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Quick Start Guide

For Precision Fill Mini

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Introduction

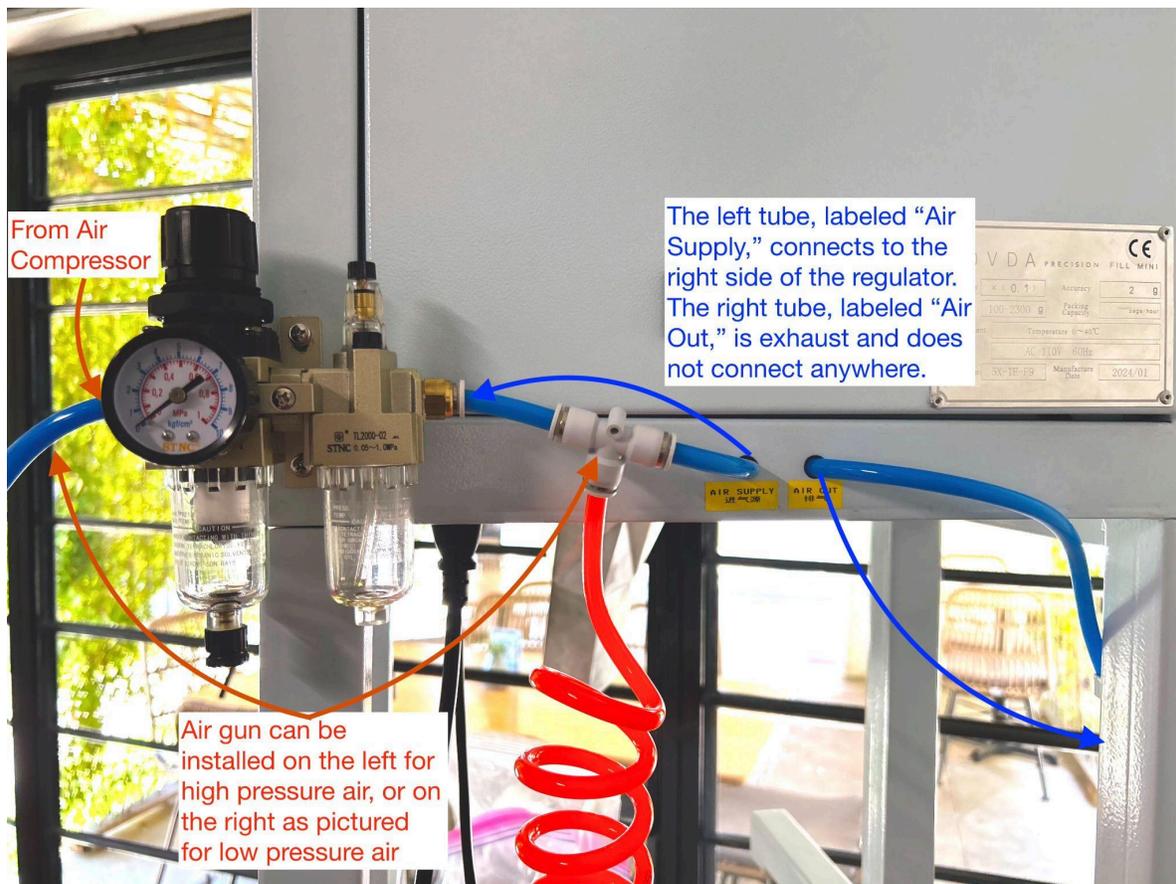
Thank you for purchasing the Sovda Precision Fill Mini! This guide covers the mechanical setup of the machine. Additional recipe creation and calibration information can be found in the Precision Fill Mini user manual, linked at the bottom of this guide.

Assembly

1. Remove the Precision Fill Mini from the crate and place it on a stable, vibration-free surface. We recommend a table that you would be willing to stand and jump on to ensure the weight readout is stable.
2. Level the machine by adjusting the 4 feet with a wrench until it is level left to right and front to back
3. Assemble the Air Regulator using the included quick-connect hardware and pressure gauge:

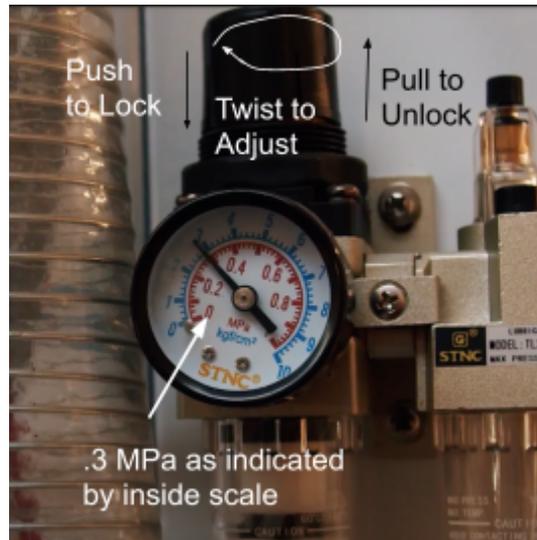


4. Install the air regulator on the back right side of the machine using the included hardware and make the following connections:
 - a. From air compressor to left side of regulator
 - b. From right side of regulator to the left blue tube coming from the back of the Precision Fill Mini
 - c. The other blue tube is exhaust and does not connect to anything



Note: The back access panel does not need to be removed unless the blue air tubes have receded into the machine. Install the regulator with the back access panel installed.

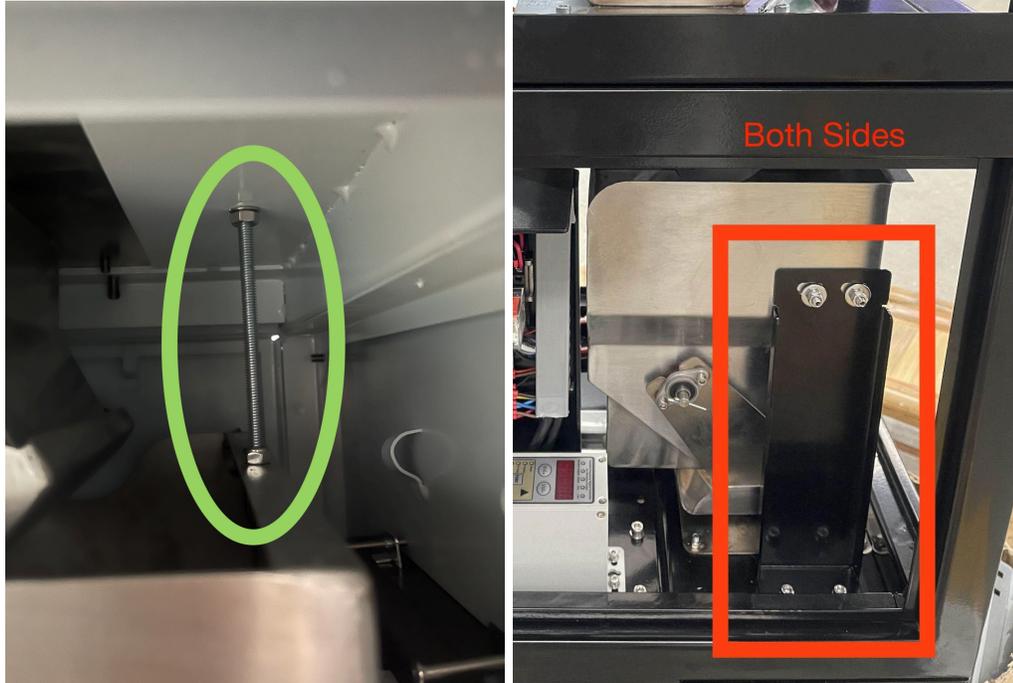
5. Connect your compressed air source to the air regulator and use the knob on the top of the regulator to set air pressure to .3mpa:



6. Make sure the scale sensor shipping protectors are removed.
 - a. On the bottom of the machine, loosen the jam nut and then remove the machine screw in the center of the machine.



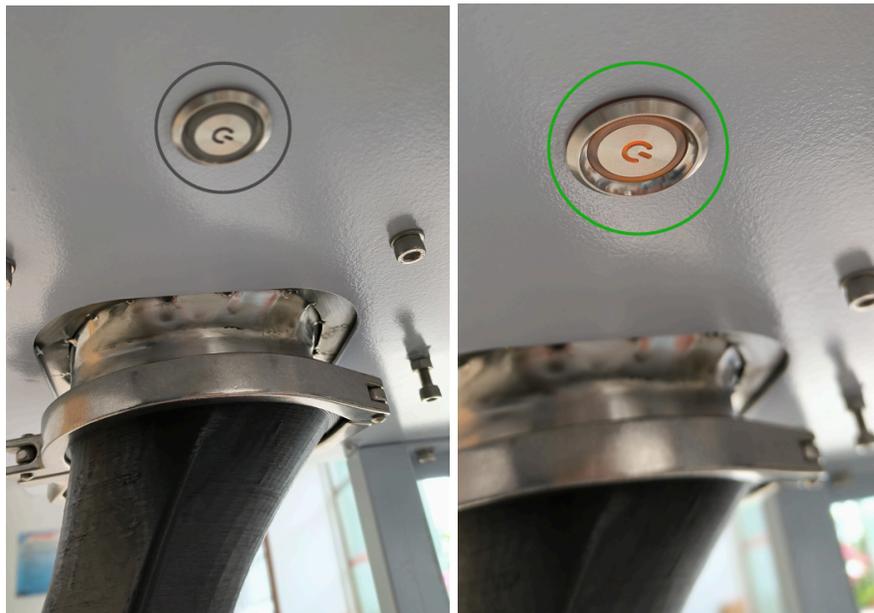
- b. Inside the machine, also remove any internal supports (you may have 2 or 3 depending on when your machine was shipped):



7. Install the filler head by placing the tri-clamp around the top of the filler head, slide the head and tri-clamp onto the outlet, and tighten the clamp:



8. Plug in the foot pedal and power cable to the bottom of the machine and plug the power cable into the wall
9. Push the center power button on the right underside of the machine to turn the machine on. The screen may take some time to load, but the power switch will immediately glow amber:



Performing a Weight Calibration

Your Precision Fill Mini was calibrated at the factory. However, we recommend re-calibrating your machine to account for possible changes in regional electrical supply or shifting of components during shipping.

If you weigh coffee after discharging and the weight is different than what the Precision Fill Mini displayed, perform a calibration.

1. Tare a scale with a bucket on it
2. Weigh out 2000g of coffee into the bucket
3. From the home screen, go to System Settings>Calibration. You should see this screen:



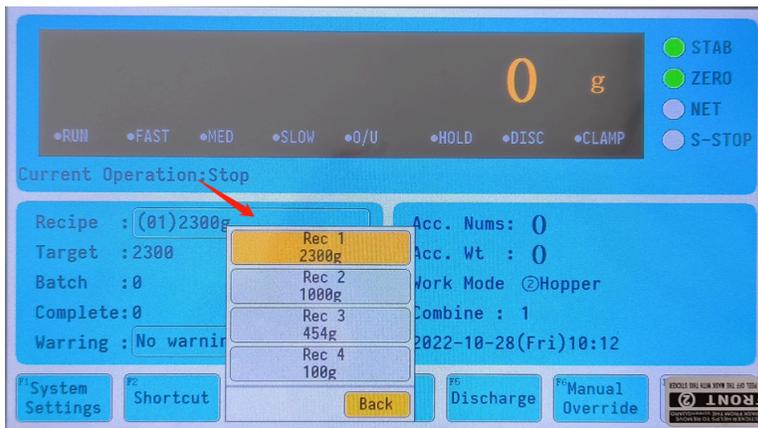
4. Place a vessel underneath the discharge chute, then tap "Discharge" and "Fast" to ensure there is no coffee in the machine.
5. Tap "Fast" and "Discharge" again to close the discharge gate and shut off Fast Feed
6. Wait for the weight readout to stabilize, then press the "zero clb" button. Wait for the zero calibration to complete.

7. Put your 2000g of coffee into the hopper, then press “Fast” and wait for all the coffee to feed into the weighing chamber.
8. Wait for the weight readout to stabilize and press the “Record Weight” button.
9. In the text box next to “CLB WT” enter 2000g
10. Tap “WT CLB.” The display should read 2000g
11. Tap Home

You have now calibrated your Precision Fill Mini!

Selecting and Modifying a Recipe

On the Home Screen, tap the recipe name. You will get a list of recipes like below you can select from. You can also create new recipes or rename recipes using the information found on page 8 of the [Precision Fill Mini User Manual](#).



Once you have the recipe you want to modify selected, tap “Shortcut” to adjust the recipe values.

The variables in a recipe you can adjust are:

- Target
- Fast Speed
- Medium Speed

- Slow Speed

Key Characteristics:

The weight listed next to a feed is the weight difference from zero which will shut off that feed type. For example, take the recipe below (or the ones enter in your precision fill mini) :

- **Target:** 340
- **Fast:** 340
- **Med:** 180
- **Slow:** 12

Since the Fast Feed is set to the target weight, Fast Feed will not initiate and the machine will default to Med Feed. At 180g before the target weight (in this case, 160g in the weighing chamber), Med Feed will disengage and Slow Feed will stay active until 80g before the target weight. At 12g from target weight (meaning 328g is already measured by the load cell), all feeds will shut off and the coffee in the chute will enter the load cell.

Think about your Slow Feed value as a delay for all the coffee in the chute to enter the load cell. If you are consistently overshooting your Target, the delay is not long enough. Similarly, if you are consistently undershooting your Target, the delay is too long. This means you will use the Slow Feed to dial in your recipe output to match the target value.

NOTES ON MED AND FAST FEED ADJUSTMENT

The ideal Fast and Med Feed values are the lowest values which provide consistent results. This will ensure the equipment is operating at maximum speed throughout the entire cycle.

Note the difference between a recipe being “off” and a recipe being “inconsistent;” a consistent recipe will always have a very similar output, regardless of whether or not that number is close to the target value.

The first step of recipe creation is getting a stable value, regardless of whether that value is the Target weight or not. If the recipe produces inconsistent results (such as 336, 352, 348 on a 340g recipe), increase the Medium feed by 10 until the result is the same each time (such as 343, 344, 344 on a 340g recipe).

Once you have a stable recipe, you can adjust Slow Feed to hit your target weight using this simple rule of thumb:

- If you are *over* your target weight, *increase* the Slow value by the number of grams you are over.
- If you are *under* your target weight, *decrease* the Slow value by the number of grams you are over.

Example Recipe

The 340g/12oz recipe is popular around the world. Below is a step-by-step guide to creating a 340g recipe.

Select the 340g recipe by tapping the open recipe name from the home screen, then selecting 340g from the list. Then tap “Shortcut” to open the recipe values. You should see this page (but with different values):



1. **Set Target Weight.** Tap the text box next to “Target” and enter 340g. Tap “ok.”
2. **Set Fast Feed.** Since fast feed is used primarily for recipes weighing more than 1000 grams, we will not use Fast Feed on this recipe. Disable it by entering the target weight (340g) in the text box next to “Fast Feed.”
3. **Set Medium Feed.** This number can be fine-tuned later. For now, we will just set it to 200g by tapping the text box next to “Med Feed.”
4. **Set Slow Feed.** In order to demonstrate how to dial in a recipe, we will start with a value higher than necessary. Enter 25g in the text box next to “Slow Feed.”
5. **Test Recipe.** Return to the home screen. Ensure you have coffee in the hopper, your air compressor turned on, and a vessel below the outlet to catch discharged beans. Then tap “start running” in the lower right-hand corner. You should immediately hear the main valve open and the vibrators operating and see the weight indication start to rise.
6. **Check for Consistency.** Cycle the recipe 3 times. The amount the machine is weighing out is likely lower than your target value of 340g; **don’t worry about that for now.** Focus on whether the value is *consistent* after each cycle, within +/- a gram of each other.
7. **Set Medium Feed.** If your recipe produces a consistent result each time, you may be able to speed up your recipe. Decrease your Medium value by 10 and run the machine through 3 cycles. If the results are consistent every time, continue decreasing the Medium value by 10 and testing the recipe until the results become inconsistent. Then, increase the Medium value by 10. This is your fastest, consistent medium feed value.

- a. If your results are not consistent over 3 filling cycles, do the opposite: Increase your Medium value by 10 until they are consistent. This also provides the fastest, consistent Medium value.
8. **Fine-Tune Slow Feed:** Once you have found a consistent Medium value, you can fine-tune the recipe to hit your Target weight. Use the simple rule of thumb to adjust:
 - a. If you are *over* your target weight, *increase* the Slow value by the number of grams you are over.
 - b. If you are *under* your target weight, *decrease* the Slow value by the number of grams you are over.
9. **Continue Fine-Tuning:** Run the cycle a few more times. If needed, make additional Slow Feed adjustments as described in the above step.

The Medium and Slow values will be similar for all recipes regardless of target weight. Each recipe may require some small adjustments, and note that for very dense vs very light coffee (decaf vs peaberry) you may need two separate recipes.

10. **Fast Feed:** Fast feed is only used for recipes >1000g. When setting up your first recipe with Fast Feed, use the same Medium and Slow values from your 340g recipe and start with a Fast value of 900. From there, use the same steps you used in step 7 to adjust Medium Feed, except for the Fast value. It is generally pretty obvious if the Fast value is too high or low; if the value is too low, you will get substantially more coffee than your target, and if it is too high, the recipe will take a long time to complete.

Take away for setting up recipe:

- Medium feed will correct the problem of consistency. If you find a range of values larger than 4 grams in your target weight, you have a consistency

problem.

- Slow feed will correct a problem of accuracy (for example, if you are systematically hitting your target + 10 grams, you have a problem of accuracy, not consistency).
- You can have both problems, in which case you will need to adjust both slow and medium feed settings. Start adjusting the medium feed until you achieve consistent portion sizes, then adjust slow feed settings to dial in your desired portion size.

Additional Notes:

- If coffee spills from the vibrator when the machine is not running:
 - Ensure the machine is installed on a solid, vibration-free surface
 - Tilt the machine backward by raising the two front legs of the machine until the coffee stops spilling
- If the machine displays a weight different than what comes out of the machine, check that all shipping supports are removed. If you contact service@sovdacoffee.com for support, they will need photos of both sides of the machine as well as an image of the screw below the machine removed (as described in the Assembly section step 6).
- If the machine presents "ADOFL" when powered on, contact Sovda Service at the below contact info and mention the machine says "ADOFL" on the screen:

service@sovdacoffee.com

+1 (971) 200-5140 (Call/Text/Whatsapp)