



purasolve

Purasolve Paint Gun Cleaner PS-200 Manual

Next Generation Cost-Saving Parts Cleaning Solutions
Designed for a Better World



envirofluid
FOR A BETTER WORLD

Installation and Operations of the PS-200 Paint Gun Cleaner

Designed for Heavy Duty Industrial Cleaning Applications

Tools needed to install the PS-200™ Paint Gun Cleaner

- ½" wrench and ½" socket drive or two ½" wrenches
- Pair of pliers or adjustable wrench
- A knife or pair of side cutters
- Male air hose fitting that will fit the user's type air hose (customer provide) Clamp to connect the ground wire to a pipe or metal structure (customer provide)

To begin installation, move the system to the location where the unit will be used while it is still on the shipping pallet. Remove the box from under the machine. The box contains the filter unit and fittings. Using the ½" wrench remove the two lag screws attaching the machine to the pallet and lift the machine off the pallet.



Complete assembly of the paint gun cleaner

1. The PS-200™ will arrive almost fully assembled. Using the two bolts, nuts, and lock washers, fasten the filter assembly to the left side of the tank using the two pre-drilled holes. The two white Teflon flat washers are to be placed on the bolt on the inside of the tank and the bolts are to stick out of the tank. Mount the filter assembly using the lock washers and nuts and tighten.
2. There are two black hoses with compression fittings at the back of the machine that connect to the filter assembly. The shorter of the two hoses that is connected to the pump under the machine and connect this hose to the black pre-filter. This is a compression fitting and the nut is tightened snugly to make the seal. Find the longer black hose coming out of the control panel and run the hose between the lid lift bars on the left side of the machine, bring it up between the two filters and connect to the small chrome or Purasolve Filter Kit. This is a compression fitting and the nut is tightened to make the seal.
3. Remove the green ground wire coiled up under the machine, attach a suitable ground type clamp and attach to a pipe or building frame to make the ground connection.
4. Check shut the tank drain valve under the machine. This is a ball valve and the valve is in the shut position when the valve handle is at 90 degrees to the pipe.
5. Using the customer supplied male air hose fitting, screw the fitting into the flexible pigtail air hose at the right side back of the machine.
6. Step on the foot bar to raise the lid and lift out the stainless steel tray and ensure there are no loose parts or debris in the tank. Replace the tray.



The machine is now ready for a test run prior to adding the solvent. Connect an air hose to the machine's male fitting on the flexible air hose. Align the two levers on the control panel in accordance with the picture on the front of the control panel to the "Brush clean" position. Raise the lid and lay a cloth under the brush. There may be some residual water in the system from factory testing. Push the start button and the machine's pump will start and force out any residual water. Let the pump run for about a minute and until any residual water stops coming out of the brush. Push the stop button to stop the machine. Disconnect the air hose from the machine while checking the filters.

Check the filters to ensure they are ready for operation. Unscrew the black filter housing. There will be a 25 micron brown filter element in the housing. Pull the filter element out and inspect the housing for any residual water from the test run. Dump or wipe out any water and reinstall the filter element. Also note the O-ring seal that is in the groove at the top of the housing. The O-ring may stick to the black bracket the first time. Ensure the O-ring is in the O-ring groove and reinstall the black filter canister. Tighten the black filter canister. Hand tighten only, there should never be a need to use a strap wrench on this filter housing. Loosen the band clamp on the Purasolve Retrofit Filter Kit and remove the clamp. Note- the band clamp has a groove and clamps onto both the stationary and removable canister. Pull down the canister and note the white Purasolve Polishing Filter Cartridge is in the canister. Reinstall the canister using the band clamp. Again hand tighten the band clamp to ensure no over torqueing. Give the canister a twist test and pull down test to ensure the band clamp has captured both lips. The machine is now ready to operate.

Control panel operation

The control panel is located on the right side of the machine. The system is equipped with a manual "Start and stop" push buttons to start and stop the machine. A timer is provided that will automatically stop the machine after about a 6 minute run cycle in both the "Gun clean" and "Brush clean" modes. The time may vary depending on the air pressure supplied to the machine.

Two levers are provided on the machine to shift between modes of operation. A picture of the lever positions is provided on the front of the panel to direct the operator how to shift between modes.

The machine has three modes of cleaning. First is the "Gun clean" mode that is used to automatically clean the paint gun. The gun is placed inside the machine and the lid must be shut to operate in this mode. A lid interlock will stop the machine if the lid is opened while the pump is running. Solvent is sprayed around the outside and through the paint gun in this mode. Second is the "Hose clean" mode. There are two fittings on the front of the machine used for cleaning hoses. The two fittings come with plugs installed and must be removed and two nipples screwed into the fittings to clean hoses. Third is the "Brush clean" mode that allows the lid to be open and the pump to run for manual cleaning or for doing detailed work. All of the solvent will flow through the brush only during this mode of operation.

The yellow control knob toward the back of the control panel is for the air regulator. This regulator takes the shop air and directs it to the pump and to the timer. There is some small range of adjustment of the regulator. To adjust the pump speed, lift the yellow knob and turn clockwise to increase speed and counter clockwise to reduce speed.

The pump is a diaphragm type pump. The pump is not positive displacement and will not pump against a shutoff head. Should the filters become plugged or some other restriction occurs, the pump will pump up to its maximum discharge pressure and stop.

Normal operation of the PS-200™ Paint Gun Cleaner

Pour 20-30 Liters of Purasolve Paint Equipment Cleaner into the PS-200™ tank. Normally one 20 Liter drum is all that is needed at any time to operate the machine. Check the drain valve under the machine to ensure no leakage.



Connect the shop air hose to the machine's flexible air hose. Shop air should normally be about 60-80 psig to operate the machine. Recommend no greater than 100 psig be supplied to the machine.

Select either the "Gun clean" or "Brush clean" mode with the control levers and start the machine using the "Start" push button. The pump will initially run fast until the filters are filled and then slow down. The operator should now check that flow is proper for the two modes of operation. Also check the filters on initial start to ensure there is no leakage. The filters will normally leak right away if they are not assembled correctly.

The operator will need to determine which fittings inside the machine are appropriate for the type paint guns they have. Two spray nozzles and one swirl nozzle for pots are provided. Each of the spray nozzles is provided with a shutoff valve that can be shut to increase flow to the other nozzle(s) when not in use. Two trigger lock clips are provided to lock open the paint gun trigger during cleaning.

The paint gun cleaning machine is not to be used as a dump for excess paint. Any leftover paint should be emptied out of the cup into the paint waste drum before putting the pot into the machine for cleaning. There is no need to do a pre-cleaning rise with thinner or other solvent before using the machine. All standard epoxy primers and poly top coat type paints can be cleaned in the machine without changing the solvent

Maintenance on the PS-200™

Filter change is the primary maintenance that is needed to be performed on the system. Typically, low volume and intermediate level paint shops will not need to change filters more than once per month and possibly less frequent. When a shop first begins using the system the filters should be inspected monthly for the first 6 months or so. The filters elements will eventually become saturated with paint and cease to flow solvent. The periodicity of changing filters may be extended out to bi-monthly or quarterly if shop workload is low. The filters should always be changed more often rather than not often enough. The Purasolve Retrofit Filter Kit maintenance is important in that it contributes to extending the life of the solvent.

When performing filter maintenance, always disconnect the air supply from the machine to prevent inadvertent starting of the pump with the filters removed. Place a bucket or some rags under the black pre-filter housing. Slowly unscrew the canister. The solvent tends to flow out of the top bracket and only a few drops of solvent may fall when the canister is removed. The canister is full of solvent, so be care to hold it while removing. Empty the solvent from the canister back into the tank. Pull out the brown fuzzy filter element and replace with a new element. Check the canister and wipe out as necessary. Ensure the O-ring is in the groove and reinstall the canister. Hand tighten only.

Move the bucket/rags under the Purasolve Retrofit Filter Kit. Loosen the band clamp and remove. The canister is full of solvent so pull down slowly to remove the canister. Empty the solvent into the tank. Use the finger pull to pull the filter out of the canister. A metal snap ring will pop out when the filter is removed. Wipe out the canister if necessary. Have a new filter element ready to install. The new filter element has a top and bottom. The bottom will be a grey color and have a stiff feel when pressed with a finger. The top will be white and soft. Place the finger pull into the filter element with the grey end down. Put the filter element back into the canister. Place the metal snap ring back into the canister on top of the filter. The ring should be just below the lip of the canister. The ring prevents solvent from bypassing the filter by flowing up between the filter element and canister wall. Reinstall the canister onto its bracket. Make sure the canister is up tight against the stationary bracket and then reinstall the band clamp. Hand tighten the clamp until it is snug. Do a twisting and pull down test to make sure both lips are caught by the band clamp.

Test run the system after filter maintenance to ensure the filters do not leak.

The Purasolve Paint Equipment Cleaner is designed to be non-toxic and non-hazardous. The solvent will remove the paint from the paint gun and is then cleaned as it passes through the filter assembly. Expected life of the solvent is at least 6 months and to a year. The solvent will change colors and pick up the tint of the paint being cleaned but the cleaning power is not degraded by the color change. Running the system liberally while cleaning paint guns should prevent sludge build up in the bottom of the tank. Should sludge build the drain



valve can be opened to drain out a quart or so of sludge and solvent. After the solvent has expired, the solvent can be removed by placing a bucket under the drain valve and draining out the solvent. If this is done, the operator should take the time to lift out the tray and wipe down the machine's tank bottom before putting new solvent in the tank.

Troubleshooting tips

The PS-200™ is a rugged and reliable system. If used and maintained properly the operator should have no problems with the system.

Low flow conditions generally are indicative of clogged filters. The operator should pull and inspect and change the filters as necessary. Typically, replacing the filters monthly will preclude any low flow conditions and will keep the system in optimum operating condition.

If the pump fails to run, the first check is to ensure there is an air supply to the machine from the shop's air system. Then check the lid interlock switch to ensure it is making contact. The pump should not run in the "Gun clean" mode with the lid open and should run in the "Brush clean" mode with the lid open.

The timer is factory adjusted to shut down the cleaning cycle after about 6 minutes.

Purasolve Micro-filtration

The Purasolve parts cleaning solvents and integral micro-filtration unit are especially designed to work together to reduce waste disposal costs and enable easier maintenance.

Filtering the Purasolve solvent down to less than 1 micron, it effectively removes oils and greases that are washed off the parts and dissolved in the cleaning solution.

Solvent life extension becomes easy, effective and predicible, resulting in significant savings in through-life costs, along with protecting the health of the user.

Specifications

Operating Fluid Capacity - 20-30 Liters

Operating by standard shop air no greater than 100PSI

Use in conjunction with Purasolve Safety Solvent

The Purasolve range of safety solvents are especially designed to eliminate the need for outside servicing and to reduce the ongoing costs of solvent disposal and replenishment caused by waste generation.

ESPEC - Purasolve Paint Equipment Cleaner in 5, 20 & 200 Liters

Tel 1800 777 580 | Fax 1300 777 580 | sales@envirofluid.com
envirofluid.com

