

Cast Heater Thermal Paste Replacement Instructions





Parts Included in the Kit

Part Number	Description	Qty
AT0H-3412-2	Thermal Joint Compound 1 oz	1
AT1E-2653-X	OverTemp Switch (X= 3 or 4 Depending on Kit Number)	1
AT0H-5176-1	Pocket Comb Fine Tooth	1
AT0F-3401-1	Nut, Special Locking 1/4-20UNC-2B	25



Thermal Joint Compound AT0H-3412-2





Nut, Special Locking 1/4-20UNC-2B AT0F-3401-1 Qty 25



Over-Temp Switch AT1E-2653-3 6KW-12KW AT1E-2653-4 13KW-17KW



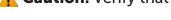
AT0H-5176-1 Pocket Comb, Fine Tooth





WARNING: Failure to disconnect the appliance from the power source can result in severe injury or death

- If the appliance is turned on , turn it off until the display is blank (Evolution) or or the power light is off (Steam'N'Hold).
- Identify the circuit breaker or circuit disconnect for the appliance and switch and shut it.
- Lockout and tagout the circuit breaker of circuit disconnect switch as outlined by your company.
- Unplug the appliance from the power source.
- Notify others in the facility that you are working in the appliance.
- Completed the installation of the kit as outlined in the instructions.
- Plug the appliance in.
- Unlock the circuit breaker or circuit disconnect switch and turn on.
- Turn the appliance on and verify proper operation as outlined in the operators manual.



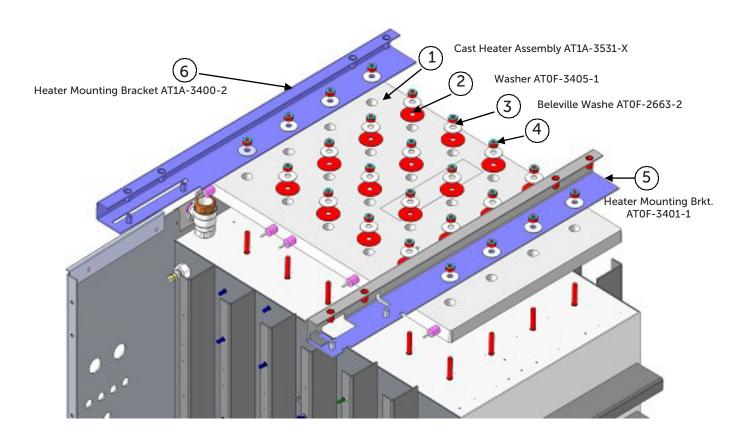
Caution: Verify that the guidelines are followed or erratic operation can occur.

- All studs must be in place and secure. (24 Total)
- All thermopaste and foreign material must be removed from the the bottom of the steamer and the mounting studs.
- Bottom of the steamer must be flat front to back and side to side or erratic operation can occur.
- Thermal paste must be applied to the smooth side of the cast heater assembly. (Side toward steamer bottom)
- Use pocket comb included in the kit to control the thickness of the thermal compound.

TOOLS REQUIRED

- PHILLIPS SCREW DRIVER #2
- SLOTED SCREW DRIVER
- ADJUSTABLE WRENCH
- TORQUE WRENCH—ADJUSTABLE TO 25 INCH POUNDS
- PUTTY KNIFE SHOP TOWELS
- DISPOSABAL GLOVES
- 1. Turn the steamer off, unplug the power cord and drain all the water from the steamer.
- 2. Remove the left side panel on the electrical compartment.
- 3. The cast heater has braided insulation on its lead wires, which run directly to the terminal block. The braided leads are numbered. Make a note of what number lead goes to each position on the terminal block. (If there are no wires with braided insulation going to the terminal block, the heater is not a cast heater and AccuTemp Products, Inc. should be contacted at 800.480.0415 to notify the Help Desk about the heater problem.
- 4. Disconnect the heater lead wires from the terminal block.
- 5. Check the heating elements for continuity. If one or more of the elements are open the heater needs to be replaced. If none of them are open continue with the instructions
 - Test the leads labeled 1 and 2. These are the wires running to the rear of the casting.
 - Test the leads labeled 3 and 4. These are the wires running to the center of the casting.
 - Test the leads labeled 5 and 6. These are the wires running to the front of the casting.
- 6. Turn the steamer upside down and remove the bottom cover.
- 7. Disconnect the wires from the high limit thermostat and move them out of the way.
- 8. Remove the insulation covering the bottom of the steamer.
- 9. Use a scouring pad to remove insulation and thread locker from the studs holding the heater in place.
- 10. Remove the nuts securing the heater to the bottom of the steamer and throw them out. Do not reuse them. Use the new nuts included in the kit.
- 11. Remove the spring washers and fender washers from the heater. Clean these up to use later when installing the new cast heater.
- 12. Swing the heater mounting brackets over the electrical compartment. They can hang from the wiring while changing the heater.
- 13. Cut any wire ties bundling the heater lead wires with the rest of the steamer wiring.
- 14. Lift the cast heater off the steamer bottom.
- 15. Clean the bottom of the steamer. All heat transfer compound must be removed. When the bottom is clean, check for foreign material or anything else that would cause even a tiny gap between the bottom of the steamer and the heater. Clean it off also.
- 16. Check the bottom of the steamer with a machinist rule to assure that the bottom is flat in the vertical and horizontal planes.
- 17. Clean the studs so thread locker will adhere to them.
- 18. Lay the cast heater on a table with the smooth side up. Wipe the surface clean and apply 1.5 2.0 ounces of heat transfer compound to the smooth side of the casting using the putty knife. Use the putty knife to spread the thermal compound across the entire surface of the cast heater. When the surface is covered, hold the fine tooth comb (included with the kit) vertical and draw it along the length of the heater in several passes to obtain an even, uniform thickness coating across the entire surface. After each pass, remove excess compound with the putty knife. When finished it should look like an even surface containing fine lines of the compound. If the lines of compound do not cover, add additional compound in those areas and repeat. Warning: do not pick the heater up by the lead wires. Doing so may damage the connections. Set the heater in place on the steamer with the heat transfer

- paste in contact with the steamer bottom. The notch in the heater casting should be towards the front of the steamer and the heater wires should be towards the electrical compartment. Try not to get paste on the studs when putting the heater in place. Center the holes in the casting on the studs.
- 19. Swing the heater mounting brackets back over the heater.
- 20. Place the large fender washers over the center studs.
- 21. Place a spring washer over each stud. Spring washers are conical shaped washers that flatten out as the nuts are tightened against them. The spring washers should point up like a miniature volcano. The purpose of the spring washer is to allow the heater to expand and contract with changes in temperature.
- 22. Install new nuts on the studs and hand tighten. Use an inch pound torque wrench and tighten each nut to 25 inch pounds per the tightening sequence in Fig 1 on page 6. **Do not over-tighten the nuts!** Repeat the tightening procedure with the torque wrench to check that each nut is at 25 inch pounds.
- 23. A bead of heat transfer compound should have squeezed out around the entire perimeter of the casting. If it hasn't, not enough paste was applied, or there is something between the steamer and heater preventing good contact. In this case, remove the heater and apply more heat transfer compound.
- 24. Apply heat transfer compound to the bottom and stud on the high-limit thermostat and screw it in the threaded hole on the rough side of the heater. It should be tight, but only finger tight. **Do not use any tools to tighten it.**
- 25. Replace the insulation covering the heater
- 26. Connect the wires to the high-limit thermostat. Push the wires into the slit in the insulation so they don't rub on the bottom cover. Push the thermostat connectors down so they don't rub either.
- 27. Reassemble the steamer and connect the heater wires to the terminal block in the correct positions.



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TIGHTENING SEQUENCE

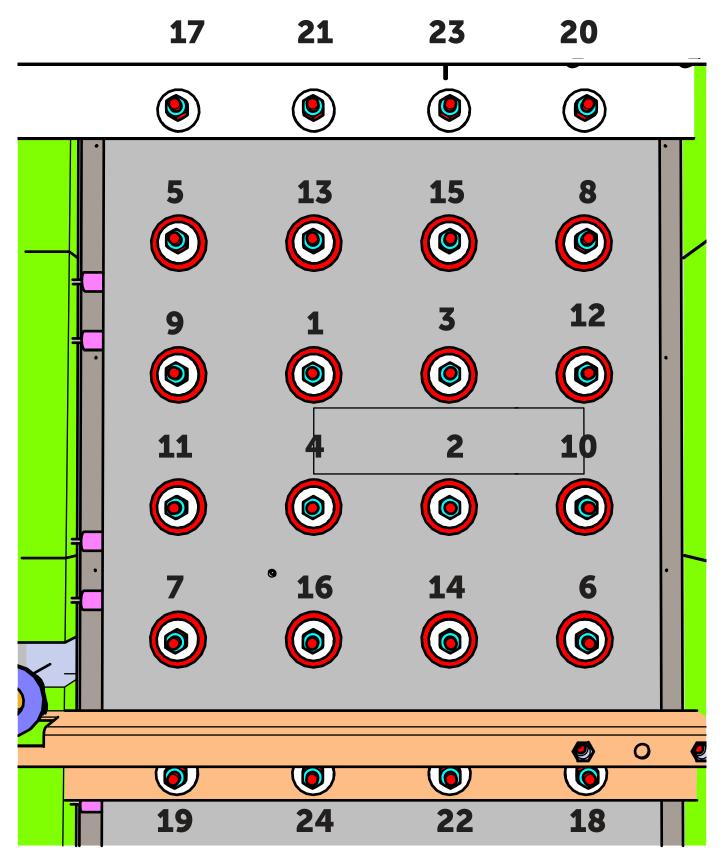


Fig. 1

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Support

IMPORTANT SERVICE INFORMATION

AccuTemp Product, Inc. Technical Support Technician is available Monday thru Sunday, 7:00am to 7:00pm EST.

800.480.0415 or 260.469.3040

Toll Free Phone: 800.480.0415
Email: service@accutemp.net
Web site: www.accutemp.net