



READ ME FIRST!



 **WARNING** The **MrSteam® Virtual Tech** instructions are intended to assist electricians troubleshoot and service MrSteam steam generators and accessories. All troubleshooting and/or service must be performed by qualified and licensed electricians only. MrSteam steam generators contain high voltage electrical components that can cause injury or death. Always read the complete MrSteam Installation and Instruction Manual supplied with the product. Manuals are available at www.mrsteam.com under Technical Downloads. Technical Support Representatives can be reached by calling 800-767-8326 or 800-727-8326.

As you follow these instructions, you will notice **WARNING**, **CAUTION** and **NOTICE** symbols. This blocked information is important for the safe and efficient troubleshooting and service of MrSteam products. These are types of potential hazards that may occur during installation and operation:

 **WARNING** Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation, which, if not avoided may result in minor or moderate injury or product damage.

 **NOTICE** This highlights information that is especially relevant to a problem-free installation. All information in these instructions is based on the latest product information available at the time of publication. MrSteam reserves the right to make changes at any time without notice.

- Never use damaged or equipment requiring service, doing so may result in an inoperative or hazardous installation.
- Discontinue use of the steam generator, control and accessories if they are damaged or otherwise not functioning properly. Doing so may result in an inoperative or hazardous installation
- MrSteam steam generators are generally connected to 208V or 240V line voltage and contain live electrical components. All installation and service to be performed by qualified and licensed electricians and plumbers only. Installation or service by unqualified persons or failure to use MrSteam parts may result in property damage or in an electrical shock hazard.
- The SAH, MS, MSSUPER, or MX series of steam generators are for residential use only. Commercial or other nonresidential applications void the warranty and may adversely affect product performance and may represent a safety hazard.



Product: Generator Models SAH, MS, MSSUPER, CT, & MX

Problem: Descaling & Element Replacement

1. Be sure power is **OFF** to your steam unit at the main breaker.
2. Turn the water **OFF** and drain all the water out of the steam unit. If you have an AutoFlush® installed, your unit should automatically drain once the power has been shut off. If your steam unit is clogged with calci-um, it may not drain completely. Have towels and/or a bucket available. Units without AutoFlush® installed will need a bucket under the drain ball valve.
3. Open the valve and drain all the water. If no water comes out, stick a long screwdriver inside the ball valve opening. This will break away the calcium build-up, and water should flow out quickly.
4. Once all the water is drained out, remove the access door located on the left side of the steam generator.
5. Remove all blue wires hooked to the heating element posts (7/16 nut driver) and move them to the side. The MS90-MS400 has only 2 blue wires. MSSUPER I-SUPER6 has 4 wires. CT units have 2, 3, or 4 wires depending on voltage and phase requirements. MX units have 8 wires. MSSUPER I R240 I with serial number higher than **MSR1409500** has 2 blue wires.
6. Using a 3/8 nut driver, remove all 6 nuts around the element flange. Remove element from tank.
7. Removing all of the calcium build up is very important. Use a crowbar or a piece of bent copper pipe. Scrape out all of the loose build up, make sure to knock down all the loose build up on the tank walls. Inside the tank to the right, there is a welded "C" channel to the tank where the probe is located. It is very important to make sure that the "C" channel is not clogged. Put your hand inside the tank and confirm there is about a 1" gap from the tank to the bottom of the "C" channel. Make sure that it is all cleared of debris. Use a shop vacuum to suck out all the small debris.
8. Once all debris has been removed, install the new silicone gasket on the tank.

IMPORTANT NOTE: DO NOT over tighten nuts.

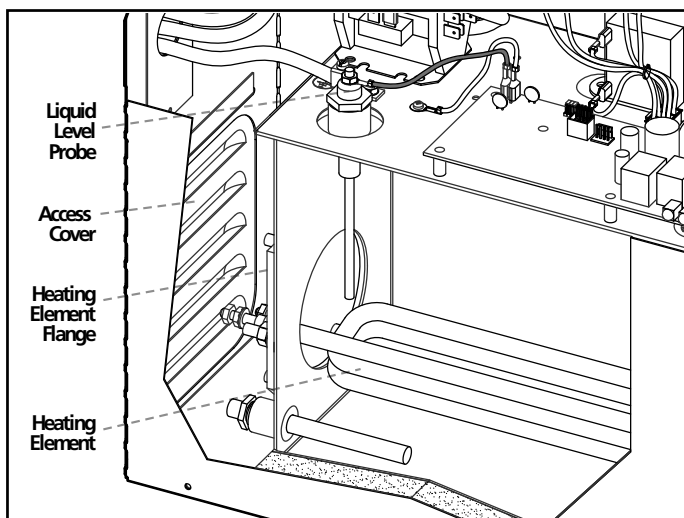
9. Slide the new element into the tank making sure the arrow on the element flange is facing upward when installed. (If there is no arrow there will be a stamped "Sussman Top" on the flange). For MS, SUPER and CT tighten nuts to 40 in-lbs and for MX & CX tighten nuts to 63 in-lbs in a star pattern. For MSSUPER I, 240V, 1 phase with serial number lower than **MSR1409500** remove both bus bars on replacement heating element before installation.

IMPORTANT NOTE: DO NOT over tighten nuts.

10. Before installing the blue element wires, make sure the nuts on the element posts are tight (Do not over tighten nuts). Install the blue wires in the same location where they were removed.
11. Install the access door on the left side of the unit.
12. Remove the liquid level probe (looks like a spark plug). The probe will have a purple wire connected to the top. Use a 13/16 socket to remove.

IMPORTANT NOTE: DO NOT use pipe dope.

13. Replace probe with new one. Make sure to put some Teflon tape on threads of probe. Make sure the ceramic piece on top of the probe is not loose, if so tighten the nut above it (only tighten a little pass hand tight, ceramic piece may break if over tightened). Reinstall purple wire on probe once probe has been replaced.
14. Turn the power back **ON** at the main breaker.
15. Turn the steam unit control **ON**. Steam should begin within 5-7 minutes.



IMPORTANT NOTE: FOR ILLUSTRATIVE PURPOSES ONLY.

Some components may be omitted or altered for clarity.

DO NOT use for wiring, repair or other purposes not related to component identification.