

A washer works hard to ensure that parts come out clean and ready for the next production process. To keep the machine working at a high level, it must be cleaned on a regular basis. The contamination removed from the parts does not magically disappear; it builds up in the tank and can greatly reduce performance. Performing a tank and system cleanout is an important part of the routine maintenance a washer requires.

To begin the process, turn off the automatic water fill supply and remove the nozzles and filters for cleaning. Pay attention to the direction spray angles of the nozzles in relation to the flow of the parts through the washer. Most nozzles will have an indication, either a slit or indented line, which shows the angle. It will be important to replace the nozzles in the correct position.

After the nozzles and filters have been removed, add a washer cleaning chemistry to the current wash solution. Heat the new solution to 160F, or the highest level attainable. Turn on the pumps and let them run for 30 minutes.

Clean the sludge that has been removed during this process and replace the nozzles. NOTE: If you run the pump for an extended period without the nozzles, then the pump motor will not sense the appropriate back pressure and the pump will burn up. After replacing the nozzles, turn the pumps back on and let them run undisturbed for 4 to 8 hours and allow the solution to work on the tank. Once the time is up, pump or drain the solution from the tank.

Now that the solution is gone, remove the shed sheets. There are 1-2 of these flat metal sheets, and they are located below the conveyor that covers the tank in the majority of machines. The sheets normally will have a ½-20 stainless steel bolt in one of the corners. Remove the bolt and allow the sheets to be moved forward or backward to gain access to the inside of the tanks. Also remove the marine cleanout door on the side of the machine. Be careful not to damage the door during this procedure. If a seal is torn or damaged, replace it before the machine is refilled. Once these are moved, clean out any sludge, debris, or sediment from the tank bottom and sides.

Use a power washer to completely clean the interior of the machine, beginning at the top and moving down. Make sure to clean the heater elements, auto-fill valve, wash headers, and blow-off headers. Check all corners or other areas that could catch dirt.

Completely clean any oil removal devices, and flush the tank of the remaining dirty solution. Then remove the clean pump inlet screen and chip basket for cleaning. Wipe down the outside of the machine. Take some time to inspect the interior and exterior components of the machine for damaged or missing parts. Make notes of any damages or problems for repair.

Replace the shed sheets and the cleanout doors, making sure that the doors are in good condition before doing so. Replace the doors in the reverse order from how they were removed, and then replace any other devices that were removed from the machine during cleaning. Place the nozzles back in their original position, making certain that they are at the correct angle and aim.

Refill the tank with a new solution of cleaning chemistry, and turn on the heat. Observe this process to make sure everything is running smoothly. Run the pumps and observe the gauge readings, making sure there are no more than 10-15PSI differences before filter and after filter. If there is, replace the filter.

Once the solution has reached the correct temperature, check the spray pattern on parts moving through to ensure the machine is running correctly. Remove the wash door, using a piece of Lexan the size of the door, and observe. If it is correct, replace the door.

Performing this maintenance on your washer will help keep it running efficiently for a long time. Cleaning out the debris and inspecting the main parts of the washer allow you to head off major maintenance problems before they become too large of a problem to deal with. The shut down in production time that will take place during cleaning is more desirable than the extended shut down which will inevitably occur if cleaning is not performed and maintenance goes unchecked.