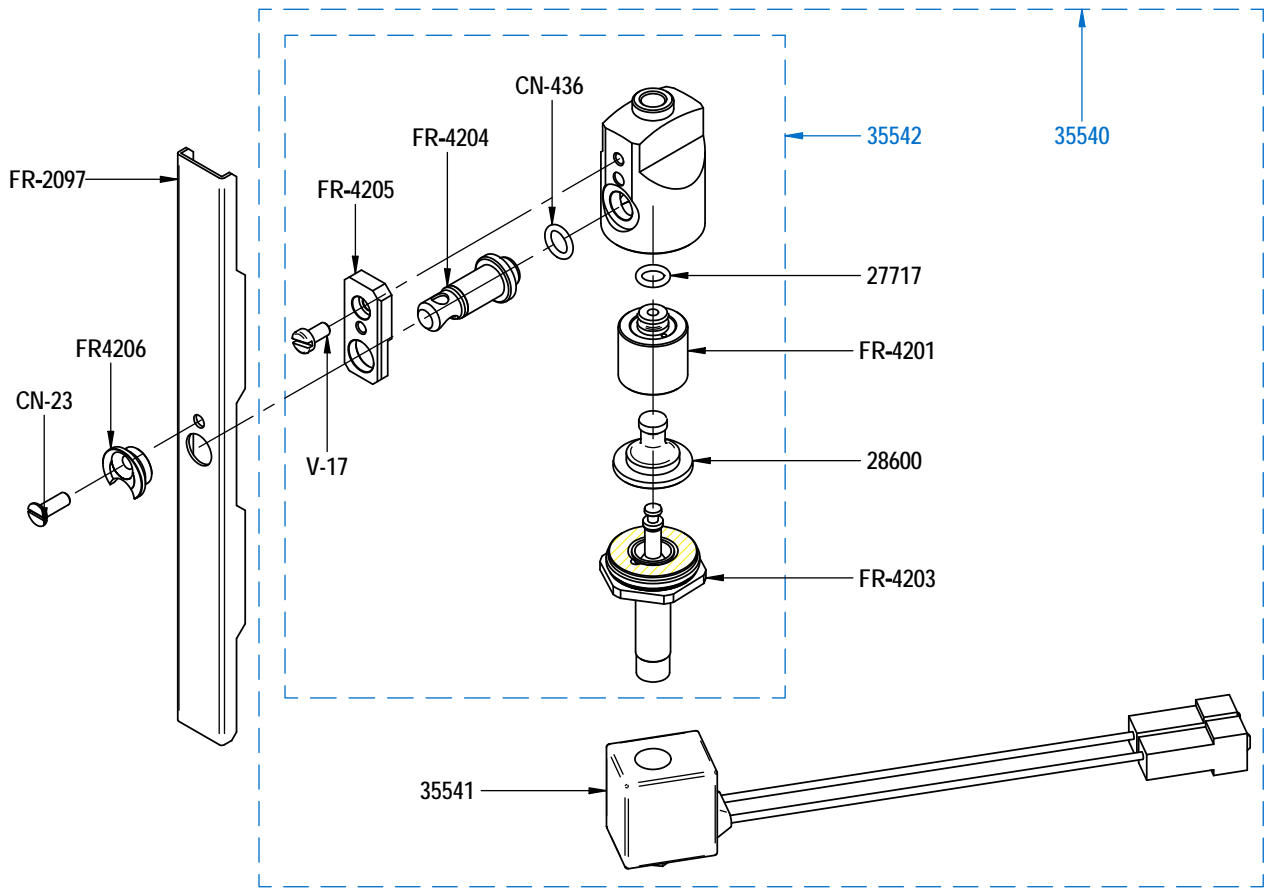
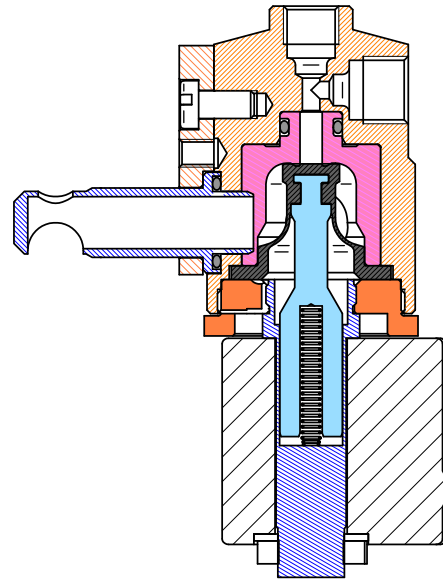
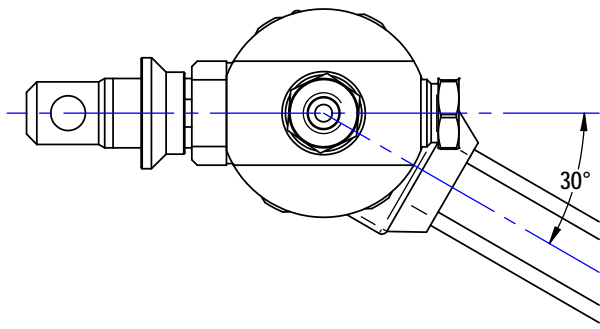
PISTON COMPLET
PISTON DEVICE

UNIC

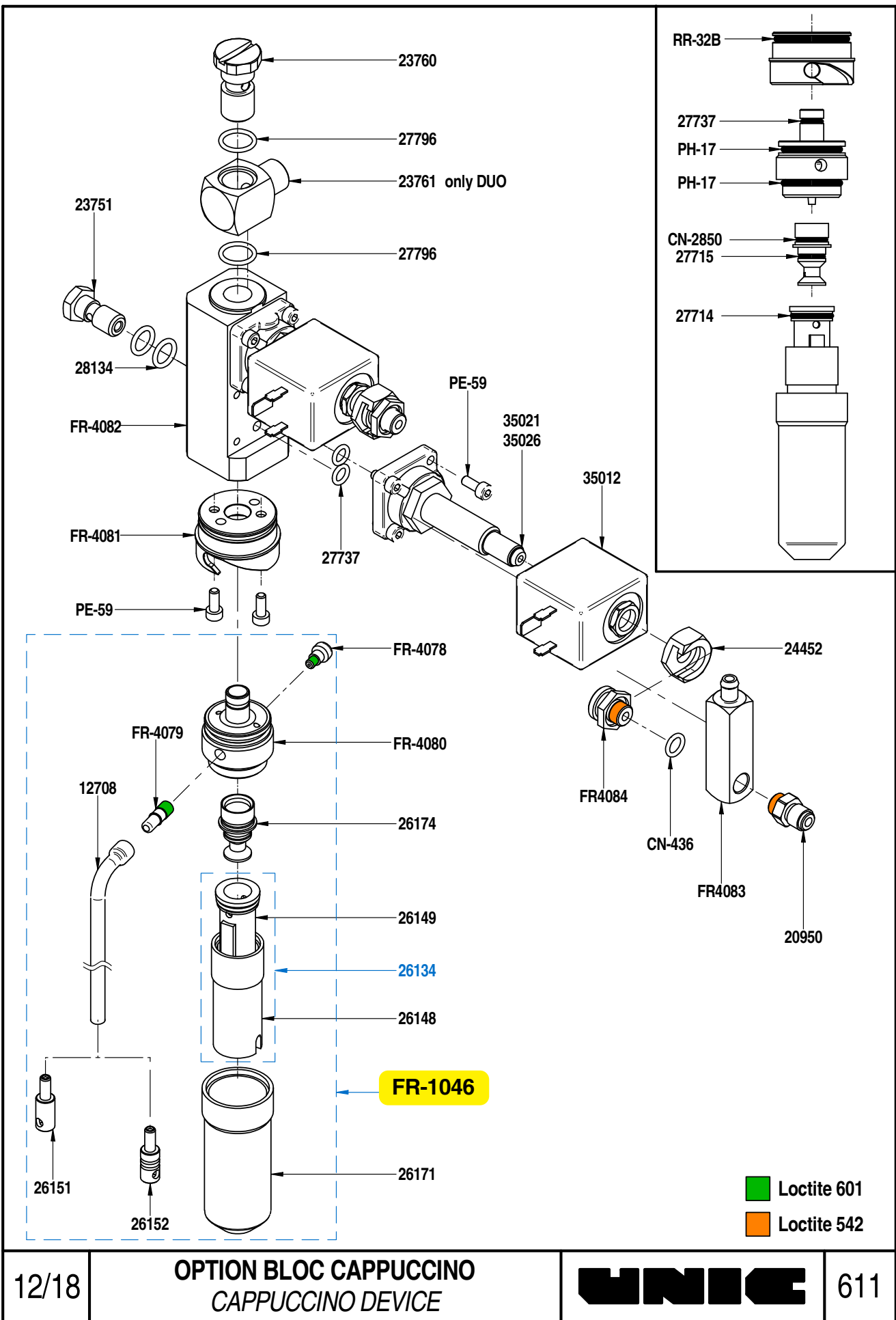
425



 Loctite 262



 Graisse 8104

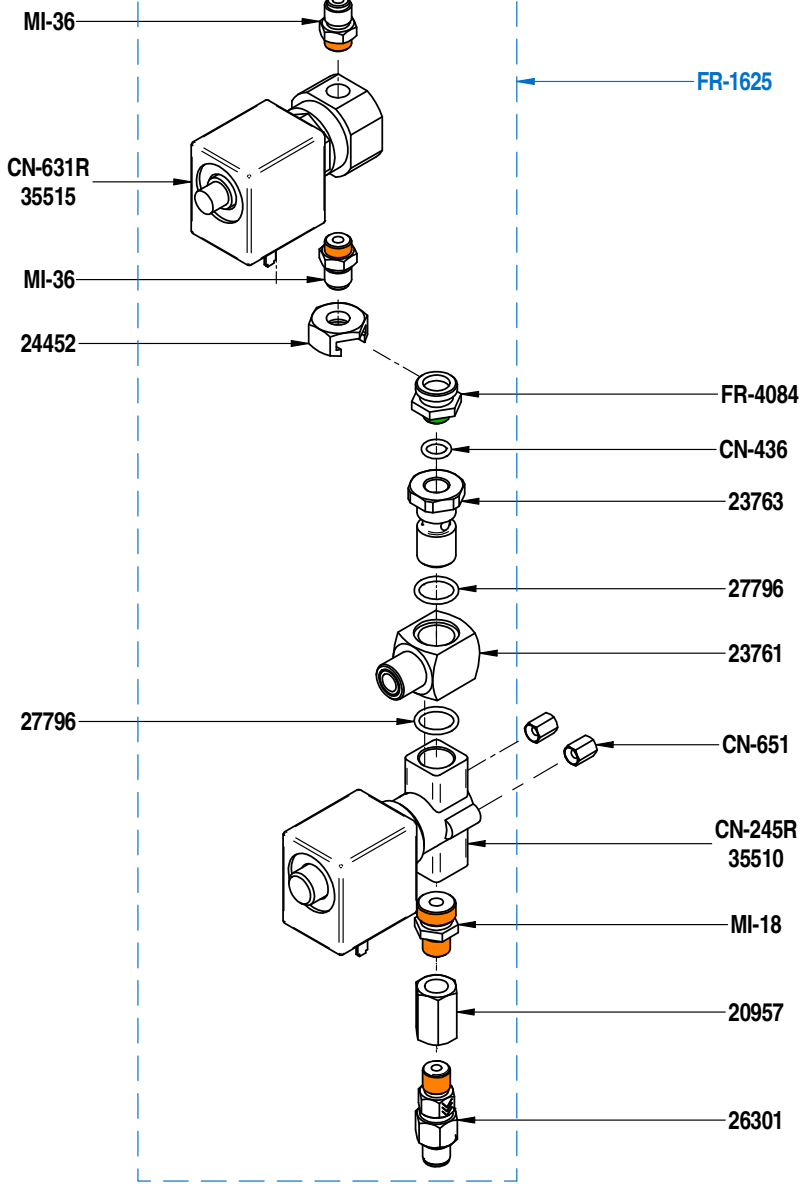


12/18

OPTION BLOC CAPPUCINO
CAPPUCINO DEVICE

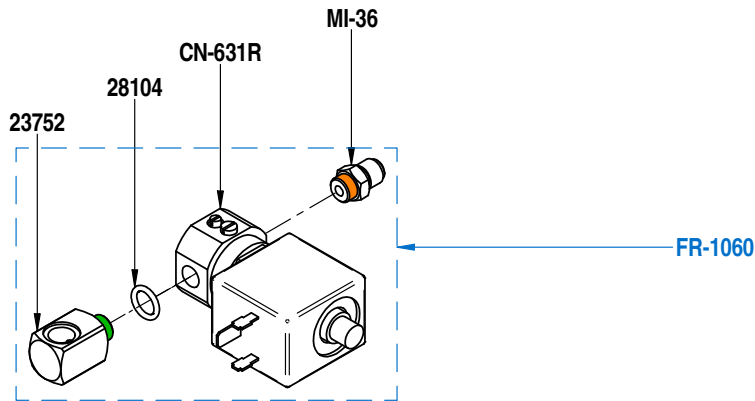
UNIC

611



SOLO & ACE

DUO



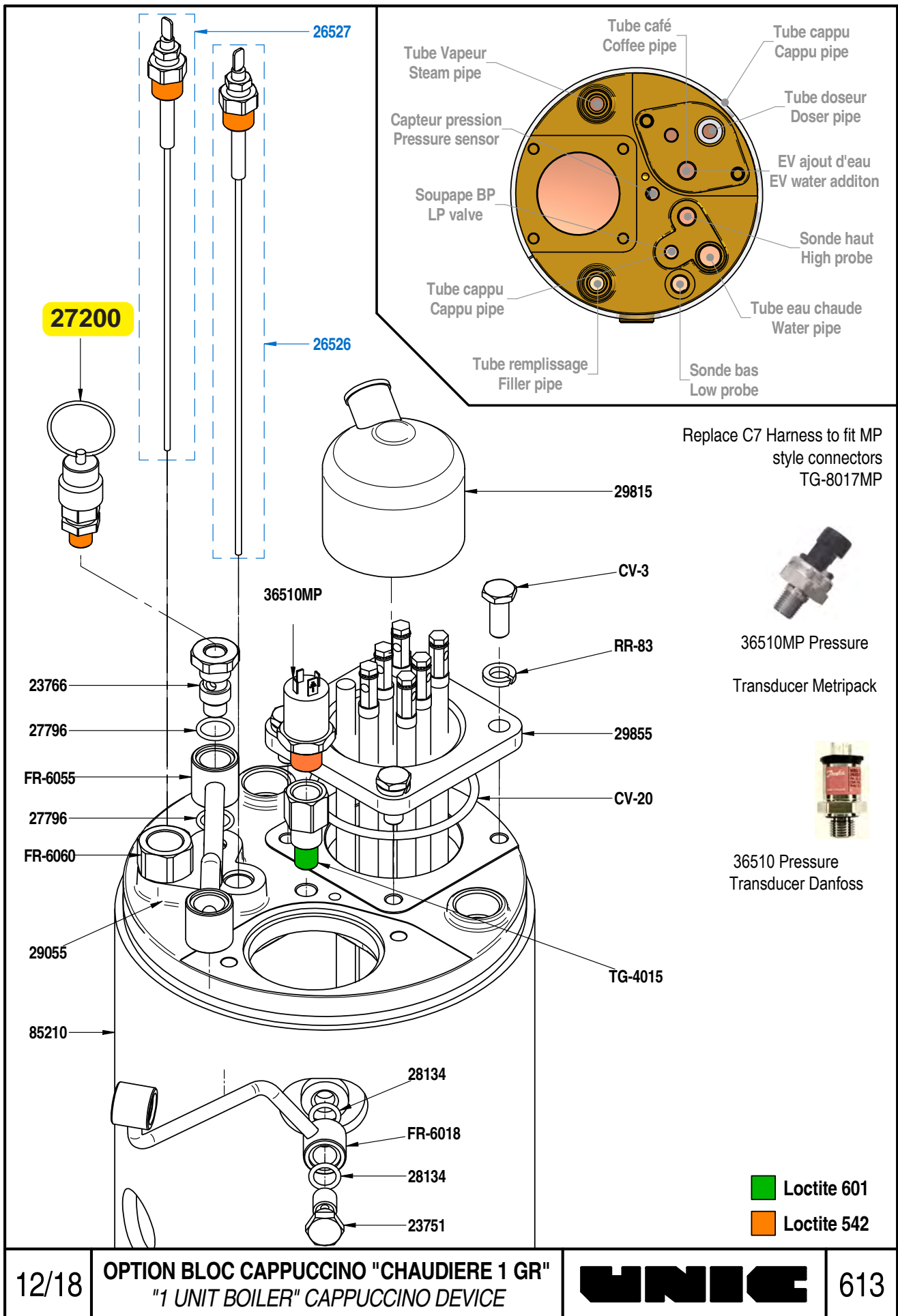
- Loctite 601
- Loctite 542

12/18

OPTION BLOC CAPPUCINO "EV NETTOYAGES"
"CLEANING EV" CAPPUCINO DEVICE

UNIC

612



12/18

OPTION BLOC CAPPUCCINO "CHAUDIERE 1 GR"
"1 UNIT BOILER" CAPPUCCINO DEVICE

UNIC

613

Caution when troubleshooting in service mode Operation Messages are suspended

Machine may be blocked:

Hopper full and drawer switch messages do not display when in service mode. Cleaning request or uncompleted cleaning messages do not display when in service mode.

Uncompleted Coffee cleaning or rinsing may be pending:

(May not display even after Service mode exit)

Switch machine OFF and ON, restart cleaning if needed

Exit Service mode by removing USB and/or pressing the “Home” Icon

Drink Dispensing Screen Problems:

Unable to run coffee drink – Drink icon appears briefly, then disappears

Drink was deleted from “Product Management” list.

The screen menu drinks are screen shortcuts linked to the “Product Management” list.

Solution: Recreate drink in “Product Management” list, Delete and replace old screen menu drink in Key Assignment

Milk Drinks Only: Milk system switched OFF in CIM setting (Common just after a software upgrade)

Solution: Check all setting in CIM, set milk to “LC Venturi” or “Pump”

Steam & water buttons grayed out.

Machine in Demo mode:

#8 top DIP switch on CPU set to “1”, change to “0”

Drink Dispensing Screen Problems cont:

Unable to run coffee drink – Drink icon frozen on screen.

Drink can be canceled with “Stop”

Coffee grams may be set to “0” in Specific Programming

Milk Drink Only: – Drink icon freezes after coffee flow – also freezes after cancel

Must switch off to clear

Milk or foam time set to “0” in Specific Programming

All Drinks grayed out

CPU & Display software versions not compatible, update both to most current version

General Operation:

All Screen Buttons Grey and not functioning

Software versions in Display Screen and CPU are not compatible

Update both using the same USB

Turntable piled with wet coffee

Brew valve exhaust blocked by water in drain

Make sure machine is mounted with slight forward tilt so drain manifold empties.

Machine won't switch ON; main contactor doesn't engage. Toggle switch not lighted

Faulty ON/OFF Toggle switch

Faulty main 10A fuse

Machine won't switch ON; main contactor doesn't engage. Toggle switch lighted

F3 Fuse, 24volts on board

F4 Fuse

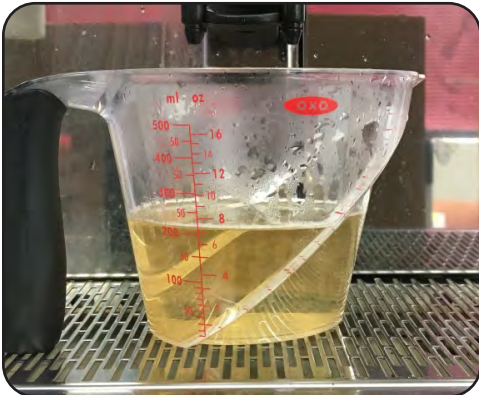
Faulty contactor coil

Drink Dispensing Flow Problems:

Reduced flow from spout when dispensing espresso drink

Piston Water Flow Test:

Remove and replace grounds drawer; spout rinses for 20 seconds



Ace / STP:
20 Second Flow
~225 ml rinse



180-250 ml = Normal flow

150-200 ml = Slight restriction, run a cleaning cycle and test again

Less than 150 ml = Piston clogged.
Remove piston to clean or replace.

No flow from spout when dispensing espresso drink:

Clog in coffee system (Gicleur Jet, brew valve, piston, or spout)

- Clog caused by improper cleaning tablets or cleaning in the morning instead of at end of day.
- Wet grounds on turntable area falling back into piston brew chamber
See Grounds Spilling section at end of this list
- Make sure machine is mounted with slight forward tilt so drain manifold empties.
- Scale in Gicleur Jet

No flow from water adding valve (Americano) and No coffee from spout

Check Flowmeter for clog

Only water from spout after when dispensing espresso drink:

Does grinder run?

No – troubleshoot grinder power

Yes – Check following:

Hopper gate not open

To open push hopper lever to the right on the larger hopper or forward on the decaf side

Hopper empty or coffee oils causing the beans to stick to the sides

Fill hopper. Stir beans to unstick. Remove and clean hoppers if insides are sticky.

Coffee grounds spraying on turntable area and not reaching piston

Drink overfills, extraction runs 90 seconds and stops.

Flowmeter unplugged, faulty, or faulty wiring connection to flowmeter

Code 81: DOG Left flowmeter blocked

Cleaning Cycle:

Buzz during cleaning

Pump buzzing - Check for restricted water flow to machine
Replace the non-return valve after coffee cleaning valve

Cleaning tablet not dissolved

Blocked cleaning non-return valve
Coffee Cleaning valve: Clogged, not getting power, or coil not working

Requests another Cleaning immediately after Cleaning cycle complete

Low water pressure, pressure dropped during cleaning
Water switch not reading, bend bracket down to ensure activation
Grounds drawer switches not closing

Asks to re-start Cleaning before Cleaning cycle complete

Low water pressure, pressure dropped during cleaning
Water switch not reading, bend bracket down to ensure activation
Grounds drawer switches not closing

Stuck on the cleaning progress bar

Switch ON OFF does not clear

Water is shut off during cleaning
Another fault appears during cleaning
After exiting standby mode

Turn off the cleaning commands to cancel cleaning cycle and restart cleaning:

- switch off the machine
- move DIP switch #6 to ON
- restart the machine
- restart cleaning
- return to the main menu

Restore normal operation:

- switch off the machine
- return the DIP switch to normal position (all switches OFF)
- switch on the machine

Screen Messages:

“No Communication – Touch to proceed”

ICU board unplugged

New ICU board has no software installed, try loading software

Replace ICU

Left Milk Level Add Milk

ST/Ave: 2 gray jumper loops on CN1 bypass future milk level sensor

UNO/Solo: 3 gray wires on CN1 must be jumped together (are inside sleeve)

Brew group temperature reads ~-630F

Temperature probe disconnected on rear of Turntable

Code 1 – No reading from Steam boiler filling probe during normal operation

Located in center top of steam boiler

Restricted water flow to machine

Filling Valve blocked

Valve driver board unplugged

Code 2 – Steam boiler filling timeout on startup (Pumps runs)

Restricted water flow to machine

Filling Valve blocked

Valve driver board unplugged

Code 3 – No reading from Steam boiler low level safety probe during normal operation

Located on left top of steam boiler

Restricted water flow to machine

Filling Valve blocked

Valve driver board unplugged

Code 4 – Turntable rotation timeout message

Waste drawer removed during drink cycle or cleaning or drawer not fully seated

TT Turntable bearing setting too tight (above 210)

Loose wire on either turntable position sensor (or sensor unplugged)

Blown fuse F4, Primary of the transformer

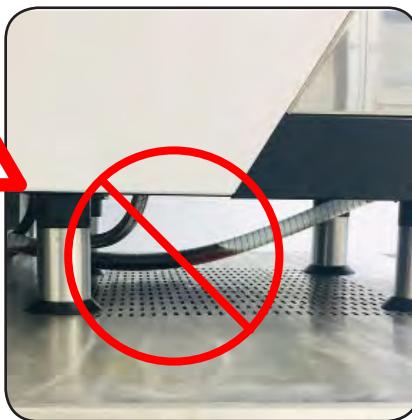
High AMP draw from piston or turntable motor

Service Piston or Turntable if dirty

Grounds spilling onto the turntable area:



Use the provided shims on the rear legs if necessary to level the Tango. Angled slightly forward is also OK



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

Drain:

Tango must be installed level or angled slightly forward!

Install the drain line running continuously downward so that no “trap” is formed.

The brew valve exhaust tube must be free to vent the built-up brewing pressure before the turntable opens the brewing chamber.

Grounds are ejected from the top of the chamber if the pressure is not released.

Group Temperature set too high at elevation above 2000F

The brewing water may flash boil when it reaches the piston, the released steam can carry the grounds up and out of the piston.

Start at 94°C, reduce more if at elevation.

Group temperature must be at least 4°C below local water boiling point.

Ground Coffee overflowing the brewing chamber

Check that the programmed dry grounds dose does fill the piston above the top rim.

Coarse grind adjustments will cause the dry grounds to take up more room.

Complete grinder calibration for correct ground coffee dosing.

Advanced: Back off the tamping before extraction for 18 gram dose

Water needs room to flow above the coffee grounds. The coffee grounds will also expand during extraction. A default amount of back off is already in place.

More back-off may be needed with larger ground coffee weights.

Use the RR setting for Solo/Uno: -4 backs off 1 mm. -8 backs off 2 mm.

Use Encoder recul for Ace/ST:

Piston Water flow test



Measure the water flow through the Piston during the spout rinsing cycle.

Clean or replace the Piston if the flow is restricted.

Remove and replace grounds drawer to start the rinsing cycle.



Press and Hold YES for 3 seconds to start the rinsing cycle



Ace / STP:
20 Second Flow
~225 ml rinse
←

180-250 ml = Normal flow

150-200 ml = Slight restriction, run a cleaning cycle and test again

Less than 150 ml = Piston clogged. Remove piston to clean or replace.

TANGO[®] ace

Coffee System Cleaning Instructions

UNIC
ESPRESSO ENGINEERS



Clean coffee with tablets everyday

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

Use only UNIC brand cleaning tablets.

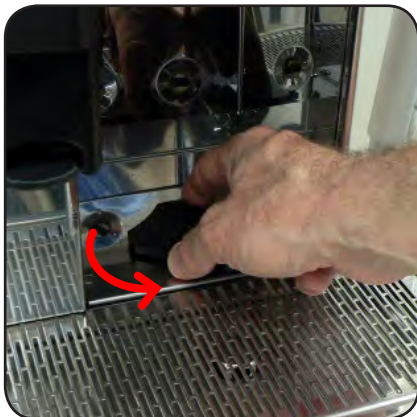
UNIC #92025 100 tablets/jar



UNIC #92025



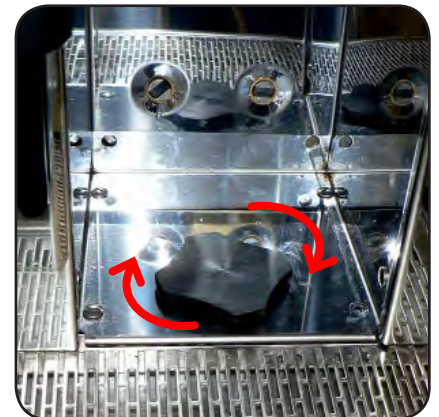
Remove Waste Drawer



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

SteamAir Wand Operation

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

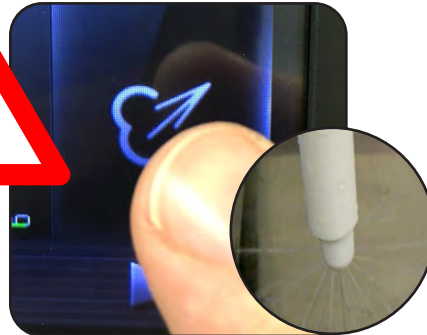


Press SteamAir Button
Steam will automatically shut OFF at the pre-set temperature



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

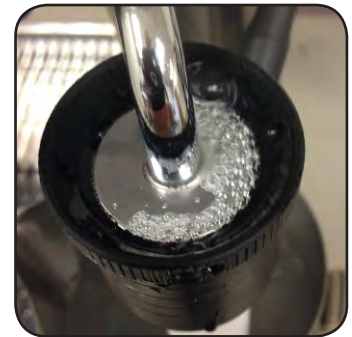
The SteamAir wand MUST be wiped and purged after each use to prevent milk build-up



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!

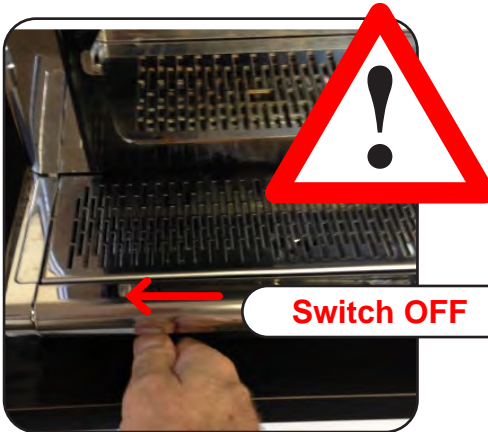


SteamAir Wand Cleaning

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



NEVER soak in cleaner!



Switch OFF

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

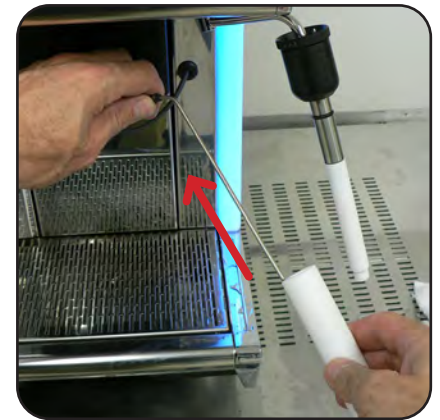
Switch the machine OFF before removing the Wand!



Unscrew Steam Tip



Remove Outer wand



Remove Temperature Probe

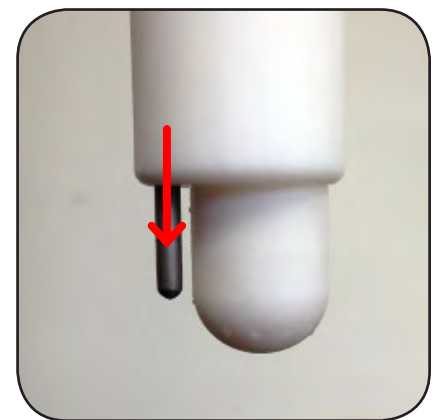


Wipe Temperature Probe and Inner wand



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



The Tango Milk Foamer must be removed and cleaned at least once per day!

Use only acid formulation RINZA
UNIC #12RAF32 32 OZ



Remove Milk Foamer



Remove the magnetically mounted spout



Unlock the Foamer by twisting it to the right



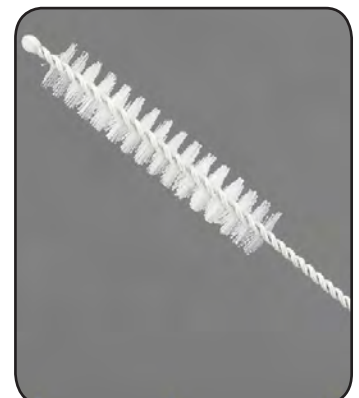
Remove the Foamer by pulling down



Soak the foamer parts in RINZA cleaner
Follow label mixing directions

Clean the nozzles with Unic cleaning Brush

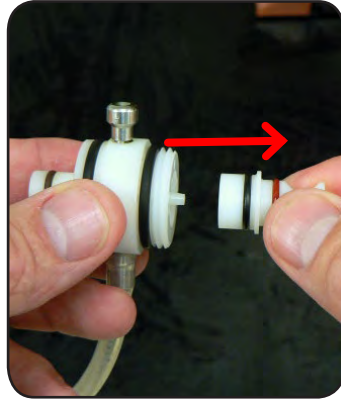
See other side for cleaning details!



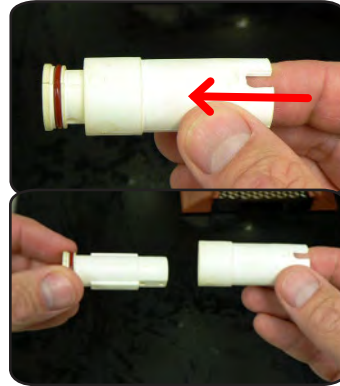
Milk Foamer Cleaning



Unscrew the Foamer Cover Tube



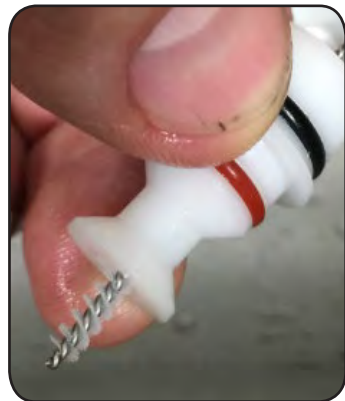
Pull out the Nozzle insert



Push the Insert out of the Center Tube



Soak the parts in Rinza solution for 5 minutes



Use the brush to clean the Nozzle insert



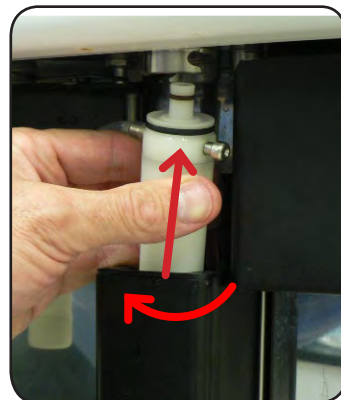
Also clean the Main Milk Jet



Rinse all parts before re-assembling



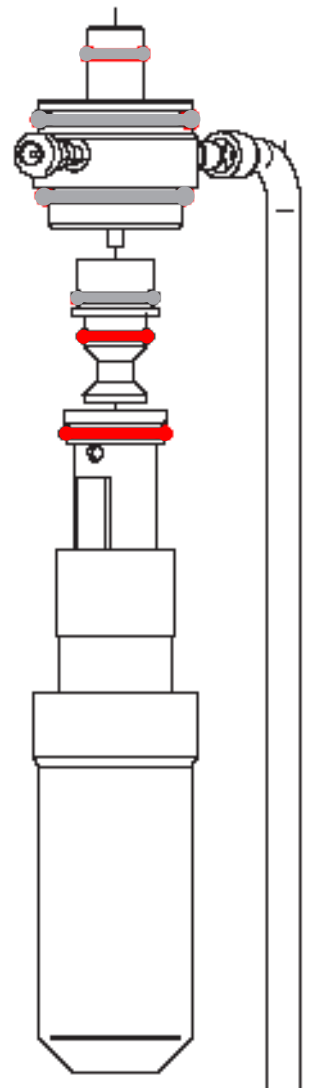
Rinse the Spout



Re-assemble and re-install the Foamer and Spout



Every Day!



WNIC

ESPRESSO ENGINEERS

TANGO[®] ace



of professional espresso machines since 1919.

The manufacturer reserves the right to modify the appliances presented in this publication without notice. Read carefully the safety instructions before use.

TG9066 07/2019

UNIC

TECHNICAL NOTE

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1-SAFETY INSTRUCTIONS

This device is intended to be used only for its specific use.
The manufacturer disclaims any liability for damage caused by abnormal use or abuse.

Children 8 years of age or older and persons with reduced physical, mental or sensory abilities, or lack of experience and skill may use this device, if supervised by a qualified person, or they have received the instructions for use and security necessary to understand the risks involved.

Supervise children to make sure they do not play with the appliance and they can't make the cleaning & maintenance of the machine.

Do not leave the packaging elements within reach of children. These elements are potentially a source of danger.

The installation must be done by a qualified technician and following local and national regulations. He is the only one to be authorized to access the internal parts of the device for maintenance and repair.

Use only the technical and spare parts manuals for proper functioning of the machine, and avoid compromising safety.

Access to the service area is limited to persons with the necessary knowledge of safety and hygiene as well as practical experience of the device.

Leave enough free space around the machine to facilitate its use and to perform any maintenance operations.

The device **must not be**:

- exposed to the elements of the external environment or placed in damp places,
- exposed to a water jet or splashing.
- installed in areas where the jets or high pressure cleaners are used.

The device **must be**:

- placed on a stable, level and horizontal surface
 - used at an ambient temperature of 5°C to 35°C (41°F - 95°F), (if it is stored at an ambient temperature below 5°C (41°F) the water circuit (boiler-piping) must be drained.)
 - if the device freezes, wait 24 hours at a minimum temperature of 10°C (50°F) before restarting the device.
- Before connecting the power and water supplies, check that the electrical and water network are in accordance with the technical information plate of the device.

The power supply must be provided with the following safety features: power switch which completely isolates the machine from the mains (gap between contacts of at least 3 mm), efficient earthing and an effective circuit breaker for protection against earthing leaks; section of the conductors appropriate for a power capacity.

Before connecting or disconnecting the power cable, switch the main switch onto position 0. If the power supply cable is damaged, it must be replaced by the manufacturer, by its after-sales service technician or similarly qualified persons, to avoid any danger.

For electrical safety, make sure that the device is properly earthed.

The manufacturer disclaims any liability for damage caused by improper earthing.

The device must be connected to a water network with a pressure of 1 to 8 bar (0.1 to 0.8 MPa) and a tap readily accessible must be fitted in front of the water supply tube. The device is to be installed with adequate backflow protection to comply with applicable federal state and local codes.

In case of emergency (fire, surge, abnormal noise, etc. the first thing to do is to cut off the current and close the water tap.

Be careful not to obstruct the air inlets of the machine with towels or other objects.

Beware of hot surfaces such as cup heaters, the unit heads and the hot water and steam outputs.

Never install containers filled with liquid on the top of the machine.

Beware of jets of hot water or steam.

The machine should be descaled only by a qualified technician.

2-STANDARD VERSIONS

The ACE range is available in three colors, Brushed stainless steel, White or Black. It is the sides and the rear shirt that change color.

DIMENSIONS	
Width	45.3 cm 17.7"
Height	77 cm 30.3"
Depth	63 cm 24.8"
WEIGHT	
	100 kg 220 Lbs
CAPACITES	
Steam / coffee boiler	6.5 liters
-	-
Coffee grounds tray	100 coffees
Numbers of cups / hour	
	+200

STANDARD				Power	
Country	Rep	Voltage (V)	Current	Total	Boiler
Philippines	0	415V tri + N 60Hz	Ph 2+3: 7A Ph 1+N: 21A	5550 W	4900 W
Europe	1	400V tri + N 50HZ	Ph 2+3: 6.4A +6,4A Ph 1+N: 10,5A	5200 W	4500 W
Europe	2	230V Mono 50Hz	25 A	5200 W	4500 W
UK	3	415V tri +N 50Hz	Ph 2+3: 7,5A Ph 1+N: 10,7A	5550 W	4900 W
UK	4	240V Mono 50Hz	25,7 A	5550 W	4900 W
Japon	5	200V tri +N 50Hz	Ph 2+3: 6,2 A Ph 1+N: 10 A	4060 W	3400 W
Japon	6	200V Mono 50Hz	22,5 A	4060 W	3400 W
Europe	7	230 tri 50Hz	Ph 2+3: 6,4 A Ph 1+N: 10,5 A	5200 W	4500 W
USA	8	240V Mono 60Hz	25,7 A	5500 W	4900 W
		208V Mono 60Hz	23,2 A	4340 W	3680 W
USA	9	240V tri 60Hz	Ph 2+3: 7,5 A Ph 1: 10,7 A	5550 W	4900 W
		208V tri 60Hz	Ph 2+3: 6,5 A Ph 1: 10,1 A	4340 W	3680 W
		220V tri 60Hz	13.5 A	5150 W	4120 W

► TANGO ACE



► TANGO ACE MT



► **MODULE FRIGO**

DIMENSIONS	
Width	22.5 cm / 8.6"
Height	39.2 cm / 15.4"
Depth	46.2 cm / 18"
Weight	14 kg / 30.8 Lbs
CAPACITIES	
Milk tank (liter)	4



3-MACHINE INSTALLATION

The machine must be installed on a horizontal plane.

A space of 5 cm (1.9") should be left all around the machine; and do not obstruct the air inlets on the top of the machine.

Provide an electricity supply corresponding to the power of the machine, a water supply and a "waste water" drain.

► Preparation of the machine

The machine is delivered in a cardboard packing case and is screwed to a wooden pallet.

◆ Unpacking the machine

- Cut the banding with shears.
- Open the packing case and remove the box containing the accessories.
- Unscrew the nuts holding the machine to the palette by tilting the pallet slightly.
- Separate the packing case from the pallet
- Remove the machine from the pallet and install it on wooden blocks.
- Remove the transport screws and washers.

◆ Installing the machine

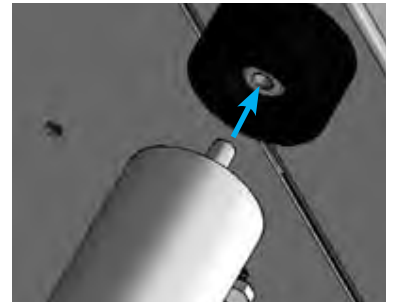
- Position the machine in its final location, and level it using rubber washers if necessary.

◆ Fitting high feet

Reference UNIC feet NSF: **NM-176**

Reference UNIC M8 x 16 bolts: **50402**

For fitting the aluminium feet, once the machine is installed in its location:
Screw the 50402 bolts to the aluminium feet, tip the machine onto the front two feet to screw in the aluminium feet at the base of the rubber feet at the back, and then do the same operation for bolting the feet to the front.



► Hydraulic connections

The machine is delivered with a complete connection kit including a stainless steel braided water hose 2 m length and a drain hose 2m (78.7") in length with a clamp located in the box of accessories.

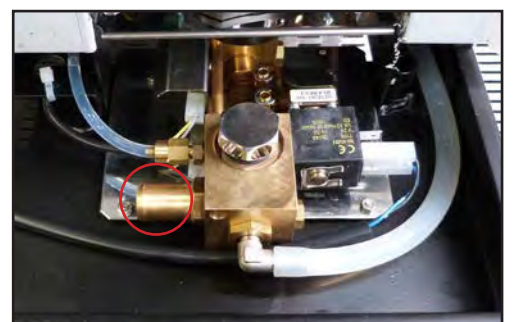
- Slide the lower trims toward the front
- Remove the basin grille
- Remove the basin after unscrewing the central screw.
- Remove the right-hand side of the ACE,
- Screw the angled part (3/8") of the stainless steel braided flexible pipe to the 3/8G fitting of the water safety filter block and the straight part (3/8") on the water softener outlet union.

The water softener must be fed directly by the mains via a shut-off tap allowing a sufficient flow, Ø 8cm (3.1") min.

Do not forget the seals. An opening in the chassis allows the hose to pass through

- Put the softener in the flush position.
- Open the supply tap.
- Run a flush of the softener.
- Put the softener in the working position.
- Fit the drain hose on the fitting located in the centre of the machine
- Check for leaks, and make sure that the drain tube allows a flow to the main drain without any reverse slope.

- Refit the bowl, not forgetting the seal which must be between drain block and the basin, and not between the central screw and the basin.
- Refit the trims and the basin grille.



► Electrical connections

Put the machine main switch in position 0, before any intervention.

The machine is delivered with a 5-core electric cable and a system of straps to allow for 3-phase or single-phase connection according to the installation.

The machine is pre-wired in accordance with the indications on the order and the country of destination. Before connection, check the conformity of the machine with the electrical circuit to which it is going to be connected.

To do this:

Compare the indications on the data plate, inside the drawer housing, with the characteristics of the circuit to which the machine is to be connected. Remove the left side of the machine and check that the connection of the straps on the terminal strip corresponds to the connection required (a diagram is glued to the inside of the side).

ADAPTATION OF THE TOROIDAL TRANSFORMER TO THE VOLTAGE OF THE CIRCUIT

The machine is equipped with a multi-voltage transformer in order to ensure the correct supply voltage to the electronics and 24-volt motors.

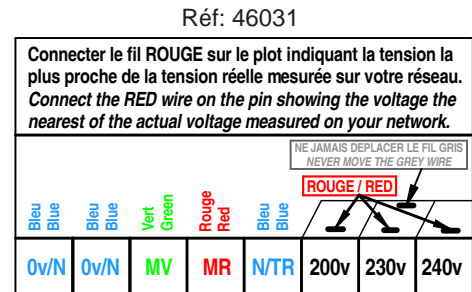
The machine is pre-set in the factory according to the country of destination (see page 6 and/or 7).

E.g.:

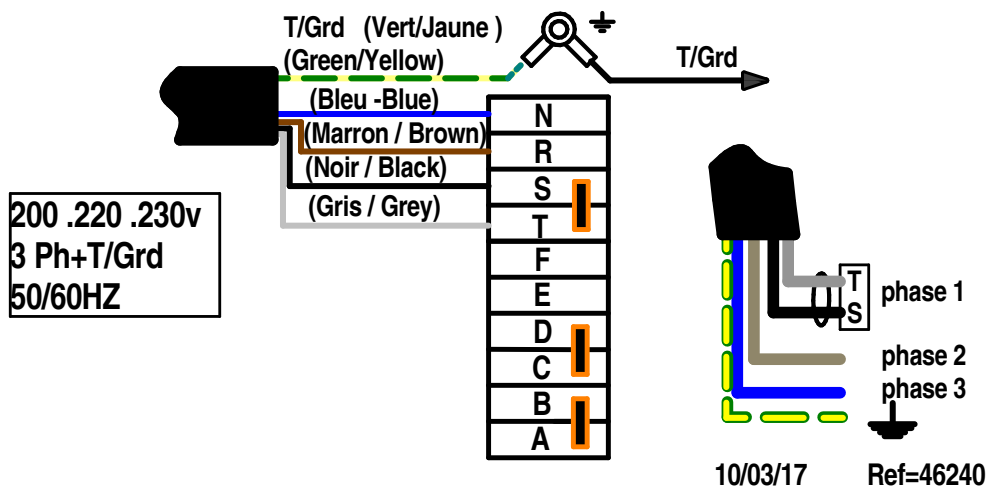
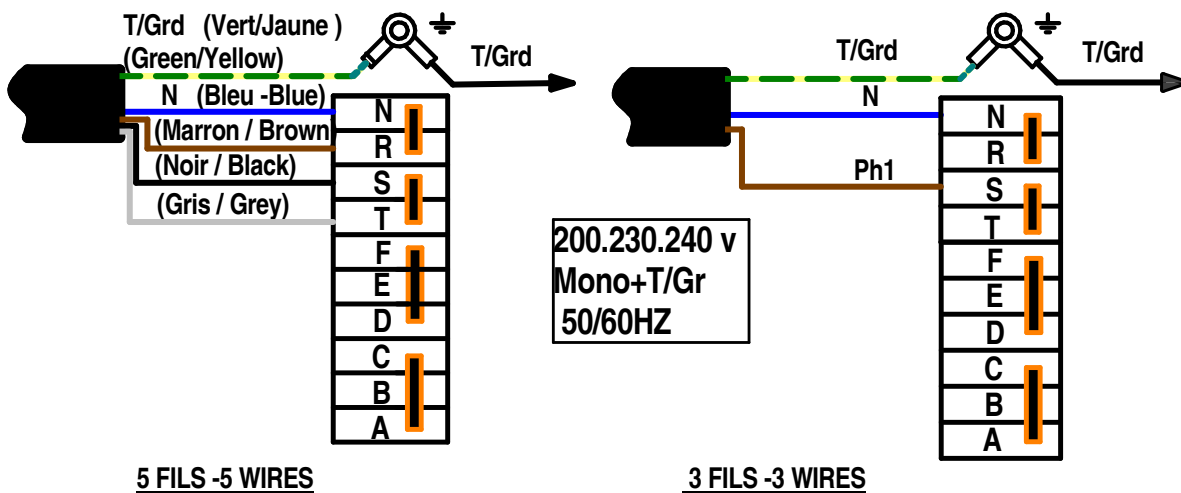
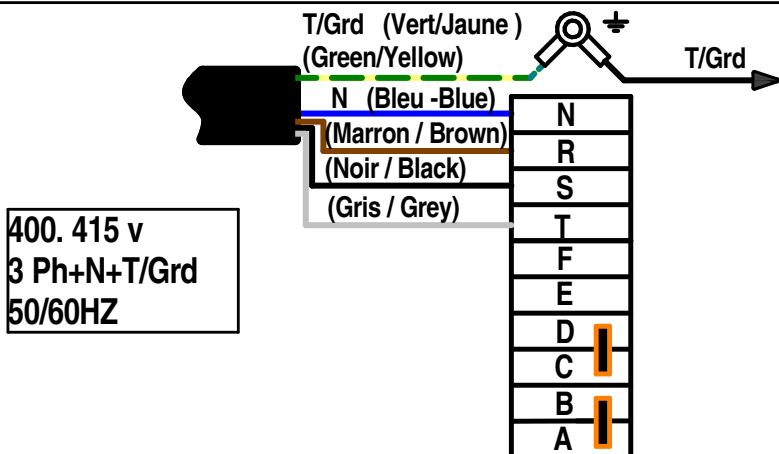
For Europe, the red wire is connected to the 230V terminal.

Once the connection has been performed correctly, it is nevertheless advisable to check that the voltage is $230V \pm 5\%$.

The low voltage should be about of 22V. These voltages should be checked with the machine working and the main switch closed.



BRANCHEMENT BORNIER / TERMINAL CONNECTING

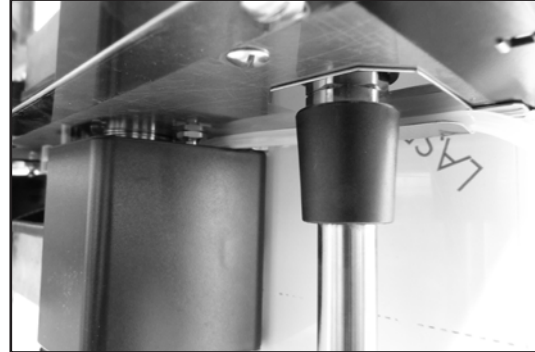


IN ALL CASES THE GREEN/YELLOW WIRE MUST BE CONNECTED TO THE EARTH OF THE INSTALLATION

► Connecting the ST module to the machine

◆ LC hydraulic part

With a cappuccino LC the refrigerator is delivered with the pipe already fitted in the refrigerator, it remains simply to feed it through the plate prepared for the purpose and fix it to the cappuccino outlet end.



► Installing the bins

To avoid damage during transport, machines are delivered with the bins removed

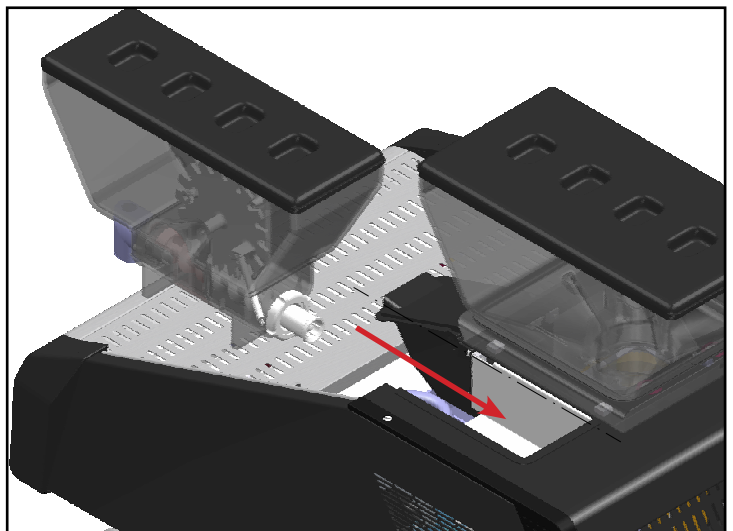
INSTALLING THE BINS:

- The bins are fixed from behind. Respect the direction of fitting.
- Position the closing trap on the bins; pay attention to the direction of the opening of the trap.
- Access to the trap is by removing the side.
- Capacity: 1.7 kg (4,5 liters) for the large bin.
- Capacity: 1.2 kg (3 liters) for the small bin.



INSTALLING POWDER BIN:

- Remove the powder cover forwards (locked by the lock).
- The hoppers are fixed from the rear. Observe the mounting direction (picture).
- Reposition the cover and lock.



CAUTION:

Air must be able to circulate freely around the machine. The ventilation openings located at the rear of the machine and on the top must not be obstructed.

The machine must not operate without its legs.

4-COMMISSIONING

► Switching on the machine and Turning on the heating

Once all the connections are made and checked (water supply, electricity supply and drain).

Set the main switch in position 1.

As soon as the electricity is switched on, the boilers fill automatically.

Remember to open the water tap supplying the machine.

The heating of all the parts starts automatically if the filling is correct.*

When the machine reaches its operating temperature, it performs a self-check.

These initialization phases are very important for the proper functioning of the machine. They are only possible if the coffee grounds drawer is in place, and they must not be interrupted, for instance by removing the drawer. (The steam pressure and the temperature of the groups are visible on the screen during heating).

The machine is operational once heating has been switched on and the self-check performed.

It is advisable to leave the machine heating on permanently.



► Module ST



The temperature display indicates the ambient temperature of the refrigerator.

Specificities:

Compressor electrical regulation

Contact temperature of the liquid

Liquid level probe (triggered at <1.2 liter)

9 liter container capacity

Dimensions:

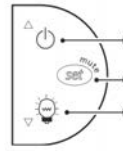
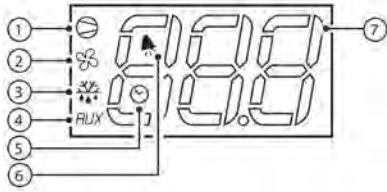
Outer (width * Length * height) 8.6" x 18" x 15.4"

UNIC part number for the display: 45039



Explicative note of display 45039 (TG9191)

1. Compressor indicator
2. Fan
3. Defrosting
4. Auxiliary output (AUX)
5. Clock (RTC)
6. Alarm
7. Numbers



1. Press 3s, to switch ON/OFF
2. Press <1s : cancel sound alarm
Press =1s : temperature setting
Press 3s : access programming parameters
3. Press 1s : Turn ON/OFF heats cups

Normal use
warming cups ON



Temperature

Cup warmer indication ON/OFF

Temperature setting
from 38.3°F to 46.4°F



- Press during 1s on SET, after a few moments, the programmed value flashes;
- Increase or decrease the value with UP or DOWN;
- Press on SET to confirm the new value



Main alarm A5 = Indication empty
container and / or missing container

Parameter navigation

The operating parameters, modifiable through the front keypad, the access is protected by a password (default = 22) which prevents accidental changes by unauthorized persons.

Access to parameters:

- press the SET key for 3s (in case of alarm, cancel the buzzer). On the screen appears the code of the parameter 'PS' (password),
- confirm by pressing the SET key, to enter the password, scroll with UP and DOWN (default = 22), then confirm with SET,
- use the UP and DOWN keys to scroll through the parameters.
- press SET to display the value associated with the parameter;
- increase or decrease the value with the UP and DOWN keys respectively;
- press SET to temporarily save the new value and return to the parameter display;
- repeat the procedure for the other parameters that you wish to modify;
- press the SET key for 3s to permanently save the parameters and exit the modification procedure.

Main parameters:

/I5 = selection °C/°F



/C1 = offset temp. probe



H4 = Disabling the buzzer



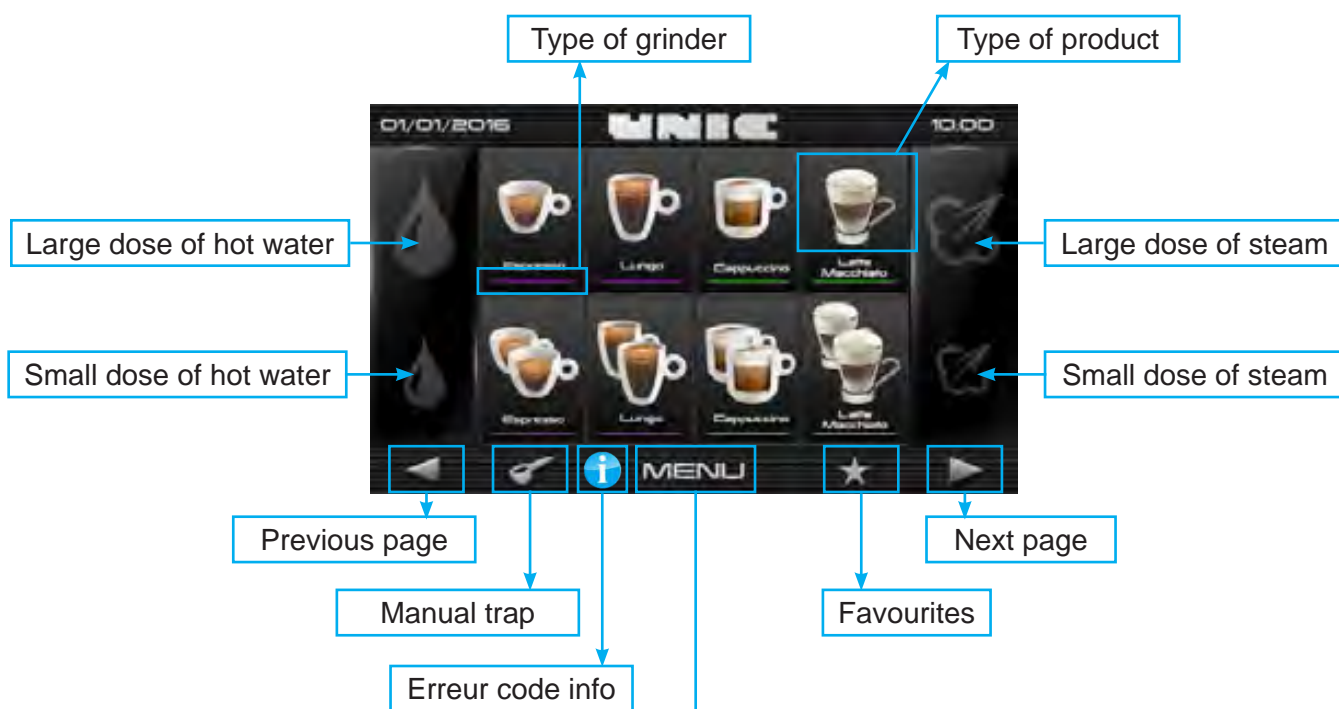
A4 = Disabling
presence sensor



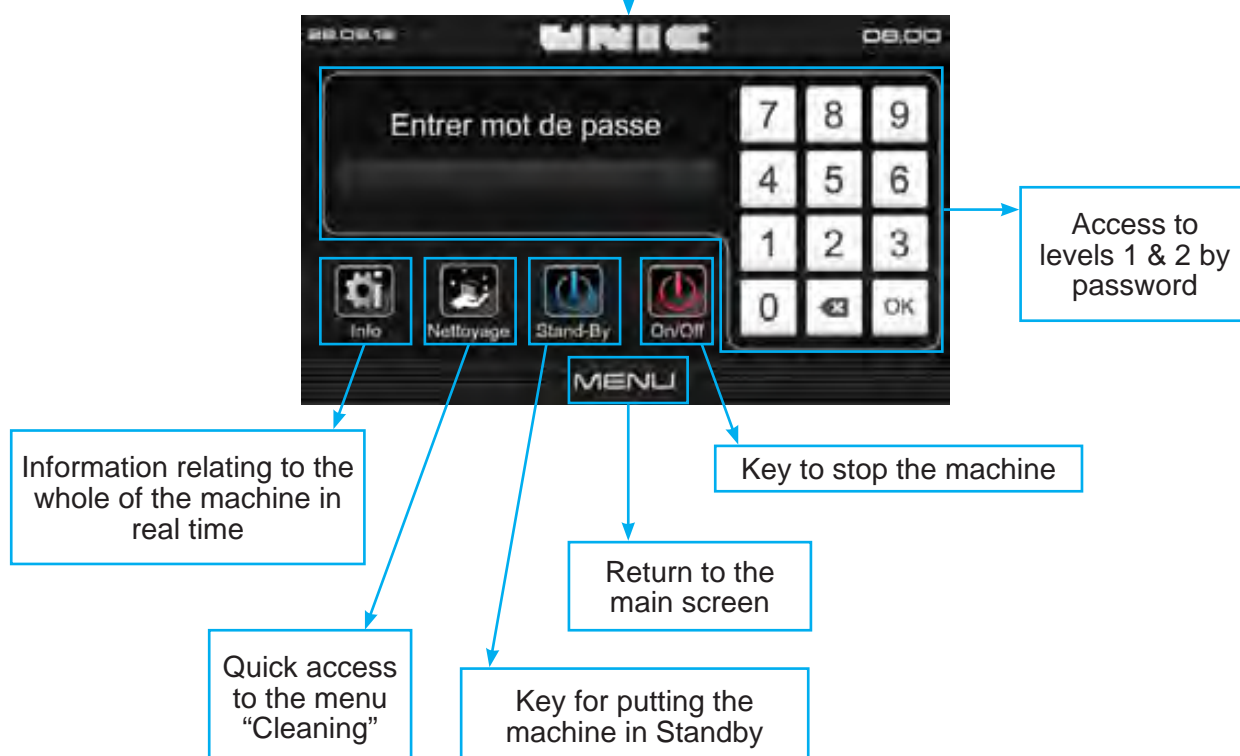
5-INTERFACE

The level 0 (User) includes the main screen for making the products, the hot water, the steam and access to the quick access screen, which allows the user to have direct controls such as to Stop the machine or put it in Standby.

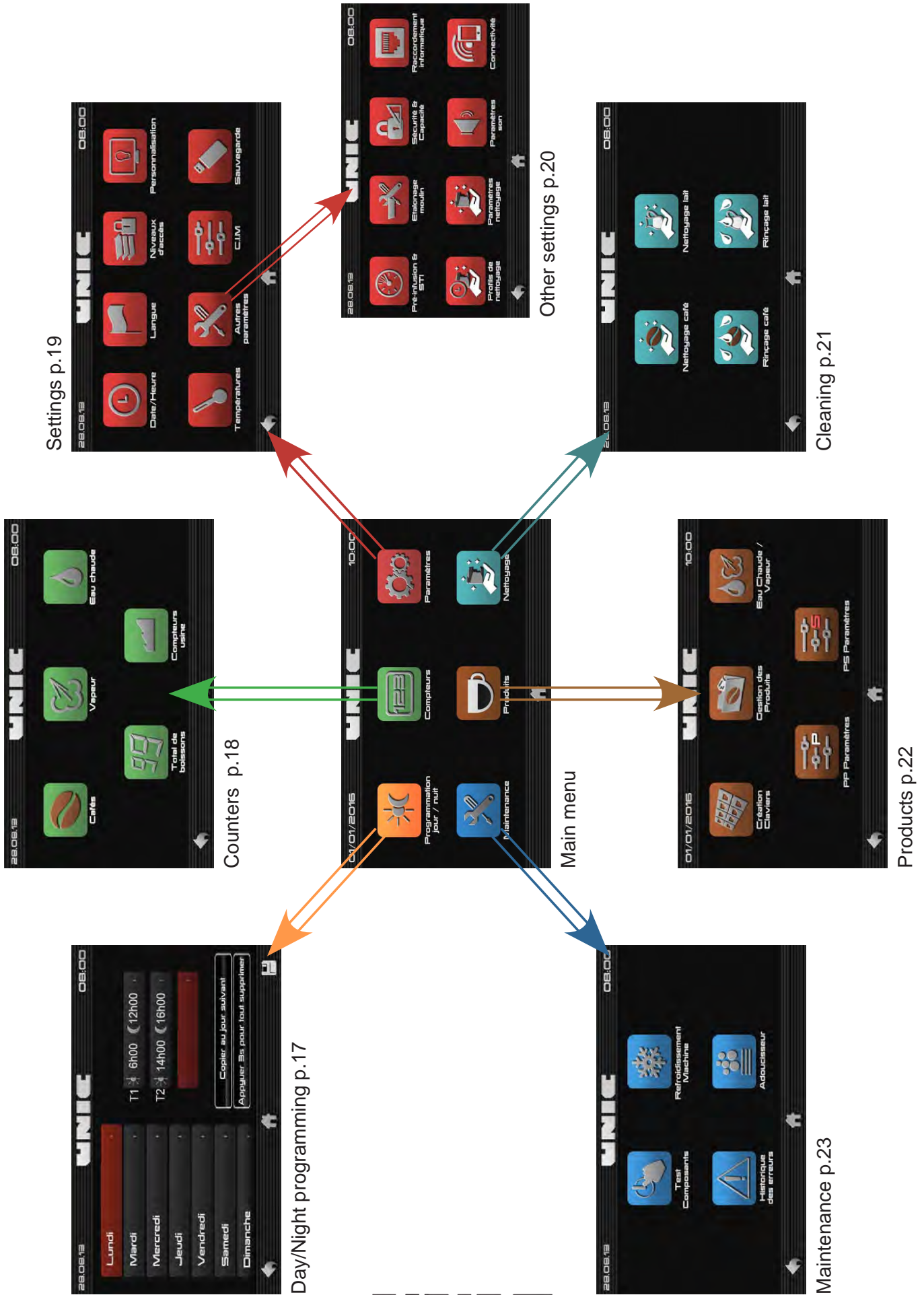
► Main screen
















► Quick access screen / Code



Once the security code has been confirmed the levels 1 (Customer) or 2 (technician) are accessible (according to the Code).



► Miscellaneous icons

	Scrolls the drinks keyboards.
	Icon to access the «Quick access / code» screen
	Return to the main screen
	Return to the previous page
	Key to activate the opening of the cover of the manual trap for 10 seconds; the time required to introduce 1 or 2 doses of ground coffee and close the trap again.
	Access to favourite products on the main screen
	Icon for copying a file and/or data
	Icon for indicating settings (e.g.: settings of a product)
	Icon for saving data and/or parameters
	Icon for confirming data and/or parameters
	Icon for cancelling data and/or parameters
	Icon for indicating the remaining time of the compulsory cleaning of the machine (before blocking).
	Icon for accessing error codes / alarms activated.

► Day/night programming

Allows you to schedule the days and times of automatic switching to night mode (machine in standby, reduced heating temperatures), and day mode; may or may not be followed by an automatic cleaning cycle.

To add a time slot:

- Press «Add a time slot»
- Schedule the desired times
- Remember to confirm
- you can then either copy this same time slot for the next day, or add a new one.



If you want to re-schedule your time slots, press the button at the bottom right of the screen for 3s.

Remember to save your settings.

Note: When Standby is enabled the regulation of the group and the coffee boiler goes to 70°C and 0.1 bar for the steam boiler

All screens are off

All safety functions remain activated

Standby output: resumption of the normal regulation is done 10 minutes before the exit from standby.

► Counters

This menu allows you to view the statistics for all the products produced on the machine.

Note: At level 2, it is possible to perform a general reset of all counters.



Level 2 (technician) required

► Settings

This menu allows you to adjust the settings of the machine such as the date and time, the desired language, the boiler temperatures and the LED colour and brightness.

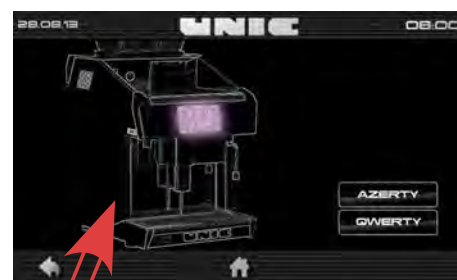
Note: Some settings are only accessible or changeable at level 2 (technician).



Language p.24



Modifiable at level 2 (technician) p:24



Customizing p.24



Level 2 (technician) required p:25



Level 2 (technician) required p:25

◆ Other settings

Grinder calibration p.27



Pre-infusion & STI p.27



Computer connection p.28



Cleaning setup p.26



Connectivity p.28



Cleaning settings p.25



► Products

Keyboard creation p.29



Product management p.30



Hot water / steam p.29



'FP' settings p.30



'PS' settings p.29

► Maintenance

Component test p.39



Cooling machine p.40



History of errors p.40



Softener p.40

6-SETTINGS

► Language

◆ Language selection

To change the language, tap the icon for the desired language (A confirmation is not required, the change is effective immediately).



► Personalization

◆ Keyboard selection

In this sub-menu the type of keyboard can be changed. There are 2 modes: AZERTY or QWERTY (A confirmation is not required, the change is effective immediately).



◆ Wallpaper

Tap the machine's screen to see a selection of several standard desktops. Tap to select the desired image (the images will step through). The slider allows the time delay to standby screen to be set (cursor left = standby disabled).



Personal wallpapers can be imported: Insert a USB drive with the images, press the "import" tab, select the image(s) and confirm.

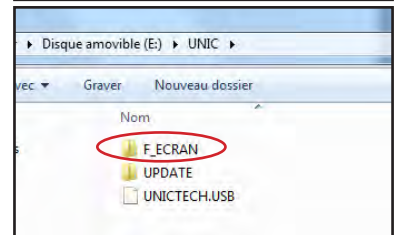
Adding images to the USB drive from a computer: Open the USB drive > open the folder named "UNIC" > open the "F_ECRAN" folder > copy the image into this folder > follow the instructions on the "Desktop wallpaper" menu

If there is no "F_ECRAN" folder on the USB drive, create a new folder in the "UNIC" directory, following the syntax exactly.

If the syntax is not exact, or if the "F_ECRAN" folder is a subfolder to any folder other than "UNIC", the machine will not be able to find your logo.

Note: accepted formats are .png or .jpg, resolution 800x480.

Propriété	Valeur
Images	
ID de l'image	
Dimensions	800 x 480
Largeur	800 pixels
Hauteur	480 pixels
Résolution horizontale	72 ppp
Résolution verticale	72 ppp



► Access level

Most menus are locked by default. Various settings and programs are inaccessible. Access to settings is enabled by entering a code according to two access levels.

To change a code, tap the settings icon, enter the new password then confirm to save the change.



► CIM

Note: level 2 required to change.

Permits access and/or changes to the machine's characteristics, such as:

Type of machine		ACE	ACE MT
Grinders	Purple	X	X
	Orange		
	Green	X	
Pre-infusion		X	X
Left milk system	None	X	X
	LC	X	X
	Pompe		
Self mode		X	X
Water tank		X	X
Milk level sensor			
Milk temperature sensor			
Hot water		X	X
Steam		X	X
Decaf		X	X
Hydraulic system	Basic	X	X
	with EViNF	X	X



Self mode: several variations take place on the machine,

- To use hot water or steam, press and hold the key.
- To access the menu, press and hold the «self» button at the bottom of the screen for 3 seconds.

► Backup

This submenu allows importing (and/or exporting) keyboards, settings, or databases, for configurations already created on a similar machine.



► Cleaning settings

This submenu permits adjusting the settings for all cleaning and/or rinsing cycles.



► Cleaning setup

Profile 1, cleaning coffee 26h / cleaning milk 8h / cleaning powder



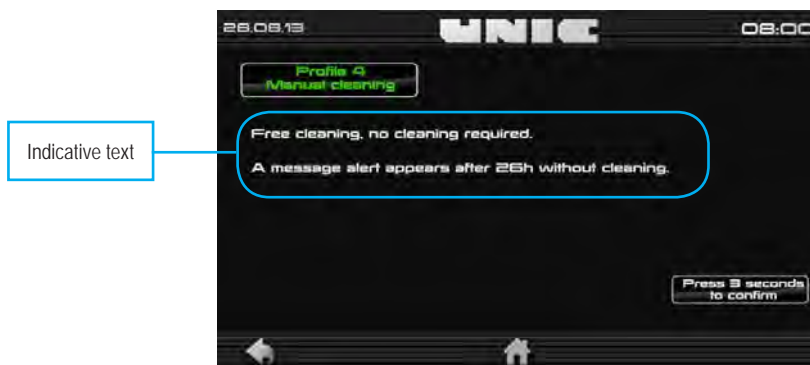
Profile 2, cleaning per hour, with 3 adjustable time ranges.



Profile 3, cleaning based by number of cycles,
The coffee cleaning is mandatory every 26h.



Profile 4, free cleaning, no cleaning required. A message alert appears after 26h without cleaning.



► Pre-infusion and STI

◆ STI

This function is common to all “coffee” cycles. It permits adjusting when in the piston cycle the infusion starts, it is particularly effective for the “1 cup” cycles. The “1 cup” quality is therefore improved and more regular, therefore programming of all the “coffee” key settings can be done by the PP mode.

Settings for 1 or 2 cups are done separately.

STI = 00 is the factory setting (ideal setting in 95% of cases)
(00 setting includes a small amount of pre-infusion)

STI = +01 to +100: infusion starts later (less pre-infusion)

STI = -01 to -100: infusion starts earlier (more pre-infusion)

STI = > 60 cancels the effect of the STI.



◆ Tamping level

There are four tamping levels.

A number gives the intensity of the tamping force; the higher the number, the more force is applied.

Level	Setting range	Default value
1	0,6 to 1,4	0,8
2	1,5 to 2,5	2,0
3	2,6 to 4,0	3,5
4	4,1 to 6,5	6,0

When exiting this setting, the machine automatically carries out self-check phases 1 and 2 to recalculate the piston parameters generated by the new tamping values.

In general:

A small dose of ground coffee infused by a small quantity of water needs heavy tamping: Level 4

A large dose of ground coffee infused by a larger quantity of water needs light tamping: Level 1.

► Grinder calibration

The type of coffee used and the grinder collar setting will affect the ground coffee dose. This procedure calibrates the actual ground coffee weight dispensed to match the value in the programmed settings. Select the desired grinder, prepare the weighing kit and the scale, and then follow the procedure.

This procedure is done in 2 steps:

1 – Grinder Tuning (Grinder collar adjustment)

A test cycle displays the time of the extraction in seconds.

Test cycle: 2 cups of 50 cl. using about 14 grams of ground coffee.

The test cycle infusion time is displayed at the end of the cycle.

2 – Grinder dose Calibration

2 grind cycles, one short and one longer, are weighed and recorded. The resulting time needed per gram is automatically calculated and applied to the programming to produce an accurate weight for each dose.

A master reset returns to the initial calibration preset in the machine's memory, in the case of replacing grinder burrs, if no scale is available, or incorrect operation, etc.



► Computer connection

Protocol type: EXE / MDB

Permits selection of the type of computer connection:

- Credit / Debit
- Debit / Credit
- RS 232



Only in french: You can check the note **TG9006** «TANGO3 système de paiement de caisse» for a complete configuration.

► Connectivity

1st step : to go in parameter > CIM > serial number, configure the serial number of the machine (S/N)

The S/N allows the identification of the machine on the UNIC interface IOT it is unique.

2nd step : to go in other parameter > Connectivity

Type of connection:

- GSM (no settings required)
- Wifi :

Security : choose the security related to your wifi network WEP / WPA / WPA2

SSID : wifi connection name (access point name, router, box)

Password : the word the point wifi acces

Very important, fully respect the syntax: tiny uppercase characters.

Diagnostics :

1. Turn off and restart the machine.
2. To wait some minutes, the LED turn green = internet connection is OK.

Green Led = ok connection with the Server

Orange Led = no connection with the server

Red Led = Problem communication with the machine



► Keyboard Menu creation

A maximum of 6 pages can be created:
Up to 8 products per page, for 48 products maximum

To delete an entire keyboard; press and hold the keyboard thumbnail until it disappears.

Example:

- Select the number of products desired (from 2 to 8)
 - Slide the desired beverages into the boxes.
 - To change, slide the new product into the desired box.
 - Scroll with the directional arrows to navigate through all the products.
- (The name of the product is displayed in the color of the grinder)



► Hot water & steam

Large quantities of steam	0 to 100	sec
Small quantities of steam	0 to 100	sec
Temperature steamAir	50 to 90	°C
Large volume of hot water	0 to 1000	cc
Small volume of hot water	0 to 1000	cc



► 'PS'

(Each drink programmed independently)

Displays all the settings for each product present on the machine's keyboard(s).

Changing settings only changes the product selected on the keyboard without altering the common settings. List of settings that can be changed:

- Grinder selection
- Grinder does 1(2) cup(s)
- Manual
- Water dose right (left) coffee
- Add water
- Repetitions
- Coffee tamping level
- Coder offset
- STI



► 'PP' Programmed parameters

(single and double drinks linked)

Permits programming base settings common to each product family (for example: espresso, cappuccino) created during keyboard configuration

Coffee		Milk foam		Milk	
Grinder selection		Left foam time	s	Left milk time	s
1 cup grinder dose	gr	Right foam time	s	Right milk time	s
2 cup grinder dose	gr				
Manual					
Left coffee water dose	cc				
Right coffee water dose	cc				
Add water	%				
Repetitions					

A pause time can be set between execution of the ingredients (expressed in seconds).



Don't forget to validate the product, to save it before leaving.

► Product management

This sub-menu permits managing all existing drinks in the machine. Copy a drink and/or access its setting to change the recipe, or just delete the drink.

◆ Adding a drink

In this sub-menu a new recipe can be created. Follow the procedure below.



Name the drink, tap the keyboard then validate the name by tapping **ENTER** (to validate a new drink the name must be entered).

- Icon to copy the drink
- Icon to access settings
- Icon to delete the drink

List of different views of cups

View of cup selected

List of different ingredients:

Don't forget to validate the drink, save it before leaving.

Maximum 4 ingredients permitted Press and hold an ingredient to remove it.

7-CLEANING & MAINTENANCE

► Cleaning external outlets / housing

It is advisable to disassemble the coffee and milk outlets daily for thorough cleaning.

◆ Coffee outlet

1. Slide the coffee spout(s) down
2. Pull the spout towards you to remove
3. Clean the spout(s) under a tap or directly in a dishwasher
4. Replace the spout(s) on the machine

◆ Cappuccino outlet

1. Slide the coffee spout(s) down
2. Pull the spout towards you to remove
3. Remove the cappuccino foamer head by turning the assembly to the right and pulling down
4. Separately disassemble each part for individual cleaning, including the silicone suction tube.
5. Reassemble.

◆ Steam wand

After each use, wipe the steam tube with a damp cloth and briefly tap the steam button to purge the small quantity of milk remaining inside the tube. Disassemble the steam outlet nozzle for easier cleaning.

◆ Drip tray


Remove the drip tray by sliding the frame forward and lifting the grate out. Clean the grate using a sponge.

◆ Housing

Use a soft cloth and alcohol for the stainless steel parts, and non-abrasive detergent for the painted parts. The grounds drawer is entirely in stainless steel, it can be easily cleaned with water. Take care not to scratch the painted parts.



► Cleaning Cycles

In the 'Cleaning' menu, the rinsing icons  automatically start a rinse cycle (~30 sec) for the milk or coffee systems.

Daily cleaning is required; the machine will stop after 26 hours if a tablet cleaning has not been completed. As soon as the cleaning is finished, the timer restarts for another 26 hours.

Note: for more information about cleaning products, refer to the manufacturer's safety data sheet.

◆ Milk & coffee cleaning

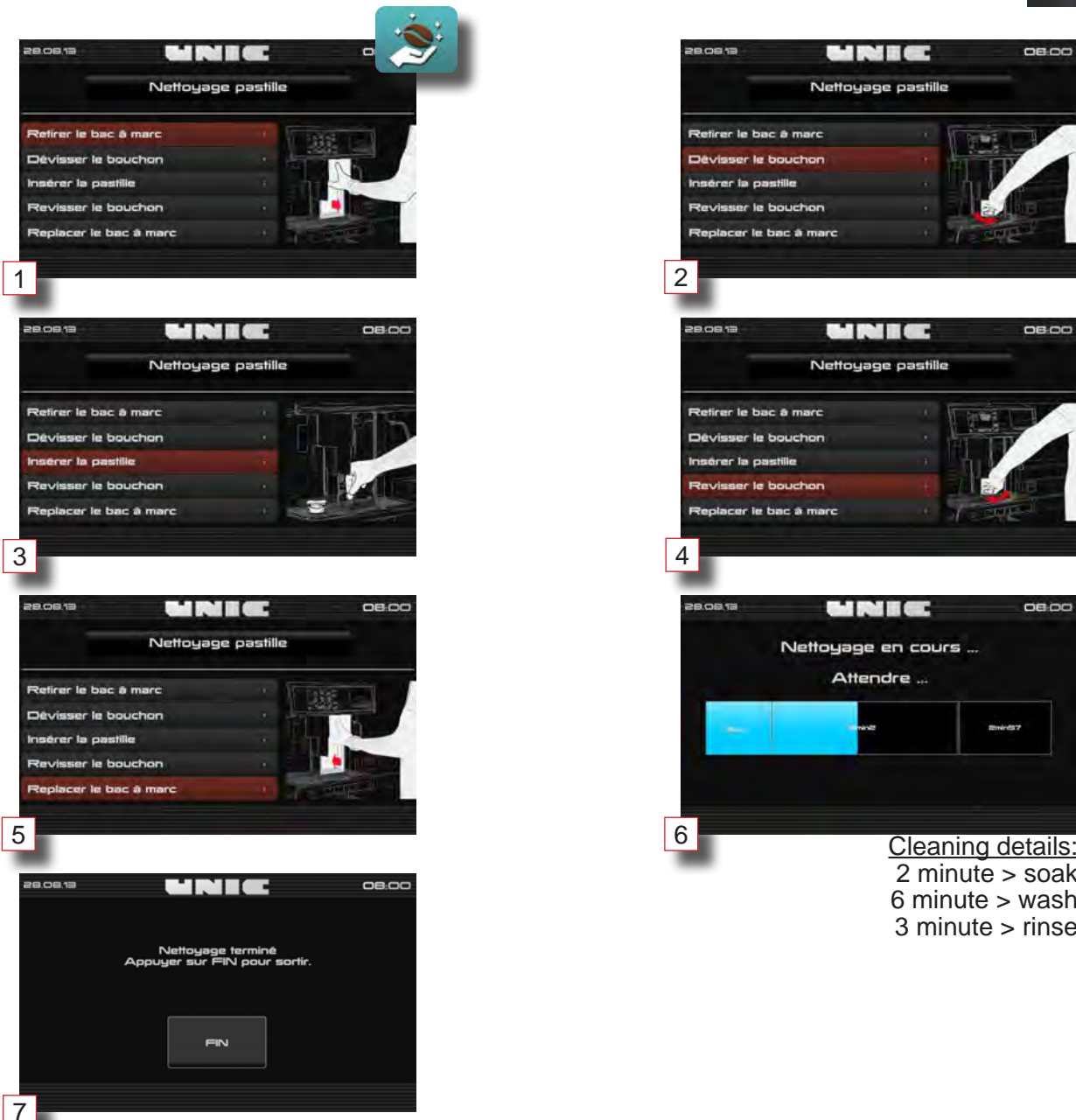
It's possible to lunch in same time these two cleanings, start by the coffee circuit by inserting the pellet follows the cleaning procedure of the milk circuit.

◆ Coffee cleaning

Tap the "Coffee cleaning" icon to access the procedure and follow it step-by-step.



**DON'T FORGET TO INSERT TABLET (1 tablet)
(UNIC reference, box of tablets: 92060)**



- 1
- 2
- 3
- 4
- 5
- 6
- 7

Cleaning details:
2 minute > soak
6 minute > wash
3 minute > rinse

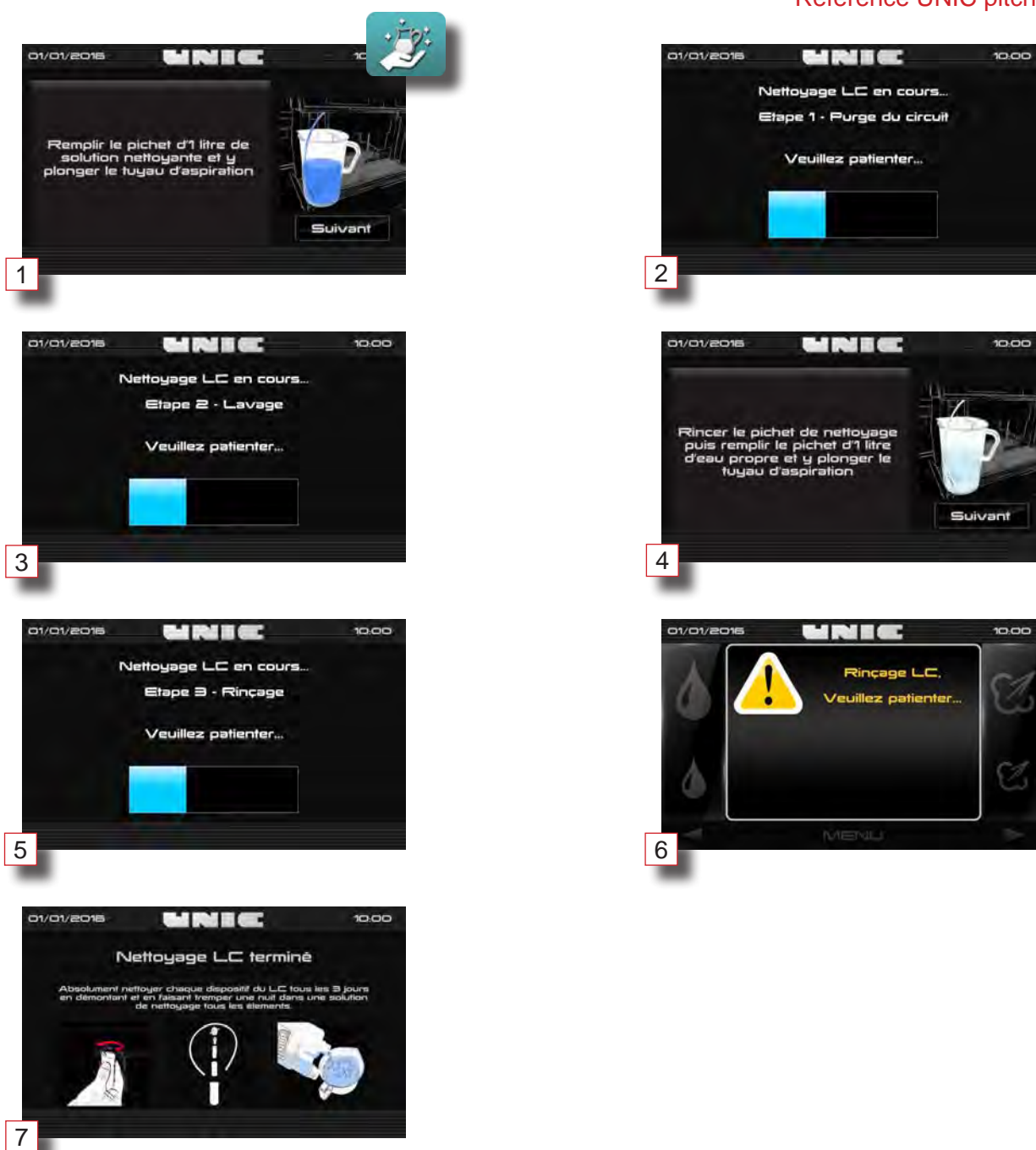
Cleaning kit for milk and cappuccino circuits.



◆ Cappuccino cleaning (with LC)

This includes internal cleaning of the circuit and external components related to the circuit, such as the milk tray and cappuccino outlet. Use a pitcher of about 2 liters for cleaning.

Reference UNIC Urnex: 92027
Reference UNIC pitcher: 54212



◆ Powder cleaning (ACE MT)

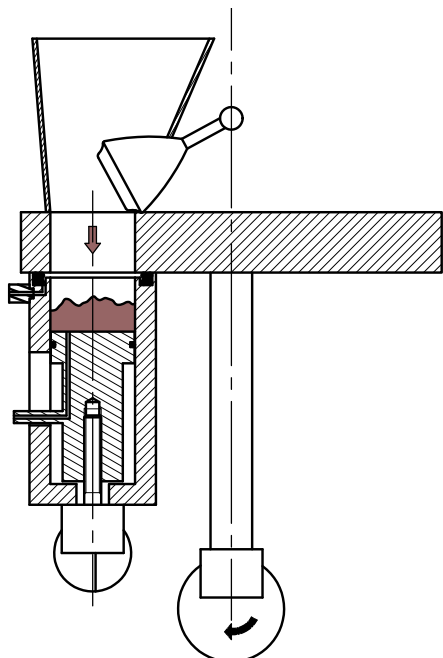
It includes the internal cleaning of the circuit and the external components related to the circuit.



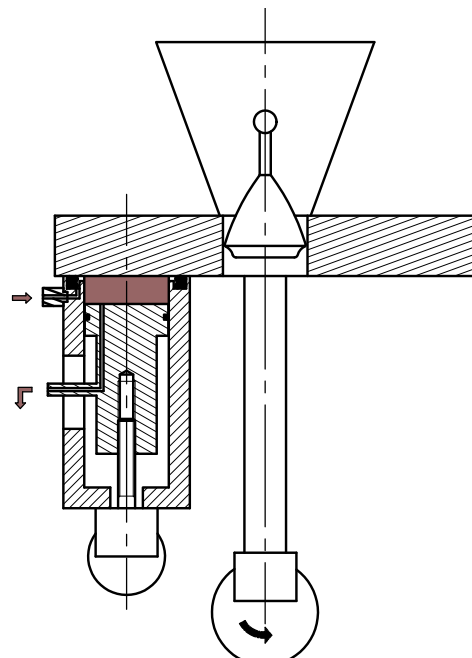
8-MAINTENANCE & TROUBLESHOOTING

► Description of cycles

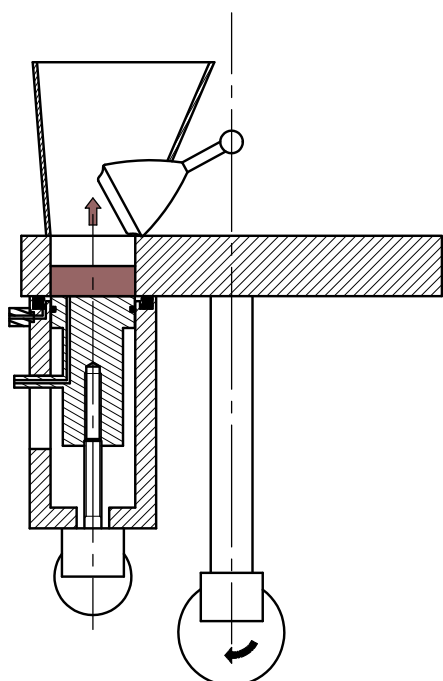
◆ 1 group Cycles



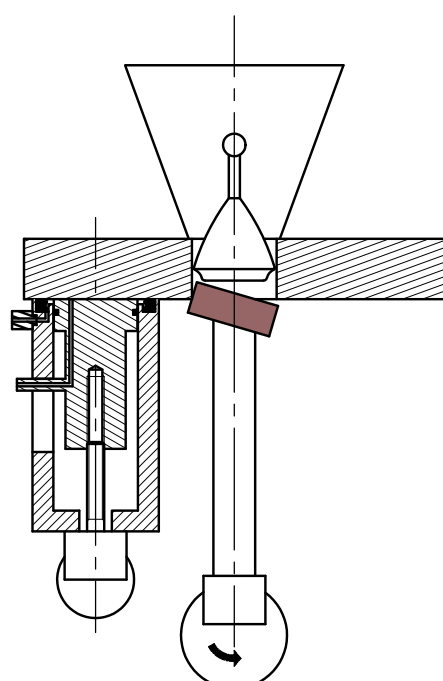
COFFEE GRINDING



INFUSION

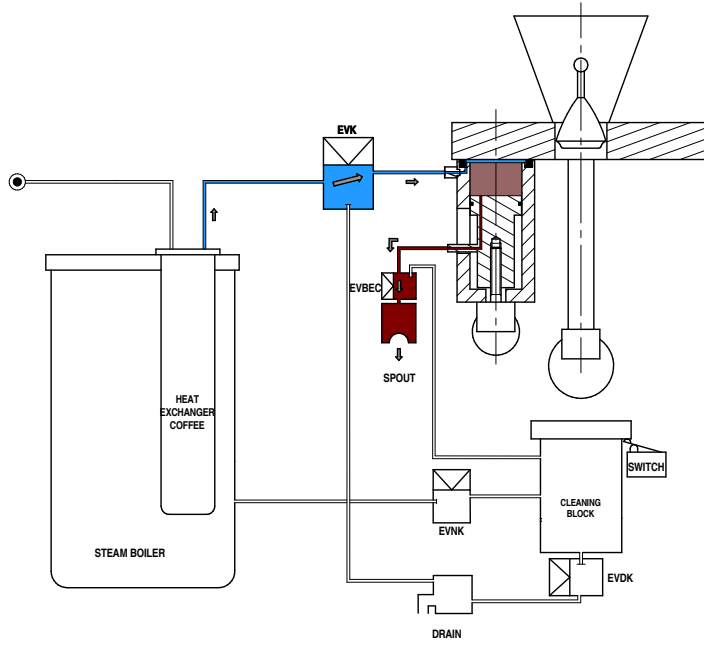


GROUNDS EJECTION

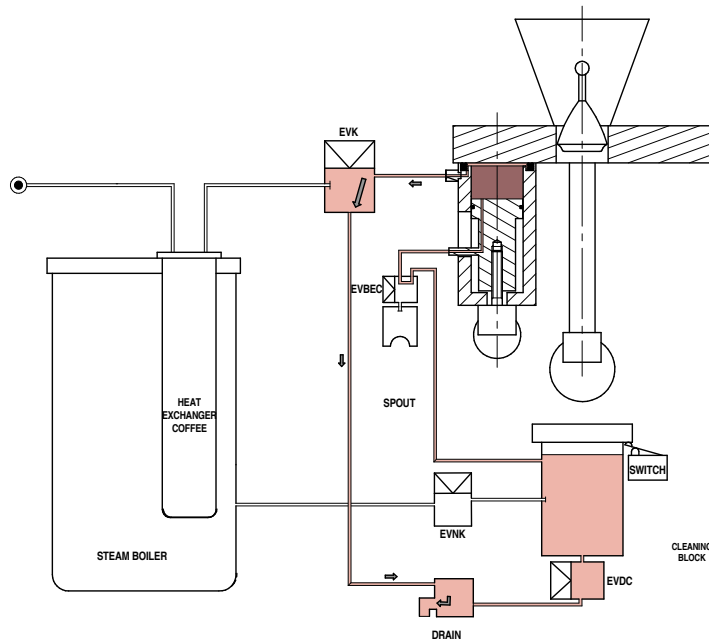


STAND BY

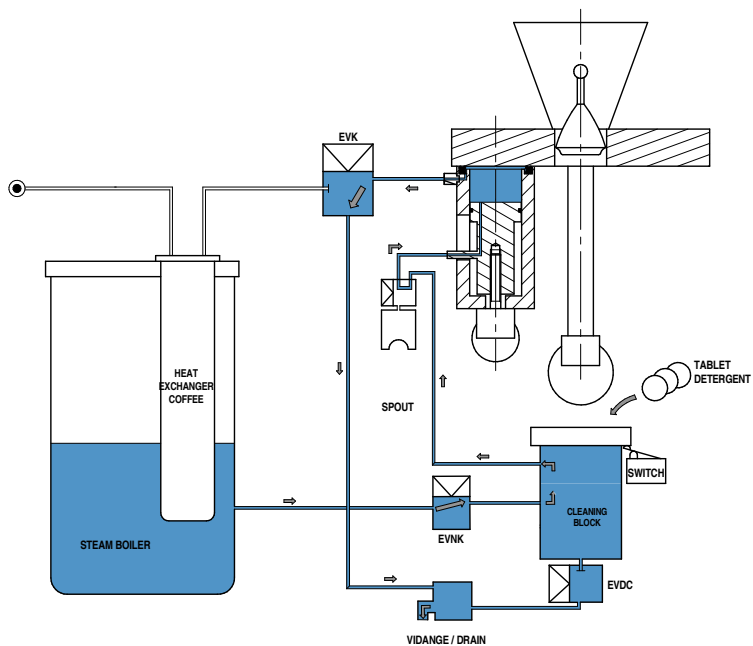
Infusion cycle.



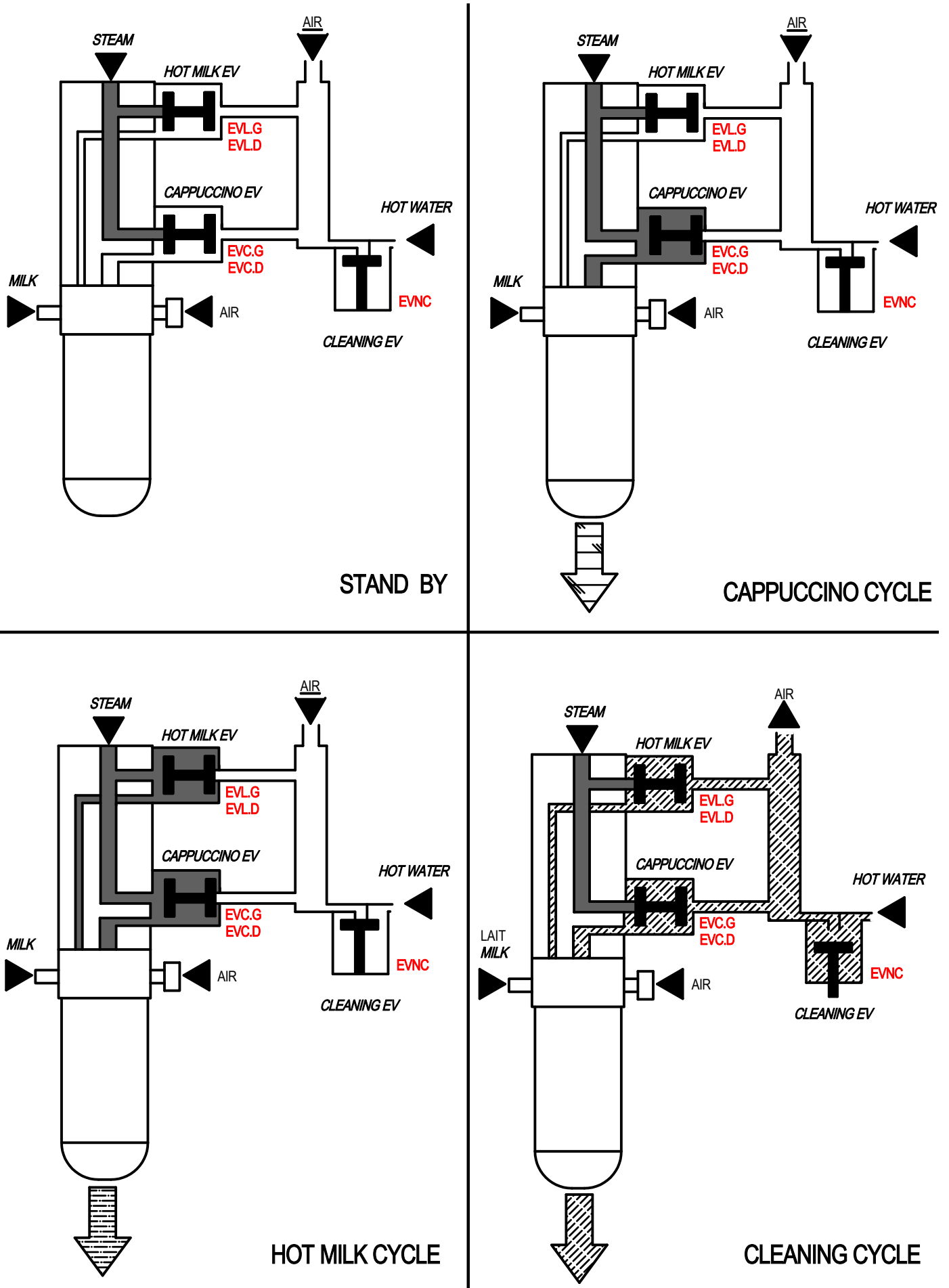
Decompression cycle.



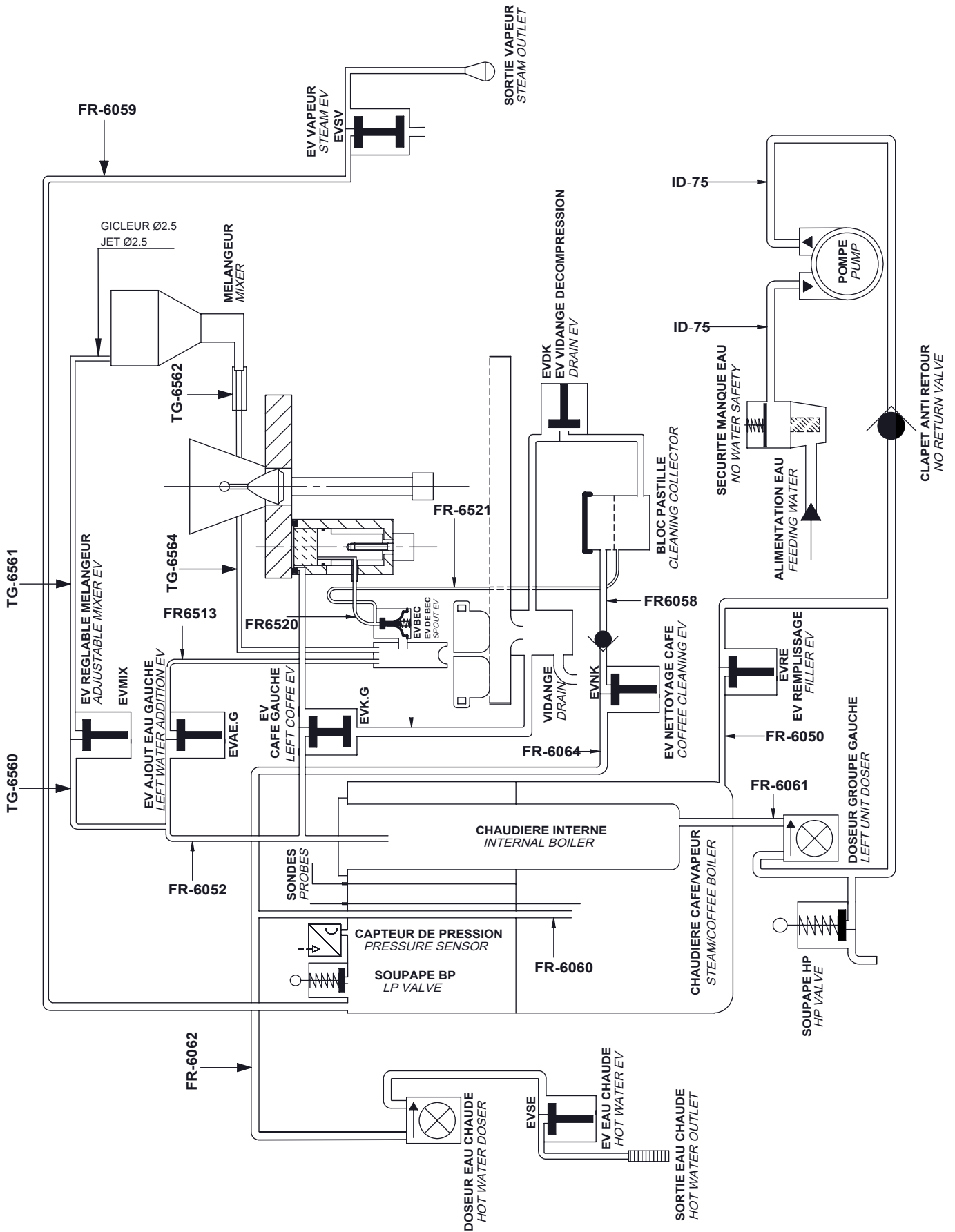
Cleaning cycle.



◆ Cappuccino Cycle



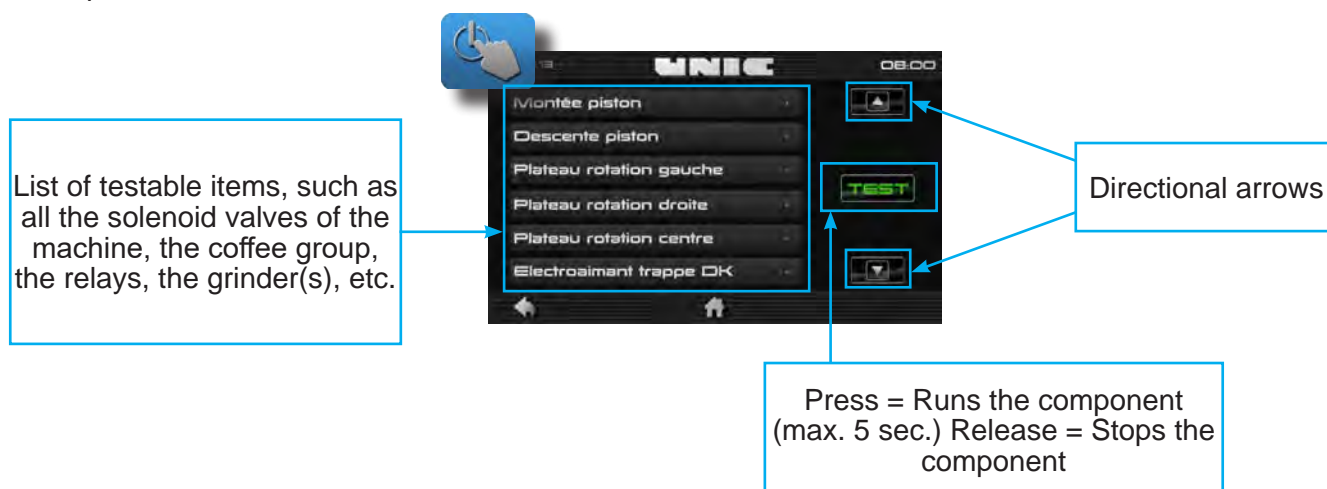
◆ Hydraulic circuit ACE MT



► Component test

When entering the menu the machine switches to the “test” mode (on the duo the right screen is disabled), the group and steam heating are disabled.

Note: Self-checks 1 and 2 are carried out after having left the test menu, and then the machine goes into normal operation.



	Piston LEFT up	EVKG	EV left coffee
	Piston LEFT down	EVP1	EV pre infusion 1
	Piston RIGHT up	EVLCF	Hot-cold milk selection
	Piston RIGHT down	EVNR	EV steam/EV cleaning-rinsing
	Plateau to LEFT position	EVNO	EV bloc de nettoyage
	Plateau to CENTER position	EVALF1	EV cold milk air
	Plateau to RIGHT position	EVNL1	EV cleaning milk
	Find known plateau position	EVALC1	EV hot milk air
RSV1	Solid state relay steam 1	EVLG_EVVS	EV left LC latte outlet/EV coil pipe steam
RSV2	Solid state relay steam 2	EVAEG	EV water addition left coffee
RSV3	Solid state relay steam 3	EVCG_EVVP	EV left LC cappu outlet/EV rinsing purge
RSC1	Solid state relay coffee 1	EVNC	EV cleaning cappuccino
RSC2	Solid state relay coffee 2	EVKD_EVM1	EV right coffee/EV mixer 1
RSC3	Solid state relay coffee 3	EVAED_EVM2	EV water addition right coffee/EV mixer 2
MAC1	Grinder n°1 (purple)	EVCD	EV right LC cappu outlet
MAC2	Grinder n°2 (green)	EVLD	EV right LC latte outlet
MAC3	Grinder n°3 (orange)	EVP2	EV pre infusion 2
POMP	Motor pump	MM1	Motor mixer 1
CHGR	Heating group	MM2	Motor mixer 2
EAMAN	Electromagnet of DK door	MT1	Motor hopper 1
EVRE	EV filling	MT2	Motor hopper 2
EVSE	EV hot water outlet	FAN_SOL	Fan for soluble MT
EVSU	EV steam outlet	MPOMP	milk pump
EVNK	EV coffee cleaning		

► Cooling machine

Select the boiler to be cooled down and then press the 'refroidir' (cool) key. The temperatures and pressure are shown in real time.

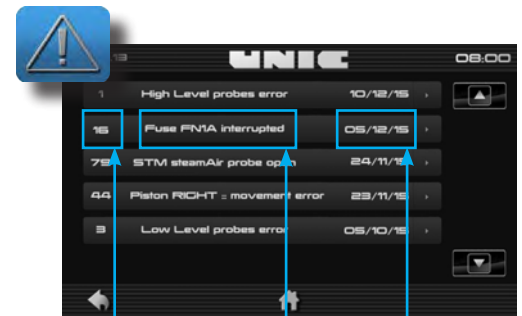
The Water key disables the heating of the Water/Steam boiler SOLO.

The Group coffee key disables the heating of the Coffee infusion Group Shutting down of the cooling is done manually.



► History of errors

This menu has no action on the electronics of the items affected by the error codes of the machine. It is simply a log of events in which the technician can leave a record of interventions carried out. The consultation of the aid is for information purposes.



Error code number

Detailed name of error code

Date of appearance of the error code

► Softener

Unic SA, uses two softener suppliers. BRITA® and BESTMAX™

Have the hardness of the water tested in the mains, and then refer to the technical documentation of the softener used to find the best settings.

Note: a softener must be changed every year, even if it does not reach the end of its filtering capacity.




► Descaling

The machine should be descaled only by a qualified technician.

► How to upgrade CPU and Display

STEP 1: CPU's identification

Software *without USB Key*



WARNING: to avoid CPU's destruction, you must be sure about CPU's identification

Visually



Before 28.xx.xx

Model 0

After 28.xx.xx

2 possibilities
'Model 0'
or 'model 1'



*Advice: leave the USB stick always connected to his socket.
For the Duo the Display's upgrade is done automatically on both side.*

When you insert USB Key, several possibilities:

- Update CPU
- Update Display
- Import/export parameters
- Import/export data drinks



STEP 2: insert USB Key, update display first.
(After V35.15.XX)



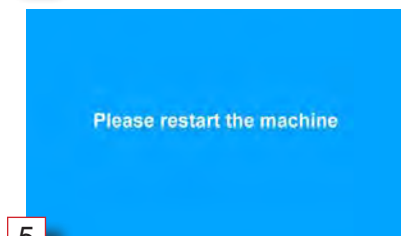
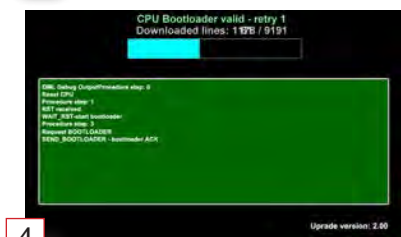
STEP 3: Update CPU. Follow process (page n°46)

STEP 4: Export / import data drink if it's necessary, The procedure does not change from previous versions.

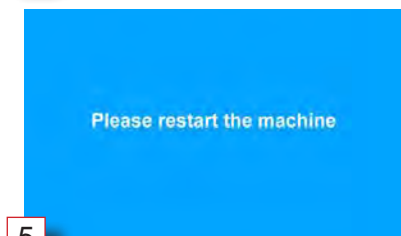
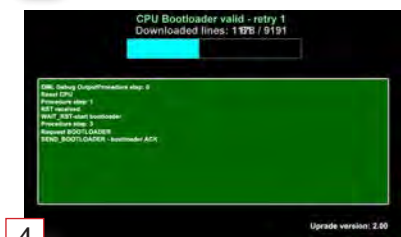


***STEP 3:** Update CPU

When the CPU is "model 0"
follow process "model 0"

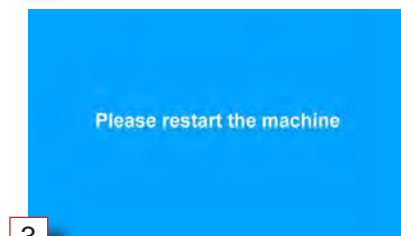


When CPU "model 1" is
mounted instead "model 0"
follow process "model 1"



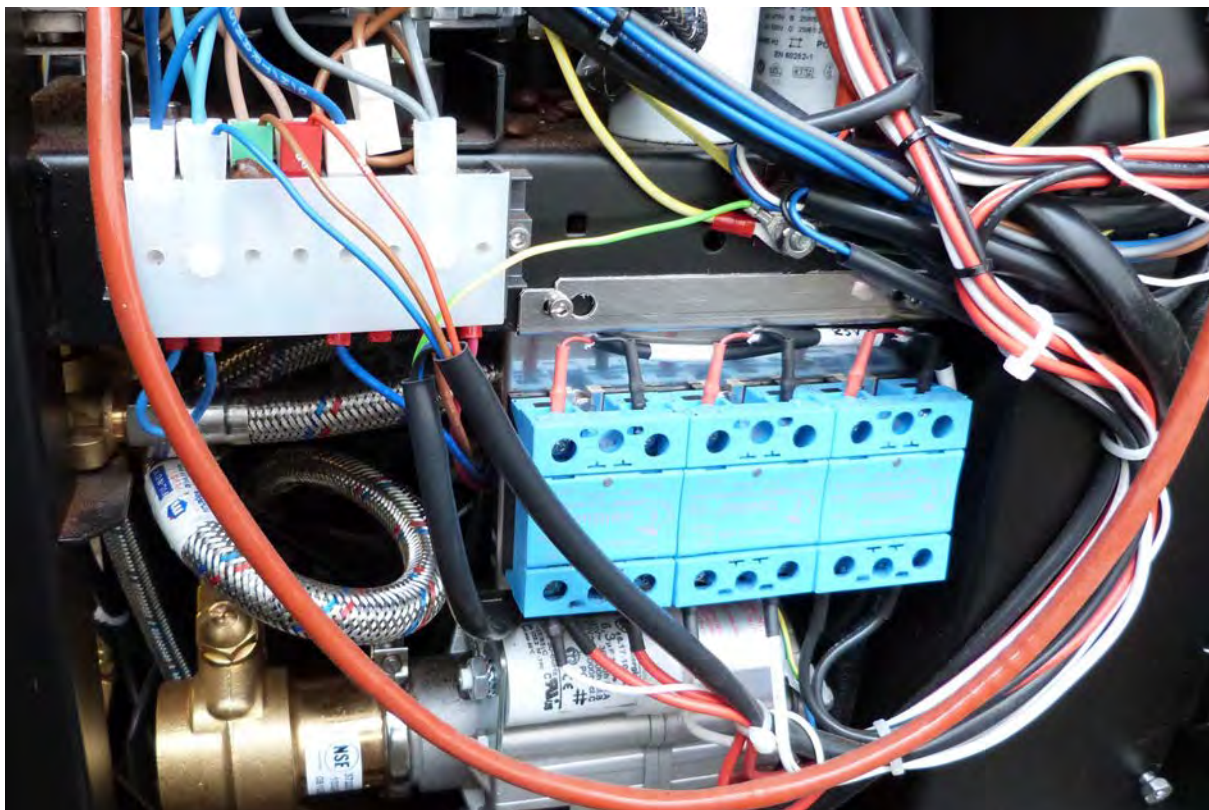
When CPU "model 1" is
already mounted in the
machine:

process model will be
lunch automatically After
confirmation



► Lists of cables

REFERENCE	DESIGNATION	CONNECTOR	NB PINS	VOLTAGE	QUANTITE		
					ACE	ACE MT	FRIGO
FR-8019	BLUE CABLE CONN. COIL AND CONTACT			High	1	1	
FR-8029	OPTICAL CELLS WITH CONNECTOR	CN6	16	Low	1	1	
FR-8055	EV SV EV EXTENSION CABLE			Low	1	1	
TG-8012	USB LINK CABLE	CN2	4	Low	1	1	
TG-8013	RS 232 TFT SCREEN LEFT	CN3	16	Low	1	1	
TG-8016	MOTOR TRAY ADAPTER CABLE	CN22	2	Low	1	1	
TG-8017	STEAM BOILER & MAINS CABLE	CN7	10	Low	1	1	
TG-8027	THERMOSTAT PROBES & LEVEL PROBES	CN17	10	Low	1	1	
		CN26	4				
		CN27	4				
TG-8030	COFFEE GROUNDS DRAWER SAFETY CABLE	CN20	4	Low	1	1	
TG-8034	BIN, BLENDER, POWDER FAN	CN24	12	Low			
TG-8037	CABLE, TRAP & PIST. COD. SAFETY MOTOR CTRL	CN8	4	Low	1	1	
		CN9	4				
		CN12	6				
		CN15	6				
		CN23	4				
		CN25	2				
TG-8039	STAT relay CONTROL. HOT STEAM / COFFEE	CN29	6	Low	1	1	
TG-8043	CTRL Cable, EVRE, EVSE, EVSV, EVKG	CN34	20	Low	1	1	
TG-8045	SV CABLE, CAPPUCINO LEFT	CN35	6	Low	1	1	
TG-8049	CABLE, CPU & GRILLE EARTH			Terre	1	1	
TG-8050	CABLE, GRINDER, R, V, O, RES GR, RI AND PUMP	CN41	12	High	1	1	
		CN44	8				
		CN47	6				
TG-8057	CABLE, COFFEE BOILER			High		1	
TG-8058	CABLE, COFFEE STEAM GROUP			High	1	1	
TG-8062	CABLE, SWITCH OUTPUT			High	1	1	
TG-8100	CABLE, INTER* T°C REG C- H DISPLAY			High			1
TG-8101	SUPPLY CABLE			High			1

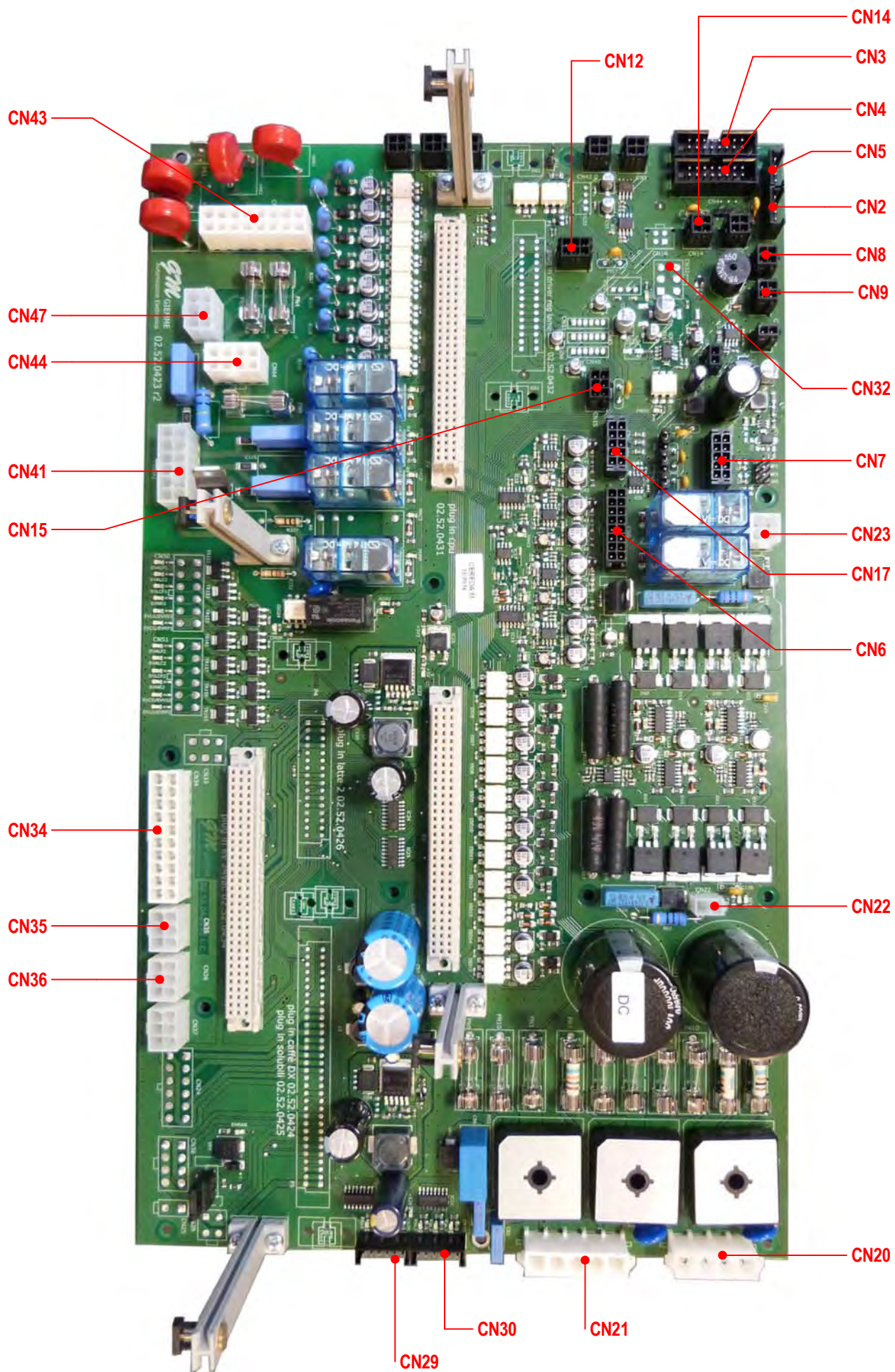
◆ Static relays

◆ Connectors

	DESIGNATIONS FR	DESIGNATIONS GB
CN2	IO232	IO232
CN3	RS232	RS232
CN4	RS232	RS232
CN5	RS232 CONSOLE DEBUG	RS232 DEBUG CONSOLE
CN6	CAPTEUR PRESSION / PRESENCE CAFE (TREMIE)	PRESSURE SENSOR / COFFEE PRESENCE (HOPPER)
CN7	CAPTEUR PRESSION EAU-VAPEUR	WATER-STEAM PRESSURE SENSOR
CN8	CAPTEUR EFFET HALL	EFFET HALL SENSOR
CN9	SECURITE ENTREE D'EAU	NO WATER SAFETY
CN12	COMPTEUR VOLUMETRIQUE D-G & EAU CHAUDE	DOSING DEVICE RIGHT-LEFT & HOT WATER
CN14	CAPTEUR GROUPE D & EFFET HALL BAS	GROUP RIGHT & EFFET HALL LOW SENSOR
CN15	CAPTEUR PISTON	PISTON SENSOR
CN17	SONDE LAIT / CHAUDIERE THERM.VAP. / GR. CAFE	MILK PROBE / COFFEE GR. / STEAM THERM. BOILER
CN20	SWITCH BAC A MARC	SWITCH DRAWER
CN21	TRANSFORMATEUR TOROIDAL	TOROIDAL TRANSFORMER
CN22	MOTEUR PLATEAU	TURNTABLE MOTOR
CN23	MOTEURS PISTONS	PISTONS MOTORS
CN29	RELAIS STATIQUES / CHAUDIERE VAPEUR	STATIC RELAY / STEAM BOILER
CN30	RELAIS STATIQUES / CHAUDIERE CAFE	STATIC RELAY / COFFEE BOILER
CN32	POMPE LAIT 2	MILK PUMP 2
CN34	ELECTROVANNES 24Vac	24Vac ELECTROVALVES
CN35	ELECTROVANNES CAPPUCCINO GAUCHE	LEFT CAPPUCCINO ELECTROVALVES
CN36	ELECTROVANNES 24Vac / LAIT 1	24Vac / MILK 1 ELECTROVALVES
CN41	POMPE / MOULINS / CARTOUCHE / GROUPE	PUMP / GRINDERS / CARTRIDGE / GROUP
CN43	SECURITE MACHINE FILTRAGE	FILTERING MACHINE SAFETY
CN44	TELERUPTEUR	STEPPING SWITCH
CN47	SECURITE CAFE-VAPEUR / GROUPE (OPTO)	COFFEE-STEAM SAFETY / GROUP (OPTO)

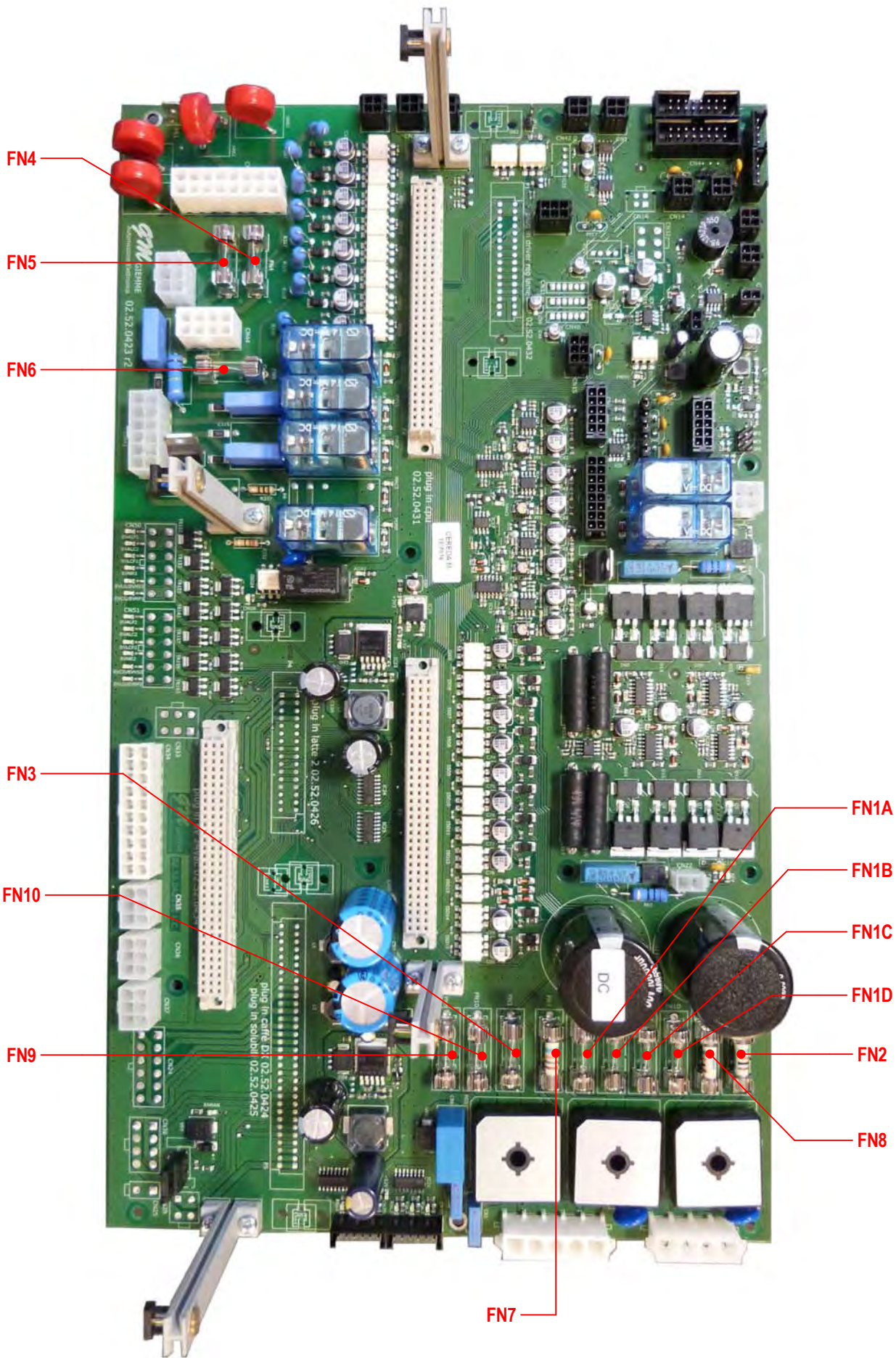
* Nota: références des câbles planche 551

Nota: electrical wires references plate 551



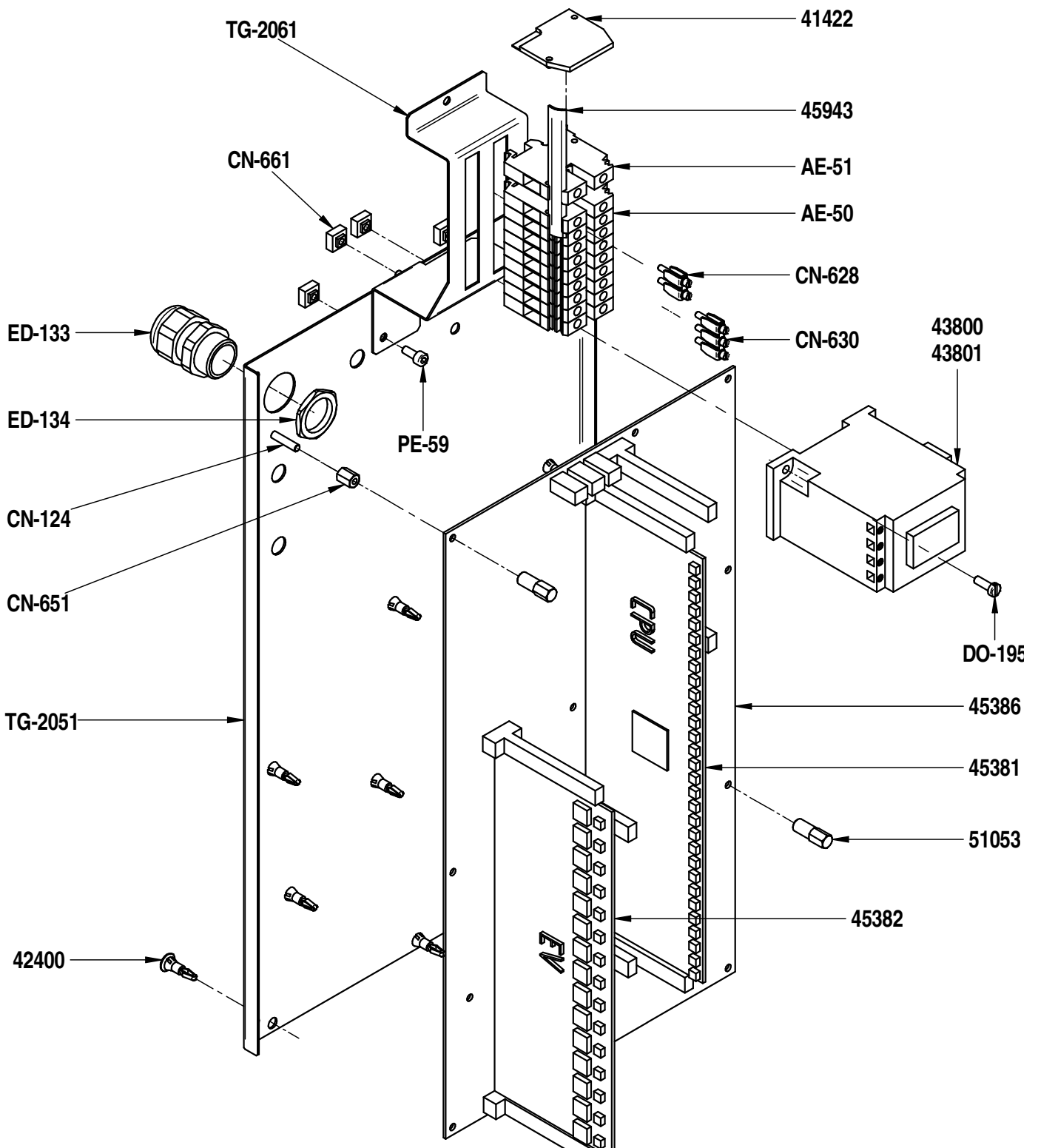
◆ Fuses

REF	DESIGNATIONS FR	DESIGNATIONS GB
FN1A	5A / EV-AC1-A / MODULE 24V: EVRE - EVSE - EVSV - EVNC - EVNK/EVNC - EVA - EVV	
FN1B	5A / EV-AC1-B / MODULE SOLUBLE: MT1 - MT2 - FAN SOL - EVKD/EVM1 - EAED/EVM2 MODULE CAFE DX: EVKD/EVM1 - EAED/EVM2 - EVCD - EVP2 - EVLD - EVS2	
FN1C	5A / EV-AC1-C / MODULE 24V: EVNKG - EVAEG - EVLG - EVCG - EVP1 - EVS1	
FN1D	5A / EV-AC1-D / MODULE 24V: EVAL1 - EVNL1 - EVVL1 - EVAL2 - EVNL2 - EVLL2	
FN2	10A / 22V / ALIM MOTEUR PISTON & PLATEAU	<i>PISTON & TURNTABLE MOTOR SUPPLY</i>
FN3	5A / 19V / +24V	
FN4	5A / TELERUPTEUR	<i>STEPPING SWITCH</i>
FN5	5A / NEUTRE	<i>NEUTRAL</i>
FN6	5A / RELAIS / MAC1 - MAC2 - MAC3 - GET1 - GET2 - GET3 - POMPE - AUX1 - CHGR	
FN7	10A / +V PLATEAU / MOTEUR PLATEAU	<i>TURNTABLE MOTOR</i>
FN8	10A / +V PISTON / MOTEUR PISTON	<i>PISTON MOTOR</i>
FN9	5A / +24V	
FN10	5A / +12V, +9V, +5V, +3.3V	
43112	FUSIBLE 5 X 20 10A RETARDE T	<i>FUSE 10A DELAYED</i>
43115	FUSIBLE 5 X 20 5A RETARDE T	<i>FUSE 5A DELAYED</i>



► Electronic Cards

◆ Turntable set

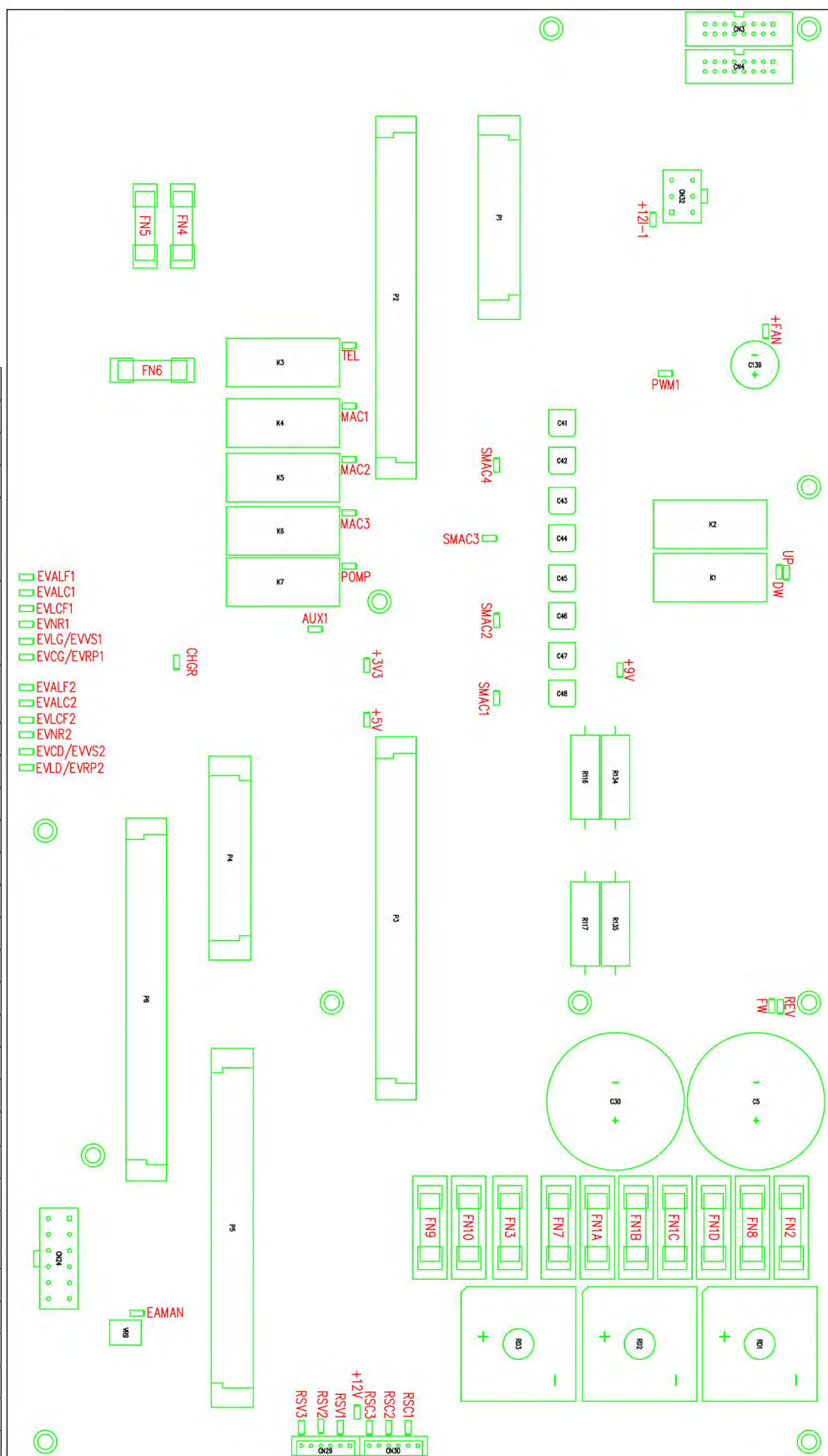


Identification

LED sur carte mère

45386

EVALF1	Cold milk air SV
EVALC1	Hot milk air SV
EVLCF1	
EVNR1	
EVLG / EVVS1	SV, latte from the LC outlet, left / steam coil SV
EVCG / EVRP1	SV, cappu. LC Output left / Cleaning steam, purge and flush SV
EAMAN	Electro-magnet manual door
RSC1	Static coffee relay 1
RSC2	Static coffee relay 2
RSC3	Static coffee relay 3
RSV1	Static steam relay 1
RSV2	Static steam relay 2
RSV3	Static steam relay 3
POMP	Electric pump
MAC1	Grinder no 1 (purple)
MAC2	Grinder no 2 (green)
MAC3	Grinder no 3 (orange)
TEL	Main switch
SMAC1	Coffee safety no 1
SMAC2	Coffee safety no 2
SMAC3	Coffee safety no 3
SMAC4	Not used
CHGR	Heating element of the Group
AUX1	
+3V3	
+5V	5V supply on light
+9V	9V supply on light
+12V	12V supply on light
+FAN	Fan supply light

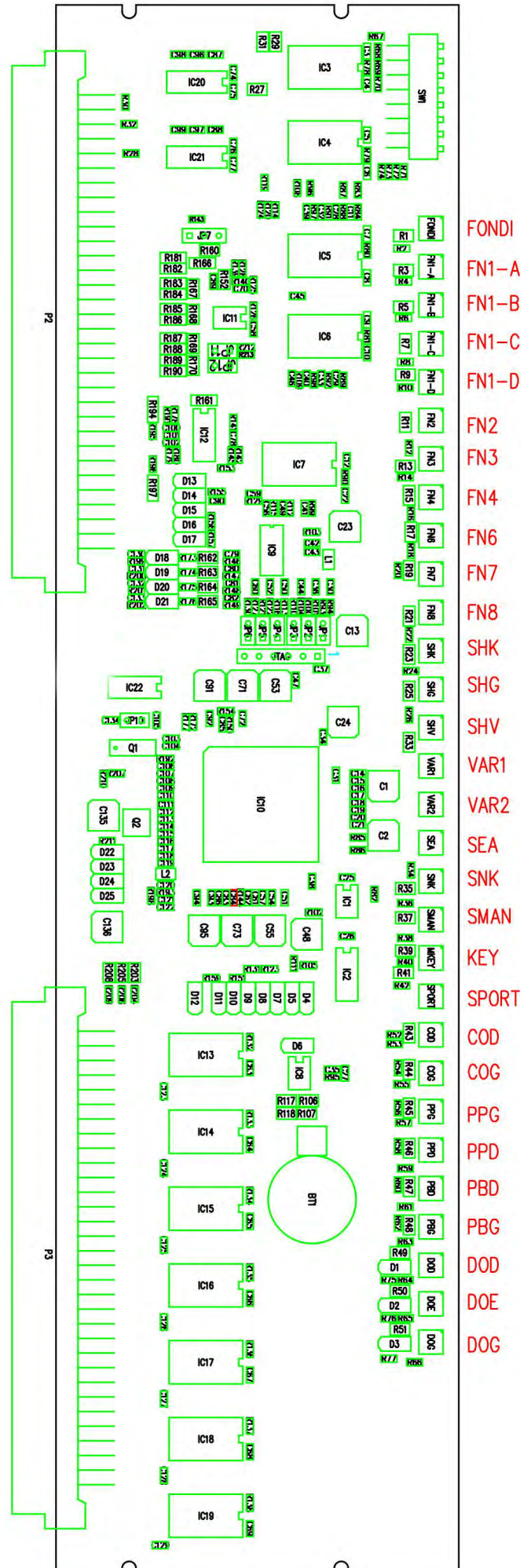


Identification

LED sur carte CPU

45381

FONDI	Coffee grounds tray
FN1A	MODULE 24V: EVRE - EVSE - EVSV - EVNC - EVNK/EVNC - EVA - EVV
FN1B	MODULE SOLUBLE: MT1 - MT2 - FAN SOL - EVKD/EVM1 - EAED/EVM2 MODULE CAFE DX: EVKD/EVM1 - EAED/EVM2 - EVCD - EVP2 - EVLD - EVS2
FN1C	MODULE 24V: EVNKG - EVAEG - EVLG - EVCG - EVP1 - EVS1
FN1D	MODULE 24V: EVAL1 - EVNL1 - EVVL1 - EVAL2 - EVNL2 - EVLL2
FN2	Piston and tray motor supply
FN3	+24V
FN4	Main switch
FN6	MAC1 - MAC2 - MAC3 - GET1 - GET2 - GET3 - POMPA - AUX1 - CHGR
FN7	Tray motor
FN8	Piston motor
SHK	Heater element safety system, coffee boiler
SHG	Heater element safety system, group
SHV	Heater element safety system, steam boiler
VAR1	
VAR2	
SEA	Water presence safety system
SNK	Plug safety system for the group cleaning circuit
SMAN	Manual door safety system
KEY	
SPORT	
COD	Encoder, right cylinder
COG	Encoder, left cylinder
PPG	Tray position to the left
PPD	Tray position to the right
PBD	Right cylinder low position
PBG	Left cylinder low position
DOD	Right volumetric meter
DOE	Hot water outlet volumetric meter
DOG	Left volumetric meter

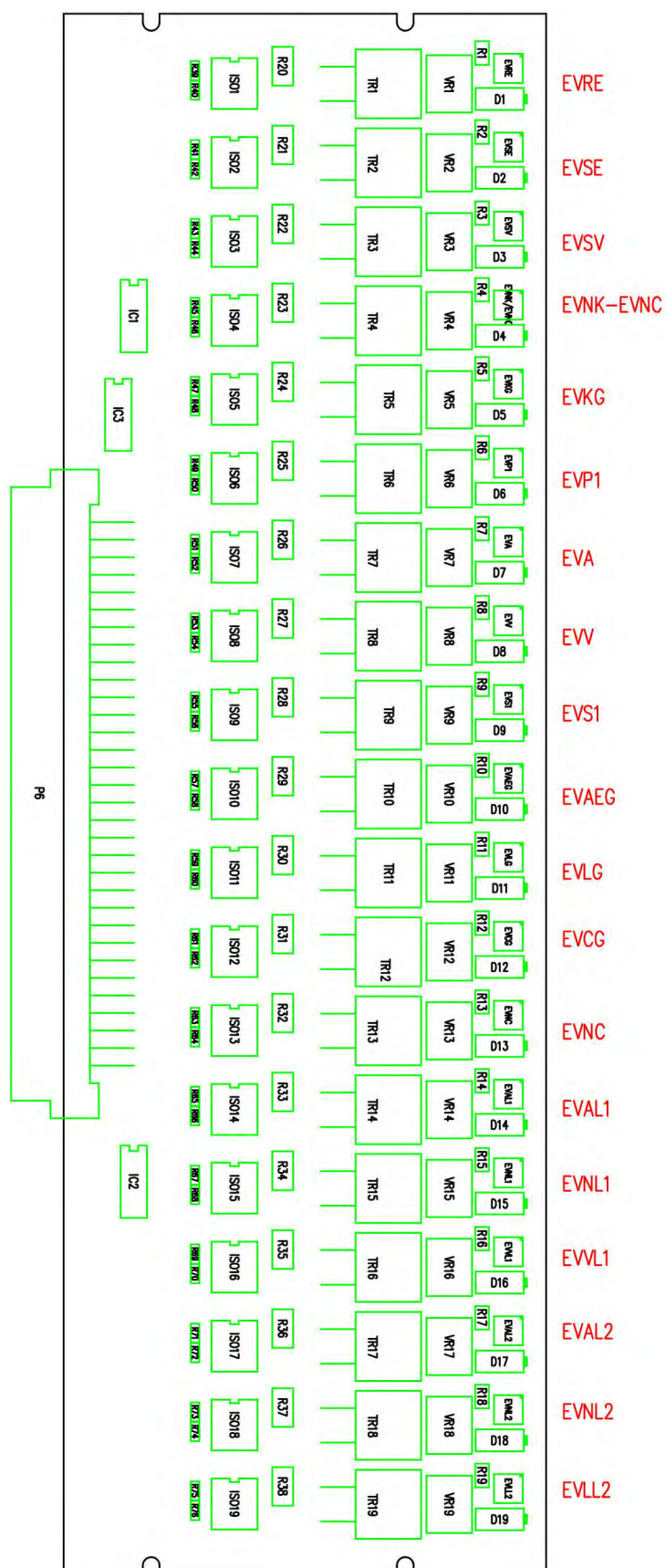


Identification

LED sur carte EV

45382

EVRE	Filling SV
EVSE	Hot water outlet SV
EVSV	Steam outlet SV
EVNK / EVNC	Coffee cleaning SV
EVKG	Left coffee SV
EVP1	Pre-infusion 1 SV
EVA	Air SV
EVV	Steam SV
EVS1	
EVAEG	SV add water at coffee outlet, left
EVLG	Latte from the LC outlet, left SV
EVCG	Cappuccino from the LC outlet, left SV
EVNC	Cappuccino cleaning SV
EVAL1	Cold air SV
EVNL1	Milk SV
EVVL1	Hot air SV
EVAL2	
EVNL2	
EVLL2	



► Active components

OPTION LC	
SM1	Coffee safety system, grinder no 1
SM2	Coffee safety system, grinder no 2
SM3	Coffee safety system, grinder no 3
SM4	Coffee safety system, grinder no 4
CHU	Moisture sensor
CPV	Steam pressure sensor
CPR	Mains pressure sensor
MGET1	Coin acceptor no 1 micro switch
MGET2	Coin acceptor no 2 micro switch
SNB	Low level probe
SNH	High level probe
THV	Steam boiler thermostat probe
THG	Group thermostat probe
THK	Coffee boiler thermostat probe
CO. D	Encoder, right cylinder
PB. D	Right cylinder low position
EVK.D	Right coffee SV
EVAE.D	SV add water at coffee outlet, right
EVINF.D	Infusion D (cleaning) SV
EVS2	
EVC.D	Cappuccino from the LC outlet, right SV
EVL.D	Latte from the LC outlet, right SV
MM1	Mixer motor 1
MM2	Mixer motor 2
MT1	Bin 1 motor
MT2	Bin 2 motor
SFAN	Soluble fan
SMAN	Manual door safety system
SEA	Water presence safety system
SNK	Plug safety system for the group cleaning circuit
DO. D	Right volumetric meter
DO. G	Left volumetric meter
DO. E	Hot water outlet volumetric meter
CO. G	Encoder, left cylinder
PP. D	Tray position to the right
PP. G	Tray position to the left
PB. G	Left cylinder low position
EA.MAN	Manual door electro-magnet
RSV1	Static steam relay 1
RSV2	Static steam relay 2
RSV3	Static steam relay 3
RSC1	Static coffee relay 1

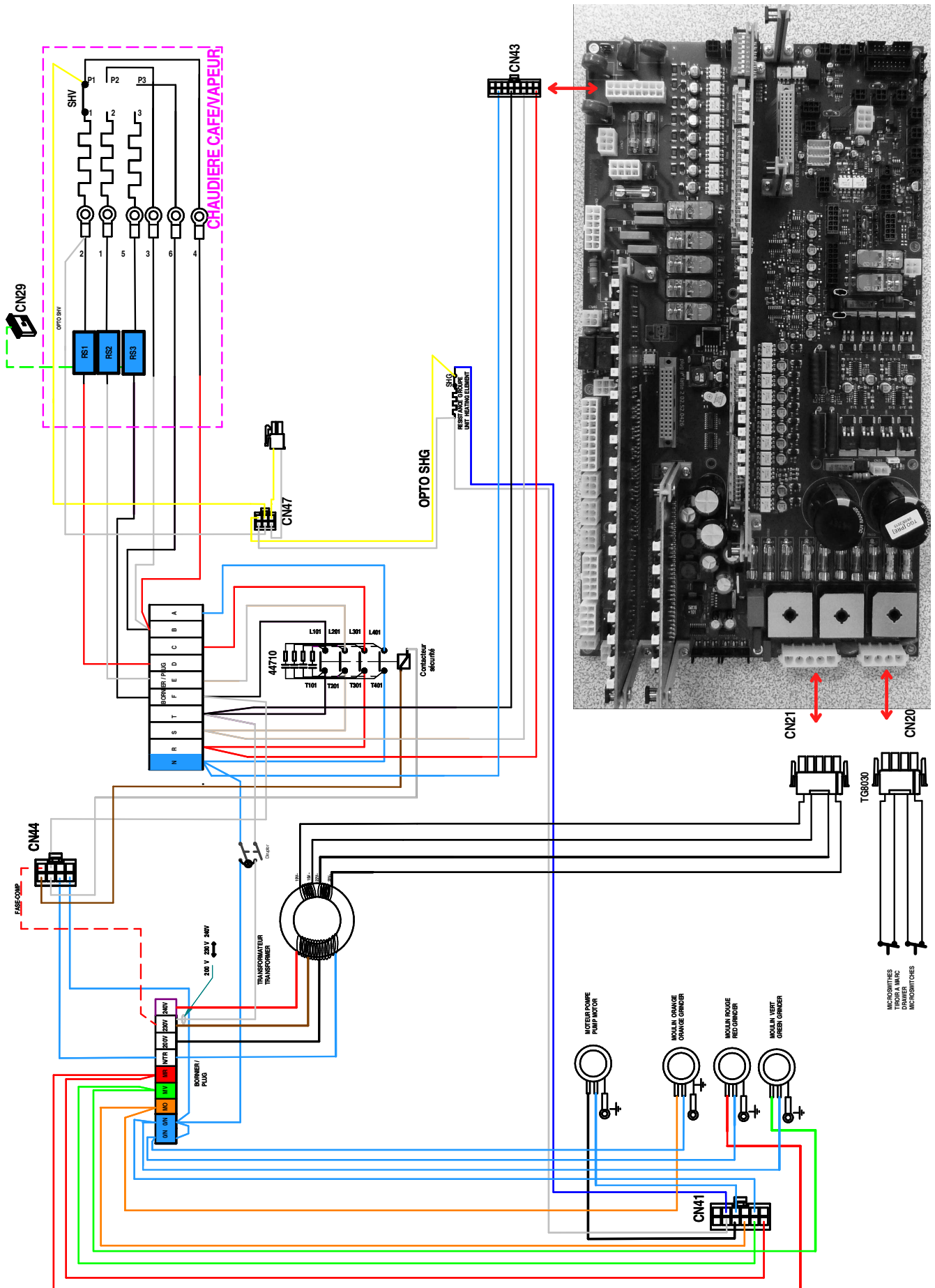
RSC2	Static coffee relay 2
RSC3	Static coffee relay 3
EVALF1	Cold milk air SV
EVNL1	Milk cleaning SV
EVALC1	Hot milk air SV
EVRE	Filling SV
EVSE	Hot water outlet SV
EVKN	Coffee cleaning SV
EVK.G	Left coffee SV
EVP1	Pre-infusion 1 SV
EVA	Air SV
EVV	Steam SV
EVDC	DISCHARGE (cleaning) SV
EVAE.G	SV add water at coffee outlet, left
EVL.G	Latte from the LC outlet, left SV
EVC.G	Cappuccino from the LC outlet, left SV
EVNC	Cappuccino cleaning SV
MAC 1	Grinder no 1 (purple)
MAC 2	Grinder no 2 (green)
MAC 3	Grinder no 3 (orange)
POMP	Pump motor
SNL1	Milk level probe 1
SNL2	Milk level probe 2
EVALF2	Cold milk air 2 SV
EVNL2	Milk cleaning 2 SV
EVALC2	Hot milk air 2 SV
GET1	Coin acceptor coil no 1
GET2	Coin acceptor coil no 2

► List of error codes

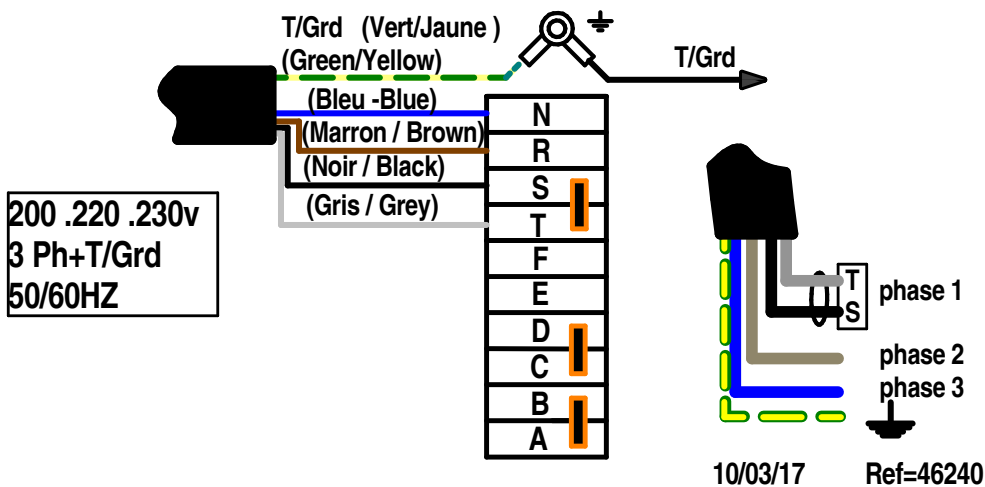
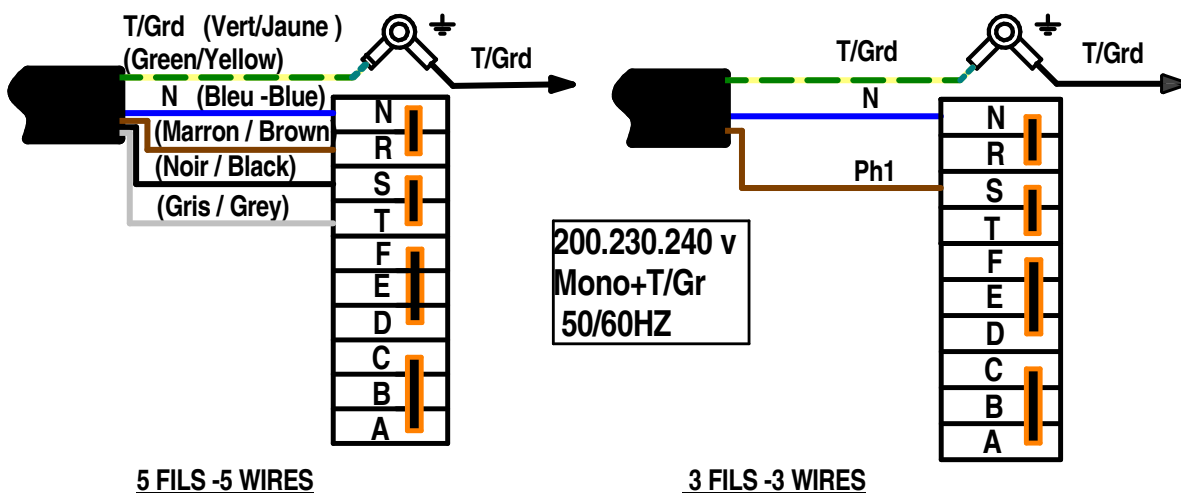
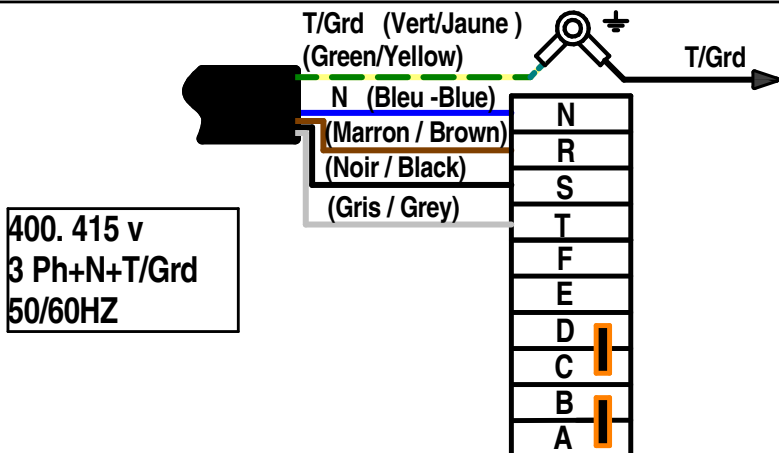
Error code no	Component	Error code description
1		High level probe
2		Connection error, level probes
2		The two level probes not covered
3		Low level probe error
4		Tray rotation time-out
5	SHK	Coffee boiler heater overheating safety device
6	SHV	Steam boiler heater overheating safety device
7	SHG	Group boiler heater overheating safety device
8	SNK	Pellet cleaning unit plug open
9		Coffee grounds drawer out
10	Left piston	Lowering Time-out disconnected
10.1	Left piston	Lowering Time-out motor slow
10.2	Left piston	Lowering Time-out transmission
11	Right piston	Lowering Time-out disconnected
11.1	Right piston	Lowering Time-out motor slow
11.2	Right piston	Lowering Time-out transmission
13		Communication error, left screen
14		Communication error, right screen
15		Decaffeinated trap safety system
16	FN1A	Fuse broken
17	FN2	Fuse broken
18	FN3	Fuse broken
19	FN1B	Fuse broken
20	FN8	Fuse broken
21	FN1C	Fuse broken
22	FN1D	Fuse broken
23	FN4	Fuse broken
24	FN6	Fuse broken
25	FN7	Fuse broken
26		Screen fan over-voltage
27	THV	Steam overheating safety device
28	THG	Group overheating safety device
29	THK	Coffee overheating safety device
30		Boiler filling time-out
31	Left piston	Encoder Fault
31.1	Left piston	Encoder Fault
32	Left piston	Low position fault
33	Left piston	Does not rise safety time-out
34	Left piston	Movement error
35	Left piston	Rise safety time-out fault
35.1	Left piston	TKC Rise safety time-out fault

36	Left piston	Jammed or simultaneous faults on the encoder and the PMBas
37	Left piston	Does not move backwards
38	Left piston	Encoder Fault
41	Right piston	Encoder Fault
41.1	Right piston	Encoder Fault
42	Right piston	Low position fault
43	Right piston	Does not rise safety time-out
44	Right piston	Movement error
45	Right piston	Rise safety time-out fault
45.1	Right piston	TKC Rise safety time-out fault
46	Right piston	Jammed or simultaneous faults on the encoder and the PMBas
47	Right piston	Does not move backwards
48	Right piston	Encoder Fault
50	THK	Coffee boiler thermostat probe disconnected
51	THK	Coffee boiler thermostat probe, short circuit
52	Left piston	Over-voltage during descent
57	Left piston	Over-voltage during expulsion
60	THV	Steam boiler thermostat probe disconnected
61	THV	Steam boiler thermostat probe, short circuit
62	Right piston	Over-voltage during descent
66	Right piston	Over-voltage during expulsion
67		Volumetric meters reversed
70	THG	Group thermostat probe disconnected
71	THG	Group thermostat probe disconnected
72	CPV	Error
73	CPV	Short circuit
74	CPR	Error
75	CPR	Short circuit
76	CHU	Error
77	CHU	Short circuit
78	SEA	Inlet water pressure error
79	STM	Steamair probe disconnected
80	STM	Steamair probe disconnected in short circuit
81	DOG	Jammed
82	DOD	Jammed
83	DOE	Jammed
90		Machine settings corrupted
91		Piston settings corrupted
92		Calibration settings corrupted

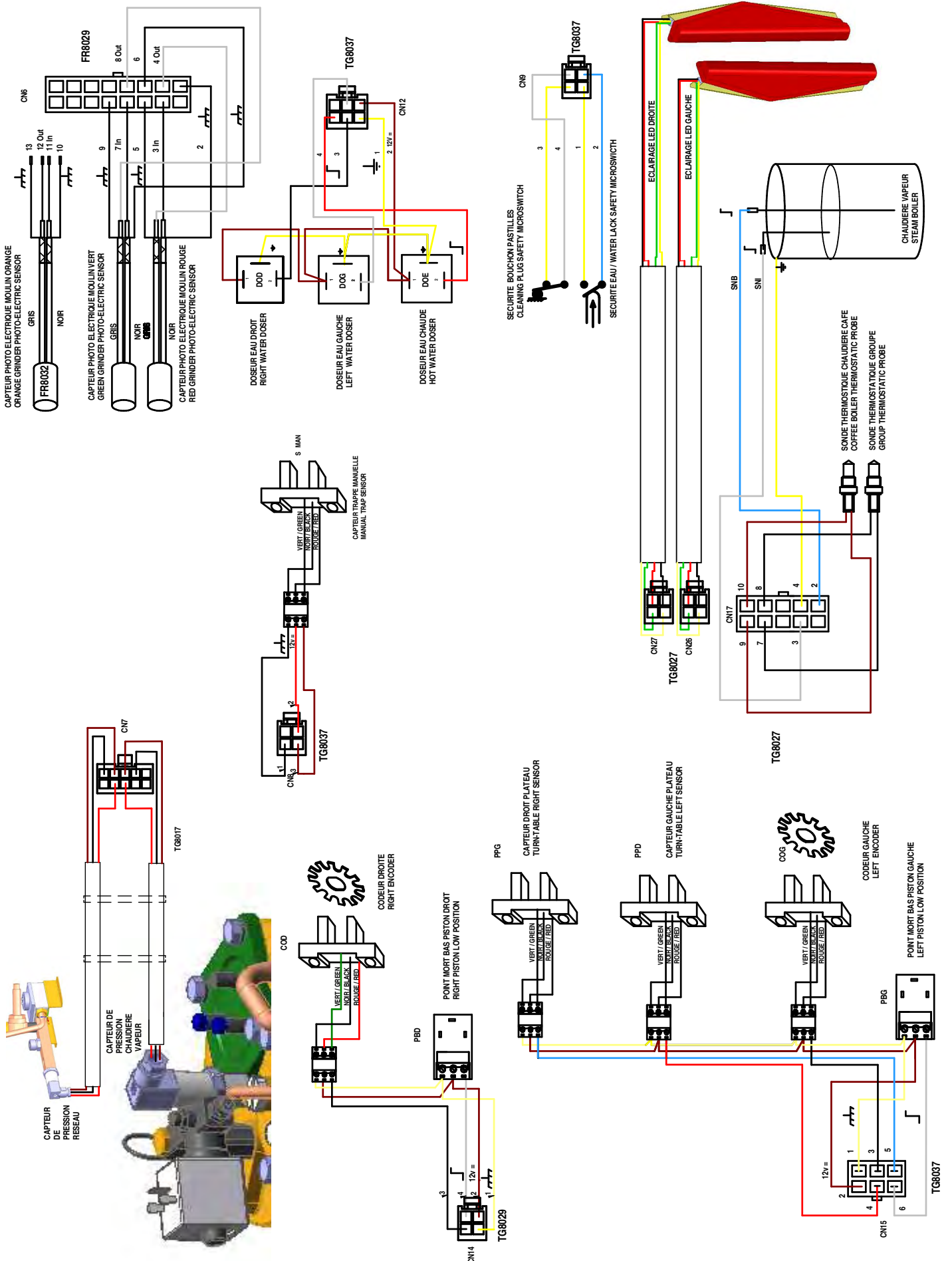
► Electric wirings



BRANCHEMENT BORNIER / TERMINAL CONNECTING



◆ Electric wirings 5/12V



► Front panel replacement

Tools:
-Phillips screwdriver
-Flat screwdriver

Remove the cup rack and unscrew the 2 front screws of the cup warmer.



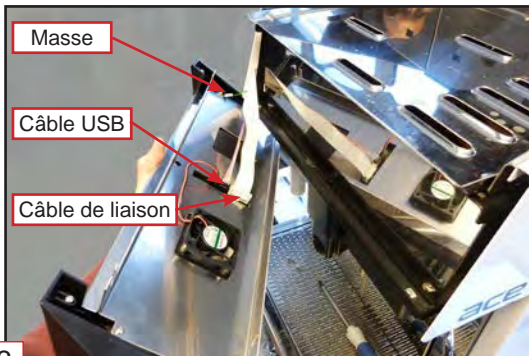
1

Unscrew the 2 screws of the bottom of the front panel. **Hold the grille** so it does not fall off.



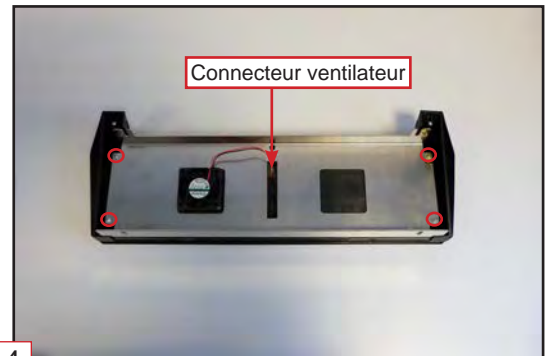
2

Remove the grille and disconnect the 3 connectors.



3

Unscrew the 4 screws and disconnect the fan connector.



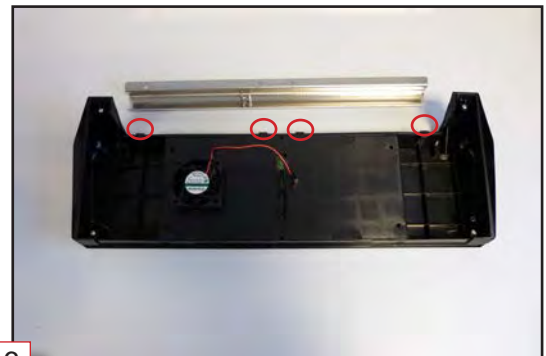
4

Remove the support plate from the grille



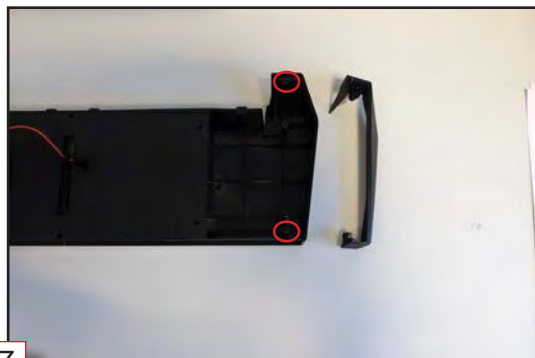
5

Unscrew the 4 screws from the top of the grille



6

Unscrew the 2 Phillips screws and then remove the ears (right and left)



7

Remove the rear cover using a screwdriver in the notches.



8



9

Installing the new screen:
Replace the cover with the fan on the new screen, then proceed to assemble by repeating all previous operations in the reverse order.