

How to Keep Your Steam Cleaner Running Strong

13 Critical Inspections Save You Time, Frustration and Money...and Keep Your Steam Cleaner and Pressure Washer Operating Safely and Efficiently

1. Check the Hoses. Damaged hoses running loose under high pressure or springing a high pressure leak can cause injuries.

- Check all hoses for leaks at the fittings, abrasions, cracks or cuts with wire exposed, kinks or flat spots, and bubbling.
- Replace a failing hose at the first sign of a problem.

2. Check Pump Oil. Oil related problems cause needless pump failure. At \$900 - \$1,800 to replace a pump, it's wise to take these simple preventative measures.

- Check the pump oil sight glass and/or the dipstick for proper oil level.
- Pump oil must be changed at least every 500 hours of operation.
- Use only the pump manufacturer's recommended brand and grade of pump oil or a safe equivalent recommended by a qualified steam cleaner pump technician.
- Check pump vicinity for signs of oil leaks.

3. Check Engine Oil and Filter. Prevent engine seize-ups and avoid an \$800-\$2500 engine replacement.

- Check for proper oil level.
- For non-filtered engines, the oil and the filter must be changed at least every **25 hours** of operation.
- For filtered engines, the oil and the filter must be changed at least every **50 hours** of operation.
- Use only the engine manufacturer's recommended brand and grade of pump oil or a safe equivalent recommended by a qualified steam cleaner engine technician.
- Check machine for signs of oil leaks.
- Install an easy drain system to simplify oil changes and avoid spills.

4. Check Enclosure Screws. Keep dangerous parts safely contained and avoid exposing internal components to harsh environments.

- Assure all screws, fasteners and clips are in place and properly tightened.
- Inspect safety guards. Make sure they are properly attached and functioning.

5. Check Tips and Nozzles. Bad nozzles will frustrate and slow you down. Bad tips increase labor time to clean and make for poor cleaning jobs. With inadequate pressure, workers hold the guns closer to the equipment and frequently scratch it causing more costly repairs.

- Make sure you have the proper tip for the volume and pattern required. A qualified steam cleaner repair technician can advise you on tip selection.
- Check tips and nozzles for wear.

- Use a tip guard to protect and prolong the life of the tip.

6. Check the Heater Coil. A bad coil is often the source of major problems, and replacing one can cost you up to \$2,000.

- Check backpressure using a properly calibrated pressure gauge. Compare findings to a certified pressure table. If backpressure is not within approved operating ranges, contact a qualified service technician immediately, as this test may indicate a number of problems, some of them serious.
- Check for hard water and soap scale build-up.
- Look for evidence of soot.
- Check for leaks.
- Check insulation for hot spots, proper placement and condition.
- Heater coils cost approximately \$2000 to replace

7. Check all Controls. Working controls prevent breakdowns and safety issues. Improperly functioning controls can cause damage to the equipment and unsafe conditions. When a control fails, workers frequently bypass it. For example, the burner does not come on. The worker bypasses the temperature controller which has failed. Now the burner comes on but overheats and damages the coil and hose. If the air switch fails and is bypassed, the forced air burner will start without forced air, causing lots of smoke and lowered fuel efficiency, as well as reduced coil life. Workers also sometimes deactivate water flow sensors. If the equipment is then run without the water turned on, the coil is damaged.

- Are all controls attached and functional...not removed or bypassed.
- Check temperature control.
- Inspect the time delay shut down. Insure thermo-coupler is working. Major safety item!
- Check the flow switch.
- Check insulation for hot spots, proper placement and condition.

8. Check the Gun. Guns take a ton of abuse. Check for safety and efficiency. Cleaning efficiency is easily quantified. Many \$4,000 machines clean only as well as \$300 Costco machines because guns are not functioning properly. Labor costs increase and customer satisfaction decreases.

- Check for leaks at barrel, valves, swivels, quick couplers.
- Check “O” rings for good seal.
- Check grip for safety.
- Inspect barrel, valves, swivels and couplers for damage.
- Check gun shut off. Important safety check!
- Make sure you have the right gun for the job.

9. Check for Scale Build-up. In hard water areas scale kills equipment. Scale will build up to the point at which the equipment is inoperable. De-scaling a machine costs between \$200 and \$500 and requires the use of hydrochloric acid. The addition of a water softener will usually eliminate this problem and can pay for itself in a year or less.

- Check for evidence of white or brown particles plugging nozzle.

- Check for evidence of soap build-up.
- Check for “temperature creep.” This is a little known safety hazard caused by the retention and build up of excessive heat...even after equipment is shut down.

10. Check the Burner Efficiency. This is a serious safety and pollution issue.

- Use a CO² tester to evaluate combustion efficiency and exhaust gases.
- Check burner for quick, quiet, safe and clean ignition.

11. Check Timer Function. Prevent overheating and operator injury.

- Is there a timer and does the machine have a properly calibrated time-out function?
- Evaluate timing and shut down against a factory certified timing chart.

12. Check Softener System. Avoid scale deposits with good water softening.

- Check salt level.
- Perform hard water test at output.
- Perform hard water test input

13. Check Overall Functions. A general look over the entire unit can avoid operating problems.

- Check diagnostic lights.
- Check belts for fraying, stretching, slipping, breaks, burns and adjustment.
- Check wheel lubrication.
- Inspect equipment for cleanliness, rust, corrosion and any evidence of broken parts or malfunction.

Manufacturer’s Note:

If this looks like a lot to check on your equipment, you’re right. But it’s worth it to protect your investment and to keep your operators working. Steam cleaners and pressure washers are valuable, hard working machines that take a lot of abuse. The inspections mentioned above are best performed on a regular basis (at least quarterly...and in many cases monthly) by a certified steam cleaner and pressure wash equipment repair technician. At Walters, we’ve been manufacturing industry leading steam cleaning equipment for 27 years. We service what we sell and we service all other makes and models of cleaners and washers as well. **Ask us about SteamCheck™, our preventative maintenance program specially designed to help keep your steam cleaner and pressure washer operating safely and efficiently for years.**

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