ALEX P.I.D. PLUS

ZUCCARINI
CUSTOM VERSION

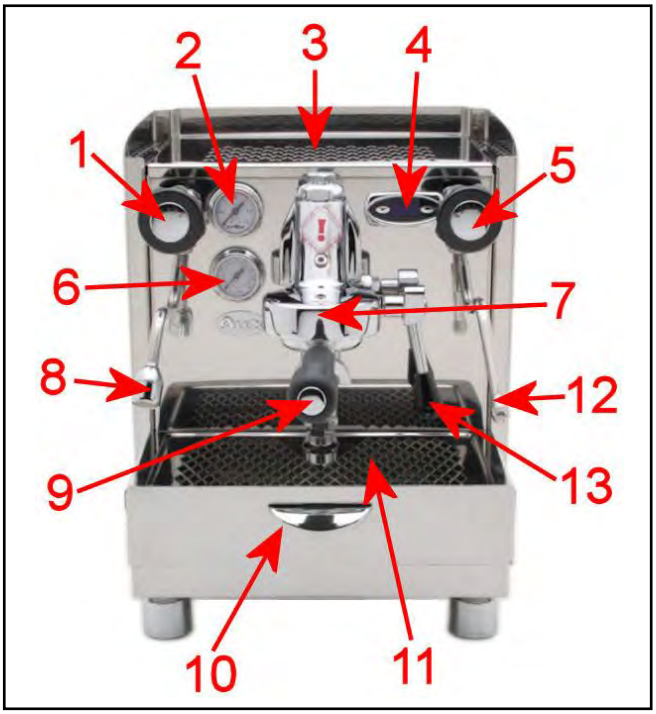
Custom made in Italy for Zuccarini by

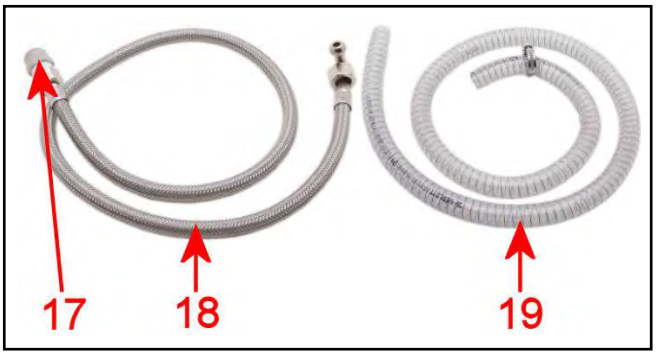
Izzo

Complete Owner's Manual

ZUCCARINI.CA
Zuccarini
EST 1954
ESPRESSO MACHINES

Diagrams





1. Hot Water Knob
2. Steam Pressure Gauge
3. Cup Warming Tray
4. PID Controller
5. Steam Knob
6. Pump Pressure Gauge
7. E61 Group Head
8. Hot Water Wand
9. Portafilter
10. Drip Tray
11. Drip Tray Cover
12. Steam Wand
13. E61 Brew Lever
14. Single Portafilter
15. Double Portafilter
16. Blind filter (Backflush Disc)
17. John Guest Fitting
18. Braided Water Line
19. Drain Hose

Introduction

First of all, thank you for your business! You are going to love your new Alex espresso machine. It combines classic beauty, value, and great performance for making the best espressos, cappuccinos, and lattes you"ve ever tasted! These instructions include tips that will help bring out the Barista that"s hidden within! Enjoy your new machine!

First Time Set Up – Reservoir Mode

- Remove the machine from the box and **GENTLY PLACE IT ON A SURFACE THAT IS PROTECTED (e.g. a workbench, a flattened cardboard box, a blanket, etc.)** so you do not scratch the counter surface.

- Hold the machine firmly and gently lift one side so you can carefully screw two of the chromed feet into the threaded holes on the underside of the machine. Then hold the machine firmly and gently lift the other side up so you can screw in the other two feet into the bottom of the other side of the machine.

Note: Should your water"s hardness level exceed three grains, then it is strongly recommended that a softener or a different source of soft water be used. If you are using bottled water then it should also be tested prior to use as some bottled water can also be very hard. A Brita or Pur style filter should only be used if the water is already soft as they DO NOT remove any hardness from the water. Using soft water will prolong the life of your machine and help prevent costly repairs.

- Remove the water reservoir and rinse thoroughly before use. The reservoir can be washed with mild dish detergent. It should NOT be cleaned in a dishwasher.

- Fill the reservoir with cold **SOFT WATER** being careful not to over fill, or it can splash out and get the electronics wet.

- Return the reservoir to the machine and be sure to put the silicone hose back into the reservoir.

First Time Set Up – Reservoir Mode – Continued

- Pull the drip tray out and ensure the lever on the right is in the "RESERVOIR" position.
- Before plugging the machine in, verify the steam and hot water knobs are closed (locked counter-clockwise) and the brew lever (to the right of the brew group) is pointing straight down.
- Plug the machine into a 3 prong 120V grounded outlet. A resettable GFCI outlet is strongly recommended, but is not necessary.
- Turn the power switch to the on position. The pump will come on to start filling the boiler (first prime). **Note:** Whenever the boiler is filling, the PID display will turn off the machine to protect the heating element.
- After the pump has primed the boiler, raise the brew lever until you have water coming out of the group head; then lower the lever.
- After filling the boiler, remove the reservoir to refill with water and return it to the machine. **Note:** An audible alert will sound and the PID display will turn off whenever the water level in the reservoir gets low to indicate it needs to be refilled.
- Place whichever portafilter you intend to use into the grouphead so that it will heat up with the machine. It is also recommended that you keep your cups on the top cup warming tray to keep them warm. When making espresso if the portafilter or cups are not hot then it will cool down the shot and make it taste sour.
- The machine should reach temperature in less than 10 minutes, but to make delicious espresso with thick rich crema it is best to allow the machine to be heated for 15-30 minutes with the portafilter kept locked into the grouphead.
- **Note:** During heat up a small amount of water and steam will be discharged into the centre of the back of the drip tray which is normal and no cause for concern.

First Time Set Up – Plumbed In Mode

- Before hooking the machine up to a water line test your water for hardness. If your water is above 3 grains of hardness then a softening system should be installed to prolong the life of the machine. Even if your water is soft it is still recommended to have either a sediment or carbon filter installed to protect your machine from any sediment or debris that can be found in the water.

- The machine comes with a braided water line that connects to a fitting on the bottom of the machine. Connect the elbow end of the braided water line to the bottom of the machine.

- The other end of the braided water line should come equipped with a 3/8” John Guest quick connect fitting. A 1/4” fitting can be substituted at the time of the order. If you are not going to use the John Guest fitting then you will need a 3/8” Male BSPP fitting to connect to the braided water line.

- Connect the braided water line to your water source. If you have a filter or softener system installed then purge a few gallons of water into the sink to prevent any carbon dust or softening resin from getting inside of the machine. Once the filters have been purged then connect the water line to the machine, turn on the water supply, and check for leaks.

- Pull the drip tray out and move the lever on the right into the “MAIN WATER” position.

- Before plugging the machine in, verify the steam and hot water knobs are closed and the brew lever should be pointing straight down.

- Plug the machine into a 3 prong 120V grounded outlet. A resettable GFCI outlet is strongly recommended, but is not necessary.

- Turn the power switch to the on position. The pump will come on to start filling the boiler. After the pump has turned off then raise the brew lever until you have water coming out of the group head and then lower the lever.

First Time Set Up - Plumbed In Mode – Continued

- Whenever the pump comes on to refill the boiler the PID display will turn off to protect the heater during the fill process.

- Place whichever portafilter you intend to use into the grouphead so that it will heat up with the machine. It is also recommended that you keep your cups on the top cup warming tray to keep them warm. When making espresso if the portafilter or cups are not hot then it will cool down the shot and make it taste sour.

- The machine should reach temperature in approximately 15 minutes, but to make delicious espresso with thick rich crema it is necessary to allow the machine to be heated for 30-45 minutes with the portafilter kept in the grouphead.

- **Note:** During heat up a small amount of water and steam will be discharged into the drip tray which is normal and no cause for concern.

Before Each Use

- Verify the steam and hot water knobs are both closed and your brew lever is pointing straight down.

- If you are using the machine in reservoir mode make sure the reservoir is filled with cold softened water.

- Place whichever portafilter you intend to use (empty) into the group head and turn the power switch to the on position and let the machine warm up for 15-30 minutes for optimal performance.

Normal Operation

Reservoir

- The reservoir is located in the back of the machine under the cup warming tray. The reservoir should be filled with cold softened water only. The reservoir can be cleaned with mild dish detergent and should NOT be used in a dishwasher.

- The water reservoir is equipped with a magnetic float to detect the water level. When the machine gets low on water an audible alert will sound and the PID and pump will turn off to indicate the reservoir needs to be refilled with water.

- When placing the reservoir into the machine it is very important that the float be on the right side for the machine to function properly.

- It is also very important that the reservoir sit as far down as it can go. It may have to be jiggled a little bit for it to seat properly. If the reservoir is not seated properly then the silicone tubing will get pinched and restrict water flow to the machine which can damage the pump. When installed properly it should like the the two pictures shown below.

Audible Alert

- The machine is equipped with an audible alert to indicate when the reservoir is getting low on water.

- The alert may also sound if the steam boiler is not able to fill. If this happens turn the machine off and check to make sure the machine is getting water, then turn back on.

Normal Operation - Continued

Pressure Gauges

- The top gauge is your boiler steam pressure. When the heating light turns off the boiler is up to pressure and should be around 1.1 – 1.2 bar. If the steam boiler power switch is turned off then the steam gauge will not show any pressure.

- The lower gauge is your pump pressure. When the pump is not engaged the gauge will show the line pressure from your water supply. When you raise the brew lever then the pressure should go to 8 or 9 bars.

Pump

- The pump pressure has been set prior to shipping, but may differ based on your line pressure or if the machine is used in reservoir mode versus plumbed in. The recommended setting is 9 bar. Should you need to adjust your pump pressure please refer to the maintenance section of the owner's manual.

- Periodically the pump will come on by itself to maintain the proper water level in the steam boiler which is normal. When this happens the PID display will turn off to protect the heating element during filling.

Switches

- On the right side on the base of the machine is the power switch. The switch will be illuminated when the machine is turned on.

- Behind the drip tray there a lever switch on the right which is used to switch between plumbed in or reservoir modes.

Drip Tray

- The drip tray should be periodically cleaned with mild dish detergent. In the back of the drip tray there is a cut out where a silicone tube can be seen poking out. The silicone tube comes from the expansion valve. It is normal for a small amount of water and steam to exit the tube into the drip tray when the machine is heating, SO ALWAYS CHECK TO ENSURE THE DRIP TRAY IS FULLY INSERTED BEFORE TURNING ON THE MACHINE.

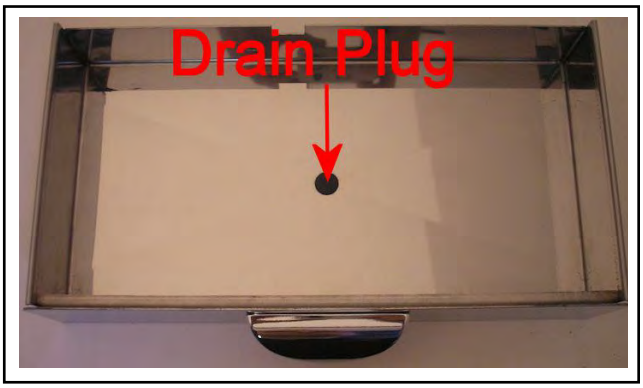
Normal Operation – Continued

Drain Kit

- An optional drain kit can be attached for hooking the drip tray up to a drain. The drain tube can be routed into an open drain, dishwasher drain tail piece, or even a 5 gallon bucket can be used if a drain is not available.

- To install the drain kit, pull out the drip tray and then pull the rubber drain plug out of the center of the drip tray and save for future use.

- Attach the drain hose to the black plastic drain box shown below and use the provided clamp to tighten the hose. Tighten the clamp enough so that it will not leak, being careful not to over tighten or it can crack the plastic drain box.



- When using the optional drain kit it is very important that the drain tube has a gradual descending pitch. If the tube lies too flat or goes up hill then the tube will not drain and will back up with water causing a leak. The drain should only be used for liquids, coffee grounds can cause the drain to be blocked and back up with water causing a leak.

PID Controller

The PID controller is used to control the heating in place of using a pressure stat. This allows for a more reliable and precise temperature control. Keep in mind the temperature shown on the display is the steam boiler temperature. The water used for making espresso passes through a heat exchange and it may be necessary to perform a cooling flush before making espresso. More information about cooling flushes can be found in the “Brewing Espresso” section of the owner‟s manual.

Setting Temperature

To change the steam boiler temperature with the machine turned on press the down arrow key. PrG will appear on the display. Press the up arrow key to view the current setting and then use the arrow keys to change the temperature. The display will revert back to normal operation after a few seconds.

Steam Boiler Temperature – By default the steam boiler temperature has been set to 255°F, but can be easily changed, as well as being changed from F to C. Often the best setting is between 121° and 123°C. The table to the right shows what temperature settings corresponds to bar pressure. There may be a slight variance in pressure depending on elevation since water boils at different temperatures at different elevations.

Fahrenheit	Celsius	Bar
248°	120°	1.0
250°	121°	1.1
253°	123°	1.2
255°	124°	1.3
259°	126°	1.4
262°	128°	1.5

Advanced Settings And Modes

To get into the advanced programming mode, with the machine turned off hold down both arrow keys and then turn the machine back on. Keep holding the arrow keys until the display reads F.03 and then release the keys.

Parameter	Setting	Description
F.03	F	Change temperature to Fahrenheit
	C	Change temperature to Celsius
P	1.3	Proportional Value
I	.06	Integral Value
D	1.5	Derivative Value
F.04	0	Offset Value

Use the down arrow key to cycle through the parameters and then use the up arrow key to select a parameter to change. Then use the arrow keys to change the value of the selected parameter. After the display reverts back then use the down arrow key to cycle to the next parameter to change. To save the new changes turn the machine off and then back on again.

Note: The F.03 parameter is the only setting that should be changed. It is not recommended changing the PID settings unless you have a thorough understanding of how a PID controller operates. The F.04 setting should NEVER be changed or damage to the machine may occur which will not be covered under warranty.

Brewing Espresso

First let me begin by explaining the three main variables of preparing great espresso.

1. Quantity of ground coffee
2. Tamping
3. The grind

Quantity of Ground Coffee - Loosely fill the basket slightly mounding over the top. Then lightly run your finger arched across the basket from left to right, right to left, front to back, and then lay your finger flat on the basket and go from back to front to remove any excess coffee. This technique helps fill any voids in the basket to help achieve an even extraction.

Tamping - After filling the basket with coffee then use your tamper to apply 25 to 30lbs of pressure evenly on the coffee bed. Then without applying any pressure lightly twist the tamper on the bed of coffee to "polish" the loose grounds on top. Then lock the portafilter firmly into the group head and then raise the brew lever to start the extraction. When it has reached the desired level, lower the brew lever to stop the shot. It is very important to tamp consistently with the same pressure each time or your shot quality and timing will vary.

The Grind - Adjust your grind so that when you activate the pump, the flow of coffee coming out of the portafilter spout looks like the tapered tail of a mouse. It should take approximately 25 seconds for a 2 oz. double shot. If it is coming out quicker then the grind needs to be adjusted finer, if it is coming out slower or not at all then the grind should be adjusted coarser. The grind particle size should look in between powder and salt. Not as fine as powder, but not as coarse as salt. Getting the right grind is crucial to making delicious espresso with thick rich crema.

Consistency - The quantity of ground coffee and tamping pressure should always be the same. Using more or less coffee or tamping lighter or harder will greatly affect the outcome and timing of the shot. If the shots are not coming out properly then the only variable that should be changed is the grind.

Cooling Flushes – The water for brewing espresso passes through a tube in the boiler called a heat exchanger. The longer the machine sits the hotter the water will get. When combined with the E61 group design it sometimes becomes necessary to perform a cooling flush. **Note: Zuccarini machines are customized at the factory to prevent the group water from over-heating, so cooling flushes may not be necessary.** To do a cooling flush with no portafilter in the group head, raise the brew lever and observe the flow of water. When the water stops spitting and sputtering then the water is cool enough to pull a shot. If you are pulling back to back shots then you should not need to do a cooling flush.

Cleaning Tip: Get into the habit of disposing of the spent grounds immediately after brewing espresso. After disposing of the grounds, place the portafilter under the group head and raise the brew lever for 1 or 2 seconds to rinse away excess oils and loose grounds. By regularly following this procedure, you will greatly reduce the tar-like buildup on the shower screen that occurs if you allow coffee oils to dry and bake on the hot group.

Steaming Milk – Basics

First, let‟s talk about some of the things you need to learn in order to become „barista-like‟ in your techniques.

Milk – Whole milk works best to steam, both in technique and in flavor! Lower fat milks contain mostly water which will not foam well and will be almost tasteless when steamed. After all your hard work you will be left with a less than desirable tasting beverage.

Milk Temperature – Your whole milk needs to be as cold as possible to ensure the creamiest, sweetest, and best tasting micro-foam. Once the milk has reached a temperature between 140-160 degrees F, you must stop the process. The longer amount of time you have with the cold milk gives you that extra time to continue making the milk creamy and sweet tasting. Milk heated above 160 degrees will be burnt and taste terrible.

Frothing Pitcher – The size of your pitcher is relative to the size and number of drinks you will be preparing at the time. A spouted version is the pitcher of choice of baristas as they promote a user friendly rolling of the milk which makes it simple to create creamy rich micro-foam for pouring Latte Art.

Amount of Milk – Too little milk in your frothing pitcher will cause splashing when you turn on the steam wand; too much milk will cause overflow and make a huge mess. The pitcher must be filled between 1/3 to 1/2 full to have the maximum capacity for properly steaming milk. If your pitcher has a spout, fill it to half an inch below where the spout starts.

Stretching the milk – Refers to the initial heating of the milk and the forceful introduction of air into the milk (using the steam wand pressure) – ***stretching*** the consistency of the milk. Stretching continues until the milk reaches an approximate temperature of 100 degrees (body temperature).

Texturizing the milk – Refers to the next phase of frothing whereby the steam wand is submerged in the milk and the pressure continues to roll the milk. The process breaks down the large air bubbles into tiny air bubbles which then creates the smooth and creamy ***texture*** that is most desirable.

Steaming Milk - Technique

- As you face your espresso machine, point the steam wand over your drip tray and open up the steam knob in order to purge out any unwanted water that may have collected inside the wand due to condensation – you do not want that added to your delicious beverage!

- Next, position the steam wand so it is facing directly toward you and slightly angle it 45 degrees from the base.

- Holding your half-filled steam pitcher with the handle facing you, submerge the tip of the steam wand approximately an inch below the surface of the cold milk. Your pitcher bottom should be parallel with the countertop. The steam wand should gently rest in the spout of the steam pitcher. Now slightly tilt the pitcher left, keeping the arm away from the side of the pitcher.

- Open the steam knob completely and position the pitcher so the tip is just below the surface of the milk. This action creates the ***"stretching"*** of the milk – in other words, adding air to the milk. When done properly, the sound you hear at this point resembles "hissing". You continue this until the milk reaches an approximate temperature of 100 degrees or "body temperature".

- After your milk has reached this "body temperature", submerge the tip of the steam arm approximately one inch below the surface of the milk. This process continues to roll the milk over itself again and again – breaking the large air bubbles into tiny air bubbles – resulting in a new, creamy and sweeter, ***texture*** of the milk. When your milk has reached approximately 155 degrees or the pitcher becomes too hot to hold then turn the steam knob off.

- Using a steaming thermometer is helpful when you are learning to steam milk. As you gain more experience and become more comfortable with the process you will be able to steam milk without the help of a thermometer. If you notice in the procedure above we mention temperatures and we also mention “body temperature” and the pitcher being “too hot to hold” We mention this because body temperature is 98.6 which is real close to 100 degrees and when the pitcher becomes too hot to hold the milk will be around 150 degrees. This makes it very easy to steam milk without a thermometer. You will “**stretch**” the milk until the pitcher becomes body temperature and then you start the “**texturizing**” of the milk until the pitcher becomes too hot to hold on the bottom and then you‟re all done.

Helpful Tips and Information

- When turning the steam knob off, always keep the tip under the surface of the milk for 2 to 3 seconds. If you pull it out too soon, you will destroy the nice velvety micro-foam.

- After removing the steam wand from the milk, position it over the drip tray and then open the steam valve for 1-2 seconds to clean out any trapped milk inside the tip and then wipe it down with a damp cloth.

- While texturizing the milk, if you lower the tip too far into the milk you create turbulence rather than rolling. Turbulence will not make micro-foam.

- If there are a few bubbles in the milk after you have finished, wait 5-10 seconds to allow all the remaining bubbles to surface, then simply tap the edge of the pitcher on the counter and swirl the milk slightly and they will disappear.

- Be sure to keep your steamed milk moving/swirling until you are ready to pour since milk has a natural tendency to separate.

Hot Water Wand Operation

- The hot water wand uses the steam pressure to push the hot water out of the boiler so the machine must be up to temperature before it is able to give any hot water.

- To use the hot water wand, position the cup or pitcher under the wand and then open the hot water knob. Once the water has reached the desired level then close the hot water knob.

- It is not recommended to remove more than 8 oz. of water at any one time until the machine has had time to refill the boiler. Failure to do so may cause damage to the heating element.

Warning: The water from the hot water wand is approximately 250°F or 121°C (HOTTER THAN BOILING WATER!) and exits the boiler under force due to the steam pressure. Extreme caution is advised when using the wand or injury may occur.

Regular Maintenance

Backflushing is a vital maintenance procedure you must follow to help keep your machine running flawlessly for years to come. There are two types of backflushing; one with plain water, and the other with espresso machine cleaner.

Plain water backflushing can be done *about* once a week, however if you are so inclined, feel free to backflush with plain water as often as you like. It won't harm the machine and keeps the shower screen clean.

To backflush, you use the portafilter"s blank or "blind" filter insert (the round stainless steel disk without holes). To remove your single or double portafilter basket, turn the blank portafilter insert upside down and use its edge to pry the basket out of one of your portafilters. (If you always make double espressos, you may choose to keep the blank portafilter insert in your other portafilter so you always have one ready.) Next, place the blind insert into the portafilter and slap it hard with the palm of your hand to secure it in place.

To perform a plain water backflush, place the portafilter into the group and snug it firmly. Next, raise the brew lever all the way up for 5 to 10 seconds, and then lower it all the way down. Water will forcefully discharge out of the bottom of the group into the drip tray; this is normal. Repeat three to five times.

Backflushing with espresso machine cleaner is the same procedure as above with a few differences. The first difference is backflushing with espresso machine cleaner only needs to be done about once a month or every 50 to 100 espressos. I don't recommend backflushing with cleaner more often than once every three weeks since overuse will remove oils that lubricate the brew lever and valves. (Remember, you can water backflush as often as you'd like.)

To begin, place about a 1/4 teaspoon of espresso machine cleaner into the blank portafilter insert, then lock the portafilter into the group. Now follow the same procedure as above **but let the solution sit in the portafilter/group for 10 to 15 seconds between flushes.** Continue until the cleaner is dissolved and the water run clear (about 5-10 flushes).

Next, remove the portafilter from the group and run 5-10 more flushes, some pressurized with the portafilter locked back in. Then take a damp cloth and wipe the underside of the group. After you have finished this procedure, I recommend you pull a shot of espresso and dispose of it to cure the group. You're finished and ready for another month of espresso.

Note: Use either Pulu Caff, Puro Café or Urnex Full Circle Espresso Machine Wash because they are inexpensive specially formulated for this purpose. The use of other cleaners may affect the performance of your machine and could even damage it.

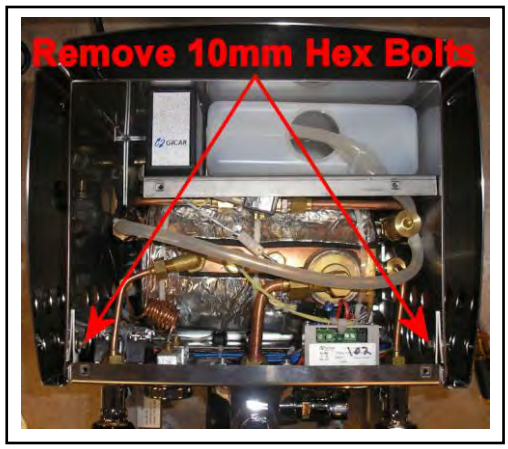
Removing The Outer Shell

WARNING: We strongly recommend that the consumer does not attempt to open or dismantle this machine. Any damage or injury that ensues will not be covered by the warranty, and we assume no liability for failure to follow this warning. If you decide to proceed, ensure that you first unplug the machine from the electrical outlet before removing the outer shell. Failure to do so may cause injury and/or electrical shock.

To remove the outer shell, remove the top cup warming tray. Under the cup warming tray there are 4 phillips screws to remove and then the top panel will lift off.

Unscrew the two 10mm hex bolts shown in the picture to the right. An open end or adjustable wrench can be used.

After removing the hex bolts grab the outer shell on the bottom of both sides and then lift the shell up and off of the machine.

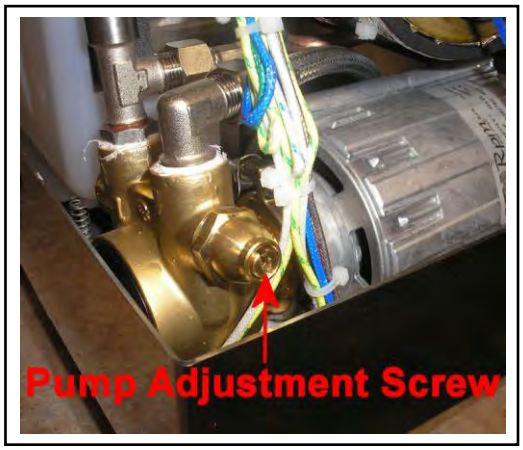


Setting Pump (Brew) Pressure

To set the pump pressure unplug the machine and remove the outer shell as outlined above.

Locate the pump in the back left corner of the machine.

To adjust the pump pressure use a slotted screw-driver to turn the adjustment screw shown in the picture to the right. Turn clockwise to increase the pressure, counter clockwise to decrease.



The recommended setting is 9 bar. The pressure may vary based on your line pressure or if you are using the machine in plumbed mode versus reservoir mode. When plumbed in it is normal to see some pressure shown in the pump gauge when it is not being used which is showing the line pressure to the machine.

If you have fluctuating water pressure at your location then it may be necessary to install a water pressure regulator valve to keep the pressure consistent. It may also be necessary to adjust the pump pressure again after installing the pressure regulator valve due to the change in water pressure.

Group Gasket And Shower Screen Replacement

- The group gasket is a black rubber gasket that makes the seal between the portafilter and the group head. We recommend replacing the gasket on a yearly basis. The Alex uses an E61 8.5mm gasket which can be purchased from your dealer.

- Replacing the group gasket requires the removal of the shower screen as well so we also recommend replacing the shower screen at the same time. The E61 shower screen can also be purchased from your dealer.

- Before replacing the group gasket and shower screen the machine should be turned off and cooled down so that the grouphead is cool to the touch.

Gasket and Screen Removal

- There are two ways to remove the group gasket and shower screen depending on how old they are. If you replace the gasket yearly then the first method shown is recommended. If the gasket is older and dried out then the second method shown will be necessary.

- Method 1

  In the picture to the right shows an indent that goes around the perimeter of the screen.

  Insert either a flat blade screwdriver or a spoon into the indent and then carefully pry the gasket and screen down. You may have to do this on a few spots to remove them.

Gasket and Screen Removal - Continued

- Method 2

If the gasket and screen will not come out using the previous method then you will need a scratch awl,ice pick or Pallo Coffee Tool to remove them.

Using the tool, deeply pierce the gasket and then pry it down. If the gasket is old and dried out then it will be more difficult to remove and will come out in pieces. Repeat until all remnants of the old gasket are removed.

Cleaning The Group

- Before installing the new gasket and screen it is very important to clean the group head. Make up a solution of hot water and backflushing cleanser. Using a group cleaning brush and cleanser, clean the group head and be sure the groove that the gasket sits in is completely free of any residual gasket material and coffee grounds or the new gasket will not seat properly.

Gasket And Screen Installation

- Step 1

With the writing or beveled side of the gasket facing up insert the screen into the gasket as shown to the right. It is also recommended to use a little bit of food grade lubricant around the perimeter of the gasket to make installation easier.

Gasket And Screen Installation - Continued

- Step 2

  Remove the insert basket from one of your portafilters and then insert the screen and gasket into the portafilter as shown to the right.

- Step 3

  With the gasket and screen in the portafilter, press the portafilter into the group head as shown. Apply equal upward pressure on the portafilter so the gasket goes in evenly. Once the gasket is up far enough then lock the portafilter into the group head and turn as far right as possible. Then remove the portafilter and re-install the insert basket and then work the gasket up further into the grouphead using the portafilter with the basket installed. If you are having trouble then remove the portafilter and press the screen up further by hand and then try using the portafilter again.

Maintenance Tip: Replacing the gasket on a yearly basis will make the replacement procedure much easier. There are also benefits to having a new gasket. It will provide a better seal for a better espresso extraction and it also enables you to be able to remove the shower screen without ruining the gasket to provide for better cleaning which will result in better tasting shots.

Descaling

- Descaling is the process of running a descaling agent such as citric acid through the machine to remove the accumulation of mineral deposits.

- If you are using softened water then it should not be necessary to descale the machine.

- Often times descaling can cause more problems than it solves. It can react to the metals and foam over ruining electrical components. If the solution is too strong it can cause the chrome plating inside the group to flake off and get in the coffee or if it's too weak it can dislodge minerals and cause a blockage. Descaling HX machines often leaves descalant inside the boiler unless done under pressure or when machine is dismantled, contaminating your hot water and steam. **WARNING: For liability reasons we strongly discourage descaling and will not provide any instructions regarding the process.**

Troubleshooting

No Steam From Steam Wand

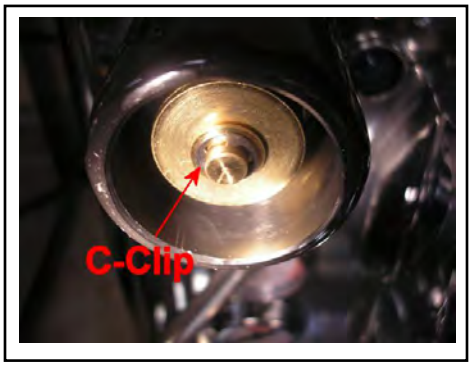
- Make sure the main power switch has been turned on for at least 15 minutes.

- Check the upper gauge for steam pressure. Pressure should be about 1.2 bar. If the gauge is at zero then refer to the **"Not Heating"** section of the troubleshooting manual. If pressure is good then continue with steps below.

- Check the steam tip for a blockage. Clean steam tip holes with a paper clip.

- Check the steam wand for a blockage by unscrewing the steam tip from the wand. Check the inside of the steam tip for dried up milk and then make sure the white teflon tube in the steam wand is also free of dried up milk.

- Check the steam knob for proper operation. Remove the end cap on the end of the steam knob. Check to make sure that the c-clip shown in the picture is attached.



No Water From Hot Water Wand

- Make sure the main power switch has been turned on for at least 15 minutes.
- Check the upper gauge for steam pressure. Pressure should be about 1.2 bar. If the gauge is at zero then refer to the **"Not Heating"** section of the troubleshooting manual. If pressure is good then continue with steps below.
- Check the hot water knob for proper operation. Remove the end cap on the end of the hot water knob. Check to make sure that the c-clip shown in the picture on the previous page is attached.

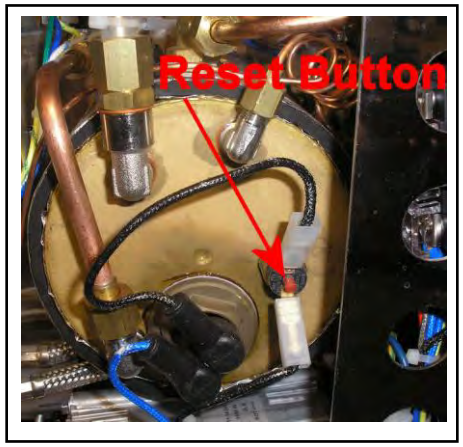
Note: If the steam gauge shows normal pressure, but when you open the steam knob the pressure immediately drops to zero then heats normally afterwards that is called a vapor lock. This is caused by a sticking vacuum breaker valve. A replacement vacuum breaker valve can be purchased from your dealer.

Not Heating

- Verify the machine is plugged into the outlet and the outlet has power.
- Make sure the main power switch has been on for at least 15 minutes.
- Make sure the water is turned on to the machine. If the water was off, then turn the water back on. Turn the power switch off, unplug the machine and then wait 5 seconds and then plug the machine back in and turn the power switch back on.
- Check the PID settings to make sure it is programmed as outlined in the PID section of the owner"s manual.

WARNING: We strongly recommend that the consumer does not attempt to open or dismantle this machine. Any damage or injury that ensues will not be covered by the warranty, and we assume no liability for failure to follow this warning. If you decide to proceed, ensure that you first unplug the machine from the electrical outlet before removing the outer shell. Failure to do so may cause injury and/or electrical shock.

- Check the resettable hi-limit switch on the left side of the boiler. With the machine unplugged firmly press the red reset button shown in the picture to the right.



PID Display Is Turned Off

- Make sure the main power switch is turned on and the outlet has power.
- Make sure the water reservoir is filled with cold softened water.
- If plumbed in make sure that the water supply is turned on to the machine.
- Turn the machine off for 3 seconds and then turn back on to reset.

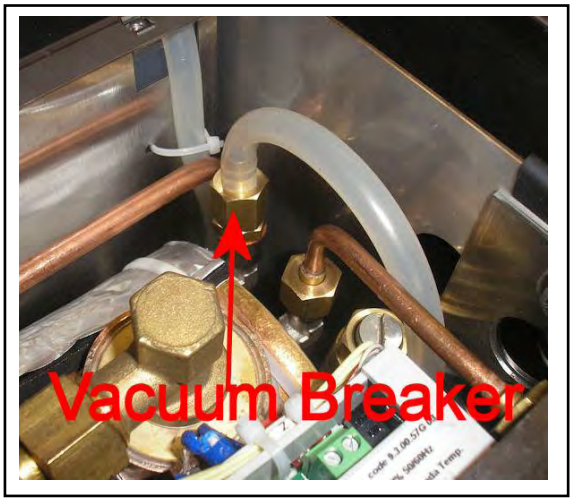
Steam Is Continually Discharged Into The Drip Tray

WARNING: We strongly recommend that the consumer does not attempt to open or dismantle this machine. Any damage or injury that ensues will not be covered by the warranty, and we assume no liability for failure to follow this warning. If you decide to proceed, ensure that you first unplug the machine from the electrical outlet before removing the outer shell. Failure to do so may cause injury and/or electrical shock.

- During heat up a small amount of steam will be discharged into the drip tray. The steam should stop within a few minutes after the boiler pressurizes. If the steam continues to fill the drip tray after a few minutes then the vacuum breaker valve should be replaced (see image below). A replacement vacuum breaker valve can be installed by (or purchased from) your dealer.

Steam Gauge Shows Full Pressure But Drops To Zero When Steam Knob Is Opened

- This is caused by a sticking vacuum breaker valve which causes the boiler to build air pressure instead of steam pressure. A replacement vacuum breaker valve can be installed by (or purchased from) your dealer.



Espresso Coming Out Too Slow Or Not At All

- Activate the brew lever and check the pump pressure. Recommended setting is 9 bar. Adjust pump pressure if necessary.
- If pump pressure is good then try adjusting grind coarser.
- Be sure the insert basket is not over filled with coffee and you are tamping with no more than 30lbs of pressure.

Espresso Coming Out Too Fast

- Activate the brew lever and check the pump pressure. Recommended setting is 9 bar. Adjust pump pressure if necessary.*

***WARNING: We strongly recommend that the consumer does not attempt to open or dismantle this machine. Any damage or injury that ensues will not be covered by the warranty, and we assume no liability for failure to follow this warning. If you decide to proceed, ensure that you first unplug the machine from the electrical outlet before removing the outer shell. Failure to do so may cause injury and/or electrical shock.**

- If pump pressure is good then try adjusting grind finer.
- Be sure the insert basket is filled with the proper amount of coffee and you are tamping with 30lbs of pressure.

Leaking Around Portafilter When Brewing

- Make sure portafilter is tightly locked into the grouphead as far right as it can go.
- Make sure the portafilter basket is not over filled with coffee.
- Replace the group gasket if more than a year old.

PID Alarm Codes

A1	Channel 1 Unplugged	Check temperature sensor, heater connections, and reset for coffee boiler.
A2	Channel 1 Short Circuit	Check for damaged temperature sensor in boiler.

Warranty

The Alex comes with a 1 year warranty starting from the original date of purchase to protect against defects in materials or workmanship. The warranty is void if the product has been damaged by abuse, neglect, or modification.

We Are Here To Help

Enjoy your new espresso machine and remember: should you have any questions, either visit our showroom or contact us by phone at (416) 537-3439 or by email at service@zuccarini.ca

Please remember: Save the shipping carton and all the packing material that came with your machine. This is very important should you need to return your machine to us by courrier. Be sure to insure your machine and pack it securely. We can"t be responsible for any damage that might occur while in transit to us. Properly packing your machine with the original carton and packing material minimizes this possibility, and bringing the machine to us in person is always advised.

WARNING: AFTER THE FIRST USE, ALL ESPRESSO MACHINES RETAIN WATER IN SEALED, AIR-TIGHT CHAMBERS INSIDE THE MACHINE. IF THE MACHINE IS EVER LEFT TO FREEZE IN A GARAGE, IN A CAR, OR DURING SHIPPING, THE WATER CAN EXPAND AND CRACK PIPES AND BOILERS. Any damage that ensues will not be covered by the warranty, and we assume no liability for failure to follow this warning.

Thank you again for your business.

Document courtesy of Chris' Coffee Service