

Installation, Operation and Maintenance Instructions

Important

- Read these instructions before operating the CleanStation™ to prevent damage to the unit or personal injury.
- Upon receipt of the CleanStation, inspect the unit for obvious defects that may have occurred during shipping. Report any damage to the carrier and PM Technologies immediately.
- *Always wear gloves and safety goggles when operating the CleanStation™.*
- The CleanStation™ is designed to remove WaterWorks™ soluble support material from FDM® parts. If it is used for anything other than its intended purpose, the warranty will be voided.
- The tank and lid get hot after extended operation. Use caution to avoid burns.

Installation

1. Hooking up the drain

The **sink is drained by gravity** only and exits the machine at a height of 17 ¾". Therefore the drain in the building should be less than 15" or the sink will not drain. The lower the building drain is the faster the sink will drain. The hook up for the drain is located at the rear of the unit (see Figure 1). A threaded pipe coupler is provided for the drain. A Ø1-inch hose barb is installed at the factory. When installing pipefitting, use Teflon tape or pipe thread sealant to prevent leaks. A shutoff valve is not recommended on the drain waste line. If one is installed, make sure the valve is open at all times while operating the CleanStation™. **Caution** drain hose is under pressure when draining machine and must be restrained.

2. Connecting the water supply

- The water supply connections are located at the rear of the unit (see Figure 1). The water supply fittings are labeled and hook up the same as a washing machine. Hot water is recommended, but not required, to reduce pre-heating times. If only cold water is available, connect to the hot water supply fitting and install ½" NPT plug in cold side.
- **(To extend to life of the machine it is highly recommended to use conditioned water).**

Power requirements

The CleanStation™ requires 240 volt single-phase, 20 amp service for operation.

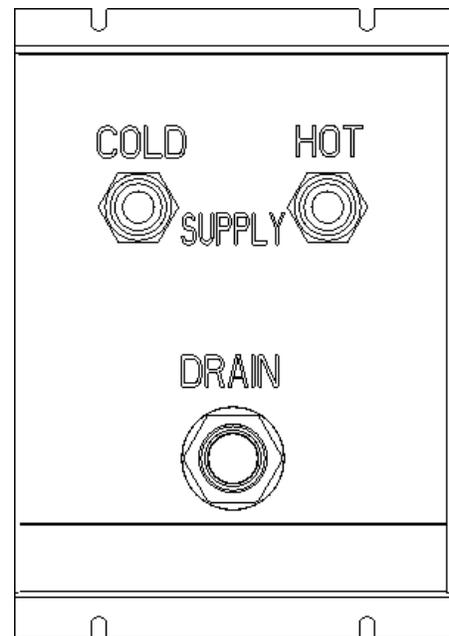
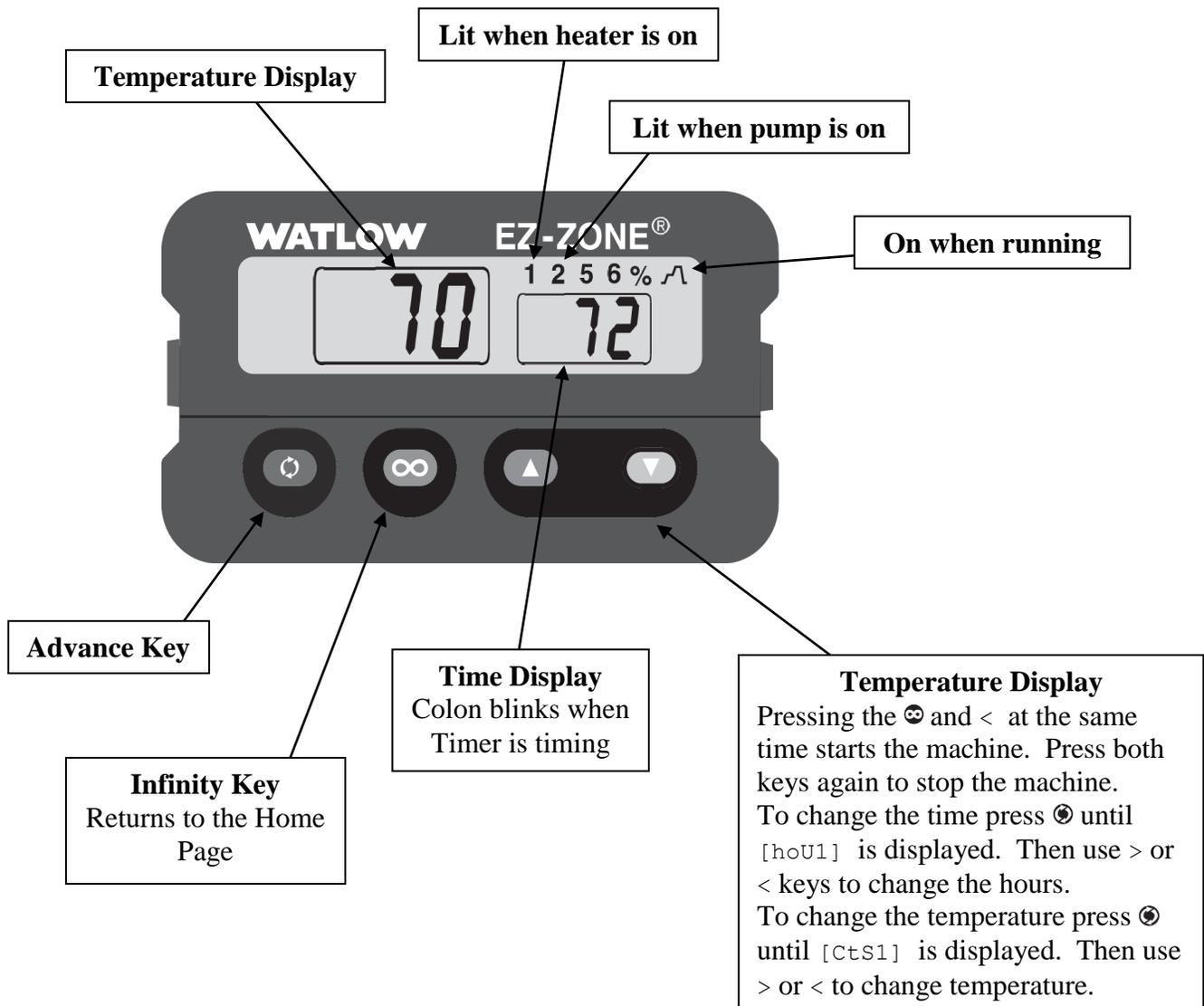


Figure 1. Outlet Connection Panel

Display definitions



Operation

3. Adding water to the tank

The Fill Valve is located on the control panel at the front of the unit (see Figure 2). To add water or fill the tank, turn the Fill Valve to the “ON” or vertical position.

IMPORTANT: Never leave the Fill Valve unattended. **Turn the fill valve to the “Off” or horizontal position when the tank is full. There is no automatic fill shut-off.**

Fill the tank until the water is 1 to 2 inches from the top of the tank.

There is a water level switch approximately 4 inches from the top of the tank that maintains the minimum water level required for operation.

4. Cleaning parts

IMPORTANT: Make sure the Selector Switch and Control Valve are both turned to “Clean Parts” mode marked with matching green circular labels before cleaning parts (see Figure 2) and the fill valve is in the horizontal position.

After the machine is filled with water and the fill valve is turned to the horizontal position. Turn the selector switch to "Clean Parts" and the controller will display [14;00] {`pm}, then temperature and time. This is also where the “**home page**” is located. To go to the “**home page**” at any time by pressing the ☺ key.

WARNING: turning the pump on and off frequently in a short period of time may damage the pump motor.

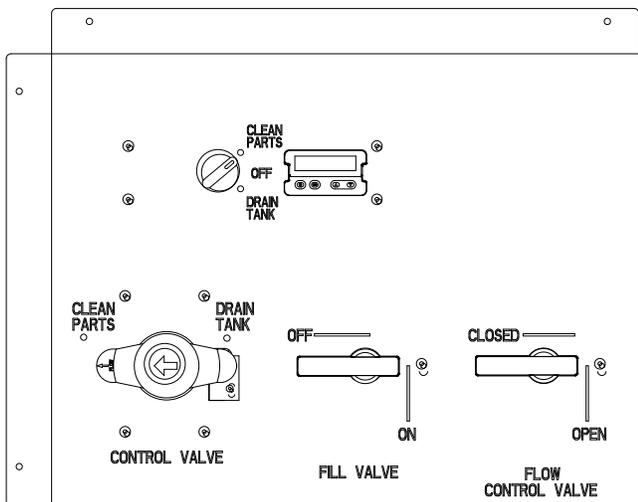


Figure 2. Control Panel Settings for “Cleaning Parts”

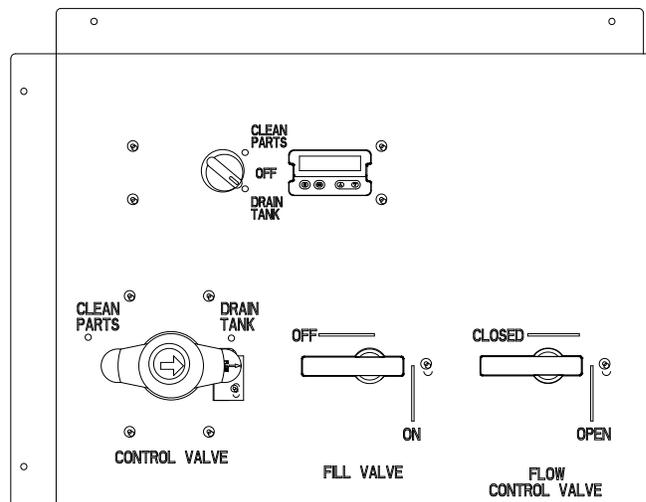


Figure 3. Control Panel Settings for “Drain Tank”

To start the machine.

Press the ☺ and the < keys at the same time.

To stop the machine.

Press the ☺ and the < keys at the same time.

To change the temperature setting, follow this procedure:

The controller is preset to heat and maintain the water temperature at 150F (recommended by Stratasys).

To change the temperature press and release ⏸ until [CtS1] is displayed. Then use the > or < keys to change the temperature. The maximum temperature is 185. Press the ☺ key to return to the “home page”.

The temperature can be changed while the machine is running.

To set the timer to the desired run time, follow this procedure:

To change the time press and release ⏸ until [hoU1] is displayed. Then use the > & < keys to change the time. Press the ☺ key to return to the “home page”.

The time can be changed while the machine is running.

The controller is preset to run for four hours at 150 degrees. Most parts take 1 to 2 hours to clean, but varying levels of geometry complexity can increase or reduce the amount of time necessary. Parts will clean faster as the water heats up and approaches 150° F.

IMPORTANT: To power off the CleanStation™ at any time, turn the Selector Switch to the “Off” position.

Once the CleanStation™ is running, it will continue to run until the timer counts down to zero, or until the Selector Switch is turned to the “Off” position, or until the water level drops below the minimum level, at which point the system shuts off automatically.

It is recommended that the lid be closed while the CleanStation™ is running. This helps to reduce the amount of water lost to evaporation.

5. Adding the solution concentrate

Fill the tank with clean water using the Fill Valve. Turn the Selector Switch and Control Valve to “Clean Parts” mode marked with matching green circular labels. Push the down arrow key on the controller to start the pump and heater. Wait until the water has heated up to 150° F before adding the solution concentrate. This procedure flushes the pump (see Maintenance section).

IMPORTANT: Always wear gloves and safety goggles before handling concentrate. Follow the instructions on the bottle of soluble concentrate.

Carefully open one and a half bottles of soluble concentrate. Slowly add the powder concentrate into the tank while the pump is circulating the water.

Wait 3 to 5 minutes for most of the concentrate to dissolve.

Place part(s) into a basket (sold separately) or directly into the tank. Carefully lower the basket into the tank.

Check the tank every periodically for evaporation and especially every 1 or 2 hours if run with the tank cover up. If the water level drops 3 to 4 inches below the top of the tank, the low level cutoff switch may disable the machine. Add more water as is necessary.

IMPORTANT: Do not add more cleaning solution.

6. Removing parts

IMPORTANT: Always wear gloves when removing parts from the tank.

Open the lid and latch it in the upright position. Carefully remove the basket by the handles and hang it on the basket hanger on the lid.

Parts may also be removed using large stainless steel or plastic tongs. Do not use aluminum tongs.

Rinse parts with water until surface does not feel slippery. Dry parts with paper towels or let air-dry.

The solution may be used for cleaning additional parts.

7. Disposal of Soluble Solution

Cleaning times are faster with fresh cleaning solution. Change the solution whenever the water gets to be a dark, coffee color or cleaning times become noticeably longer.

Method 1: Dilution

You may dispose of the solution by pouring it down the drain. **If you do, you must run tap water from the faucet at the same time.** A 5-to-1 dilution is required to reduce the full strength solution to a Ph of about 11. Continue long enough to flush the drain traps with fresh water to avoid damage to plumbing.

Method 2: Neutralization

An alternative method to dilution is neutralizing the Ph content with malic acid. Slowly add 18-ounces of malic acid in two 9-ounce treatments to the tank before draining. Litmus paper or an alternative Ph indicator can be used to determine if the Ph value of the solution is neutralized to the desired level.

The Stratasys soluble solution is specially formulated to be safely disposed of by standard wastewater disposal procedures. PM Technologies and Stratasys cannot anticipate local, state or international regulatory statutes. PM Technologies and Stratasys recommend that disposal procedures be verified by the proper authorities in your region. PM Technologies and Stratasys cannot be held liable if the solution is not disposed of properly.

8. Draining the tank

IMPORTANT: Make sure the Control Valve is turned to "Drain Tank" mode marked with a blue circular label before draining the tank (see Figure 3).

Turn the selector switch to "Drain Tank". This powers the pump and begins draining the tank. When the tank is emptied as much as possible, turn the Selector Switch to the "Off" position.

The Control Valve may be harder to turn when switching from "Clean Parts" to "Drain Tank" mode if the valve has not been used in a while. This is due to the cleaning solution crystallizing on the ball valve causing extra friction. Once the valve is turned, the water lubricates and frees up the valve.

If neutralizing the bath with malic or other acid, there may be a filmy residue remaining in the tank. Wipe this up with paper towels and dispose of it.

Maintenance

9. Flushing the pump

The CleanStation™ requires very little maintenance. One action that is recommended after each time the tank is emptied and wiped clean is flushing the pump. To flush the pump, follow the procedure outlined in “Step 6. Adding the solution concentrate” every time you add clean water to the tank. Filling the tank with clean water and heating it up to temperature while the pump is running before adding the new concentrate, rinses the seals in the pump.

Warranty

PM Technologies warrants that the CleanStation™ part cleaning system will be free of defects in materials and workmanship for a period of one year from the date of shipment. If the product proves defective during the warranty period, PM Technologies, at its option, will:

- Provide remote support and troubleshooting and/or send replacement parts at no charge, with the customer being responsible for installation and shipping.
- Service the product at the PM Technologies factory, customer pays for the shipping.

Under this product warranty, the Customer must notify PM Technologies or its authorized service representative of the defect before the expiration of the warranty period. To obtain service under this warranty, the Customer must first contact PM Technologies Telephone Support personnel or that of its authorized service representative. Telephone Support personnel will work to resolve issues professionally and quickly, however the Customer must reasonably assist PM Technologies or its authorized representative.

If telephone support is unsuccessful by PM Technologies or its authorized service representative the machine must be shipped back to PM Technologies and PM Technologies will provide warranty repair (if machine is still under warranty) for parts and labor for products purchased in the United States and Canada.

If the Customer’s product contains features that enable PM Technologies or its authorized service representative to diagnose and repair problems with the product remotely, PM Technologies may request that the Customer allow such remote access to the product.

In the maintenance of the product, PM Technologies may use new or equivalent to new parts or assemblies for equal or improved quality. All defective parts and assemblies become the property of PM Technologies. PM Technologies, at its option, may request the return of these parts.

Doing any of the following voids the warranty: 1) Any failure of the product due to negligence or misuse by the Customer. 2) Using the machine for anything other than its intended purpose or changing anything that results in a failure. 3) Changing any control parameter other than time and temperature (do not exceed 185 degrees Fahrenheit). 4) Running the machine with its filter off. 5) Using chemicals other than those supplied by Stratasys or that have not been pre-approved by PM Technologies. The Customer is expected to follow the guidelines for operations stipulated in the Installation, Operation, and Maintenance Instructions.

For technical support, call 763-425-1383 ext303 or email support@cleanstation-srs.com

Customers may be on-warranty troubleshooting and repair there may be a charge for these calls. Customers will be made aware of these charges at the time of call.

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