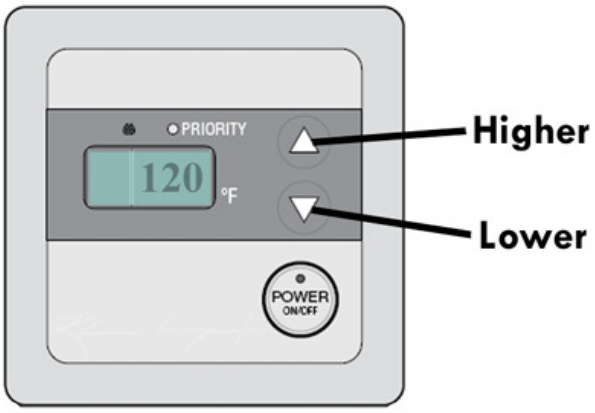
http://waterheatertimer.org/Troubleshoot-Rheem-Tankless-water-heater.html

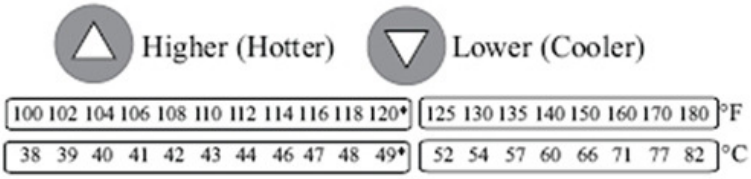
How to Adjust temperature on Rheem Tankless water heater

Use remote control to set temperatures up to 120ºF
Test current temperature with cooking thermometer at different sinks and faucets.
Remote is factory set to 100ºF

Notice:

Display shows °F only.





Time/Temperature Relationship in Scalds

Water Temperature	Time To Produce a Serious Burn
120°F (49°C)	More than 5 minutes
125°F (52°C)	1½ to 2 minutes
130°F (54°C)	About 30 seconds
135°F (57°C)	About 10 seconds
140°F (60°C)	Less than 5 seconds
145°F (63°C)	Less than 3 seconds
150°F (66°C)	About 1½ seconds
155°F (68°C)	About 1 second

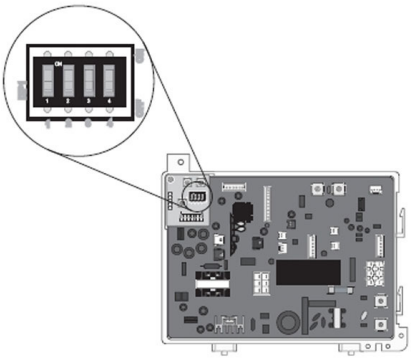
Table courtesy of Shriners Burn Institute

The chart shown above may be used as a guide in determining the proper water temperature

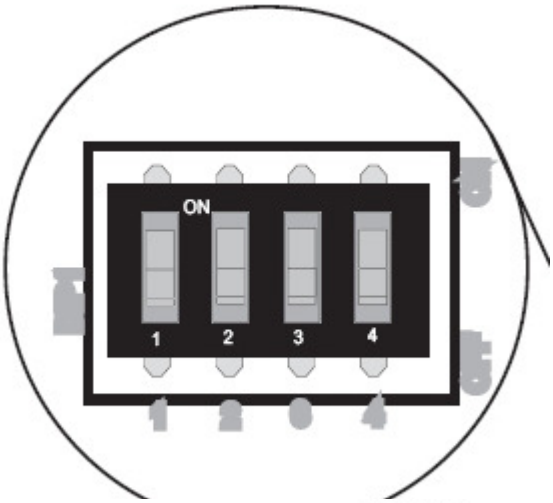
Use dip switches to adjust above 120

To adjust temperature higher than 120ºF <> up to 140ºF, then read your specific product manual for dip switch settings. *Information here will apply to SOME models*. Heavy duty models can be adjusted up to 180ºF
Dip switch settings should be adjusted by professionally trained person only.
⚠ If temperature rise is too much for incoming water temperature, or venting capacity, or air supply or gas supply, or combination of factors, then tankless will shut off.

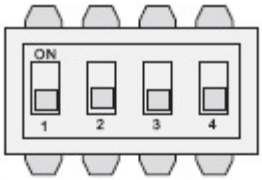
- Turn off remote control. Turn off the gas and water shutoff valves.
- Remove front cover.
- Find DIP Switch #4 located at the top left hand side of PCB.
- Change the DIP Switch #4 setting to the “ON” position. DO NOT alter any other DIP Switch. The LED on the PCB is flashing. At the same time, the display of the Main Remote Control starts to flash.
- Press the “SW1” button on the left hand side of the PCB for more than 1 second. The LED on the PCB starts illuminating continuously. At the same time, the display of the Main Remote Control is on continuously.
- Change the DIP Switch #4 setting back to the “OFF” position. DO NOT alter any other DIP Switch. The LED on the PCB will stop illuminating. At the same time, the display of the Main Remote Control will turn off.
- Attach the unit’s front cover.
- Turn on the remote control, gas and water shutoff valves.
- Check and ensure safe operation and performance of the water heater.



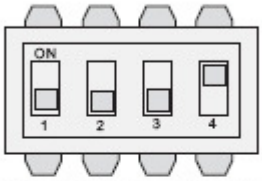
Location of DIP Switches on PC Board.



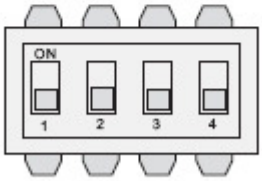
Dip Switches have to be moved in exact sequence shown instructions above



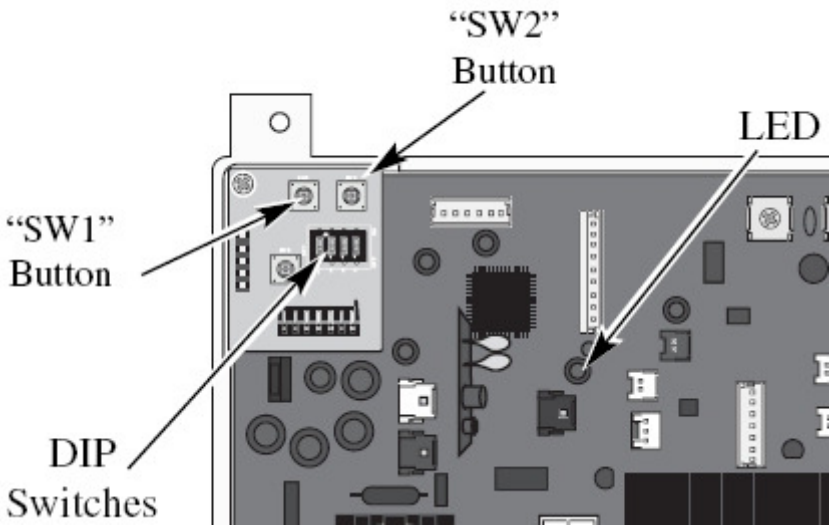
As set from factory



Setting during adjustment to DIP Switch #4 for temperature.



Setting after adjustment to DIP Switch #4 for temperature.



You want 140º from tankless? And incoming water temperature is 50º
Temperature rise is 140º subtract 50º = 90º, so gallons per minute (GPM) will fall

Flow rates

Flow rates depend on temperature of incoming water –and- capacity of tankless unit.

Chart below is based on 65º incoming water temperature, which is average year-round for Southern States.
Average year-round for mid-Illinois is approx 54º. Chart below is skewed toward warmer climates.
Place cooking thermometer under cold water tap to get comparison reading.

Fig 1 Numbers are for new tankless working at optimal performance

Maximum Hot Water Flow Rate and temperature Rise

	Raise incoming termperature by:								
Model Number	35º	45º	50º	60º	70º	77º	80º	90º	100º
RTG-64 Water Flow (GPM)	6.4	5.6	5.1	4.2	3.6	3.3	3.2	2.8	2.5
RTG-84 Water Flow (GPM)	8.4	6.7	6.1	5.1	4.3	3.9	3.8	3.4	3.0
RTG-95 Water Flow (GPM)	9.5	7.4	6.6	5.5	4.7	4.3	4.1	3.7	

Above estimates are for sizing purposes only

- Typical shower uses 2.5 gallons per minute, typical faucet 2 gallons per minute
- The hotter the shower water, the more cold water is used.

Hotter temperature setting on tankless will cause you to use more cold water, reducing water flow through tankless increasing risk that tankless will not turn ON.
Numbers shown in Fig 1 above are for new tankless unit working at optimal performance without allowance for age of unit or venting, air supply or gas supply or lack of maintenance.

Fig 2 Average ground water temperature

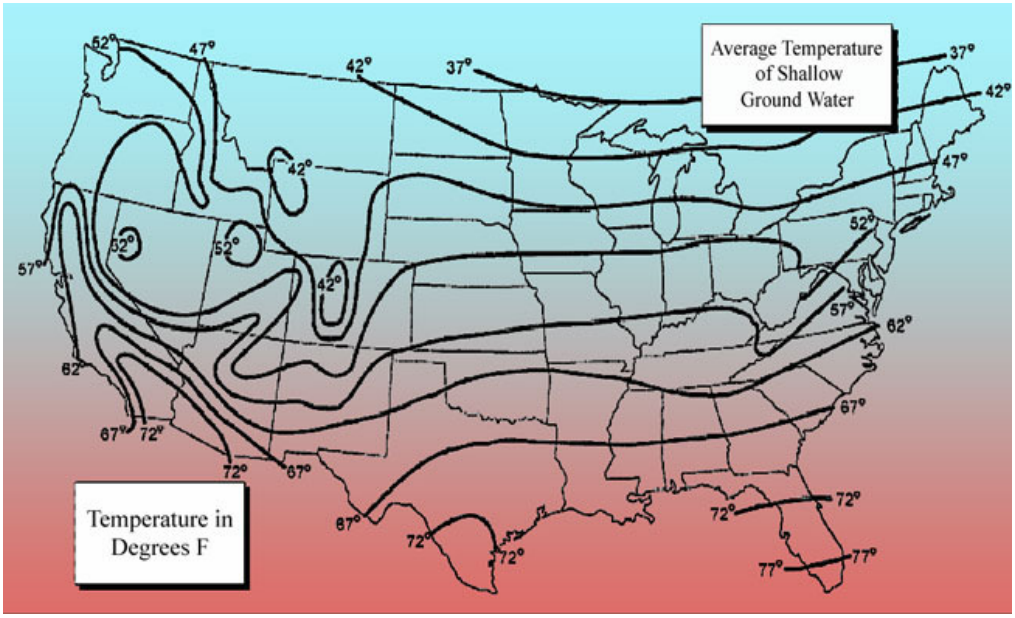
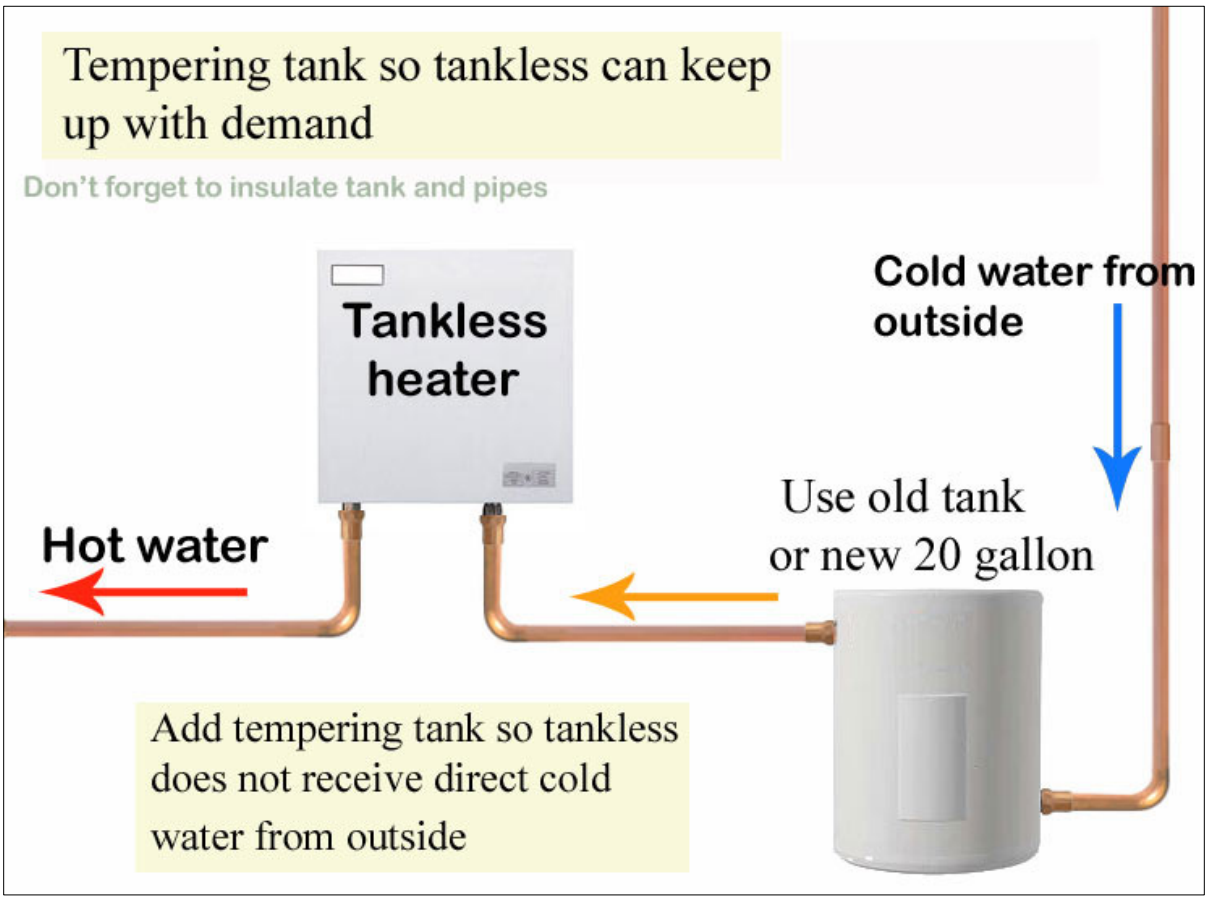


Fig 3 Add tempering tank to passively or actively preheat cold water so tankless can supply hot water.
Locate tempering tank in naturally warm location, also use to integrate tankless with solar collector



From typical Rheem manual:

1. Should you have questions about your new water heater, or if it requires adjustment, repair, or routine maintenance, it is suggested you first contact installer, plumbing contractor or previously agreed upon service agency. If the firm has moved, or is unavailable, refer to telephone directory, commercial listings or local utility for qualified service assistance.
2. Should your problem not be solved to complete satisfaction, you should then contact Manufacturer's National Service Department at following address:
2600 Gunter Park Drive
Montgomery, Alabama 36109-1413
Phone: 1-800-432-8373.
When contacting manufacturer, the following information will be requested:
a. Model and serial number of water heater as shown on the rating plate attached to front panel of heater.
b. Address where water heater is located and physical location.
c. Name and address of installer and any service agency who performed service on the water heater.
d. Date of original installation and dates any service work was performed.
e. Details of the problem as you can best describe them.
f. List of people, with dates, who have been contacted regarding your problem.

If tankless temperature is not what it used to be, then de-lime your tankless water heater.
Search U-tube for 'Delime tankless' for Do-it-yourself steps
http://waterheatertimer.org/pdf/Rheem-De-lime-tankless.pdf

For Troubleshooting resources:
http://waterheatertimer.org/Troubleshoot-Rheem-Tankless-water-heater.html