



## Flow Sensor Cleaning Procedure

This instructional manual is only intended for use by a qualified service professional or authorized Noritz Service Representative. Any unauthorized use of this manual may result in voiding the warranty.



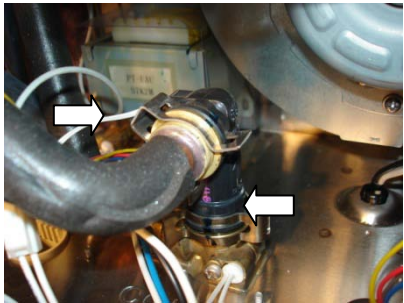
Please contact Noritz Technical Support (866-766-7489) for additional support.

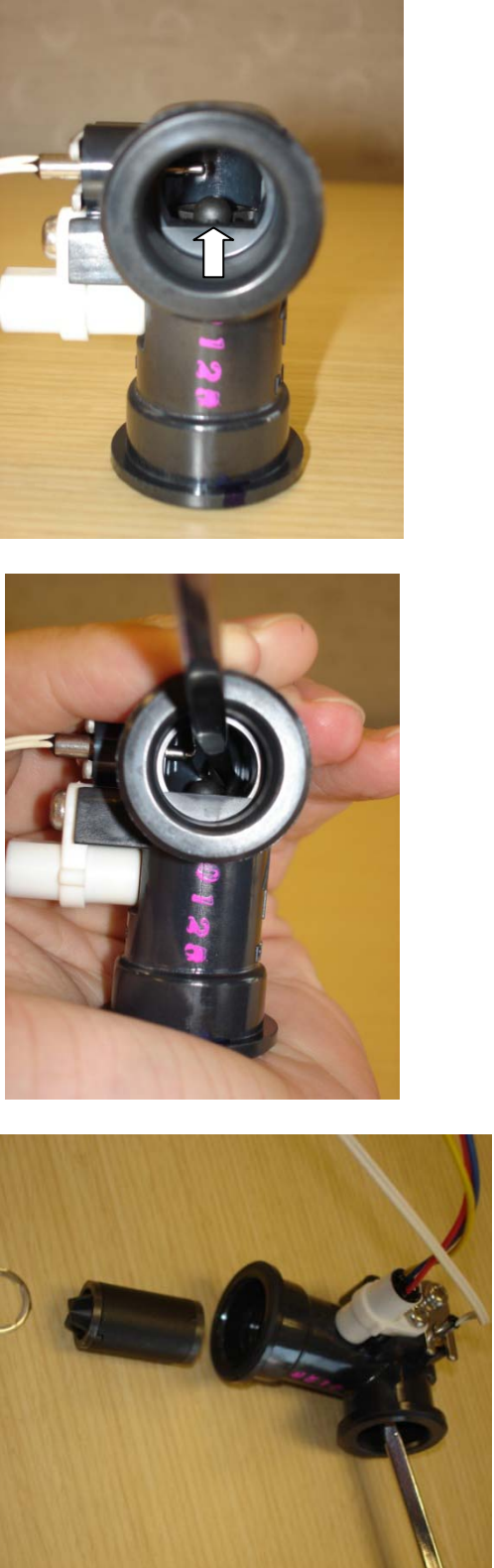
Noritz America Corporation


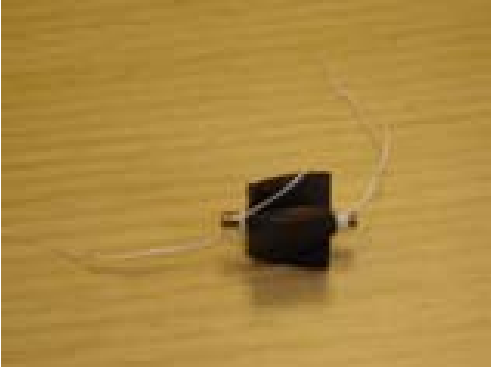
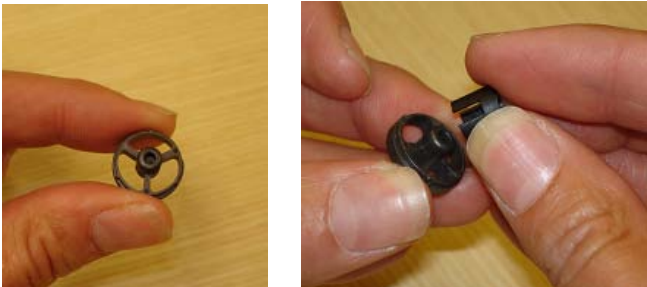

11160 Grace Avenue, Fountain Valley, CA 92708







Phone 866-766-7489 Fax 714-241-1196

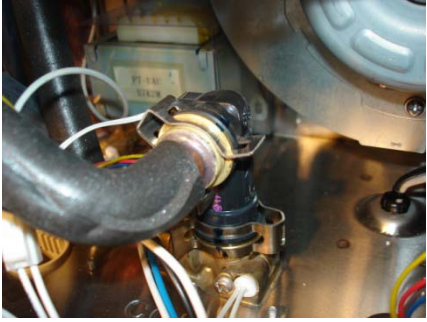

## Flow Sensor Cleaning Procedure

Procedure	Diagram
<p>1. Shut off water supply to heater and remove cover</p> <p>(1) Disconnect electrical power to unit</p> <p>(2) Remove 4 screws</p> <p>(3) Turn off gas and water</p> <p>(4) Remove filter and drain unit completely</p>	
<p>2. Locate Flow Sensor</p> <p>(1) The flow sensor is a short black elbow. It is typically found in the lower part of the unit, directly above the cold water connection.</p> <p>(2) There are two flow sensors in the following units: N-132, N-132M, N-132M-ASME, N-1321M-ASME, NC-380-SV; N-084, N-084M, N-084M-DV, N-084M-ASME, N-084M-DV-ASME, N-069M-DV.</p>	
<p>3. Remove the flow sensor from the heater</p> <p>(1) Remove the 2 "C" clamps that hold the flow sensor in place</p> <p>(2) Pull the pipe out of the front of the flow sensor then pull the flow sensor up and off of the bottom of the heater. If water drains out, dry it up to ensure that the wiring connections are kept dry.</p>	

Procedure	Diagram
<p>4. Remove the flow sensor impeller from the housing</p> <ul style="list-style-type: none"><li>(1) Locate the plastic dome inside the short end of the flow sensor</li><li>(2) Put the long end of the flow sensor in the palm of your hand and hold the top with the tips of your fingers on that hand. This is to catch the retaining ring that could fly out while performing Step (3).</li><li>(3) Push down on the dome with a screwdriver. It is typically necessary to use the body of the flow sensor as leverage while doing this.</li><li>(4) A silver ring will come out along with the flow sensor cylinder.</li></ul>	

Procedure	Diagram
<p>5. Disassemble the flow sensor</p> <ol style="list-style-type: none"> <li>(1) Set the metal retaining ring to the side</li> <li>(2) Remove the cross shaped cap from the end of the flow sensor with a needle nose pliers. When removing the end cap, pull straight out, don't twist it off</li> <li>(3) Dump out the internal components of the flow sensor – you should find a turbine and a small cylinder with three notches.</li> <li>(4) Remove the other end cap from the large cylinder, this cap looks like a "Peace" symbol</li> <li>(5) Clean the flow sensor and big cylinder – typically the types of debris you would be looking for would be Teflon tape, small debris like dirt, plumber's putty or flux.</li> </ol>	 
<p>6. Reassemble the flow sensor</p> <ol style="list-style-type: none"> <li>(1) Hold the "Peace" symbol end cap between your thumb and index finger</li> <li>(2) Drop the small cylinder with 3 notches onto the "Peace" symbol end cap. The 3 notches should fit over the "Peace" symbol.</li> <li>(3) Locate the notches on the end of the big cylinder. One side has 3 notches which will line up with the "Peace" symbol end cap. Push big cylinder and end cap together</li> </ol>	 

Procedure	Diagram
<p>(4) Insert the impeller into the cylinder. Notice that the impeller has a skinny/tapered end and a broad end. The broad end will go in first. You will be looking at the tapered end when you drop into big cylinder.</p> <p>(5) Reconnect the cross patterned cap on the end of the cylinder by lining up the 2 notches.</p> <p>(6) Put the cylinder back into the flow sensor elbow. There is an arrow on both the elbow and big cylinder. Make sure they are in the same direction.</p> <p>(7) Drop in the metal retaining ring and push it into place with a screw driver to hold the flow sensor in place</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p data-bbox="771 262 1047 325">Skinny/Tapered End</p>  </div> <div style="text-align: center;"> <p data-bbox="1096 262 1266 325">Broad End</p>  </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;">   </div> <div style="text-align: center; margin-top: 20px;">  </div> <div style="text-align: center; margin-top: 20px;">  </div>

Procedure	Diagram
<p>7. Put the flow sensor back into the heater</p> <ol style="list-style-type: none"> <li>(1) Push flow sensor down onto the bottom connection then put "C" clamp onto bottom. The larger, rounded off "C" clamp is for the bottom</li> <li>(2) Push the pipe into the front of the flow sensor then snap the "C" clamp back into place. This "C" clamp is squared off.</li> </ol>	 <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <span data-bbox="878 617 1057 663">Bottom Clamp</span> <span data-bbox="1117 617 1268 663">Front Clamp</span> </div> 
<p>8. Pressurize the heater</p> <ol style="list-style-type: none"> <li>(1) Replace the water filter on the inlet</li> <li>(2) Slowly return water pressure to the heater. If any leaks are found, shut the water back off and repair the leak. More than likely the "C" clamps are not secured.</li> <li>(3) Replace the front cover</li> <li>(4) Turn on gas</li> <li>(5) Reconnect electrical power</li> </ol>	