

To the Installer:

Please attach these instructions next to the indirect water heater.



WARNING

Improper installation, adjustment, alteration, service or maintenance can cause serious injury or property damage. Refer to this manual. For assistance or additional information, consult a qualified installer or service agency.

CAUTION

The recommended temperature for normal residential use is 120°F. The dial on the aquastat does not always reflect the out-coming water temperature, which could occasionally exceed 120°F. The variation in out-coming temperature could be based on factors including but not limited to usage patterns and type of installation. Test your water at the tap nearest to the indirect water heater.

WARNING

Hotter water increases the risk of scald injury. Before adjusting the water temperature setting, read this instruction manual. Temperatures at which injury occurs vary with the person's age and the length of exposure.

The slower reaction time of children, elderly, and physically or mentally challenged persons increases the scalding hazard to them. It is recommended that lower water temperatures be used where these exposure hazards exist. Such households may require a temperature setting less than 120°F to prevent accidental contact with hot water.

To lower water temperature use point-of-use temperature limiting devices.

WARNING

Water heater blankets are not recommended and will void the warranty.

THIS MANUAL HAS BEEN PREPARED TO ACQUAINT YOU WITH THE INSTALLATION, OPERATION, AND MAINTENANCE OF YOUR INDIRECT WATER HEATER AND TO PROVIDE IMPORTANT SAFETY INFORMATION.

To the Consumer:

Please read these and all component instructions and keep for future reference.

Indirect Water Heater

Instruction Manual

Warranty and Parts List are included.

INSTALLER RESPONSIBILITIES

Please read all instructions thoroughly before installing or placing the indirect water heater into service. This unit must be installed by licensed or authorized installers, or technical personnel that service water heating equipment. The indirect water heater must be installed in accordance with all local codes and ordinances.

These instructions are a guide for the correct installation of the indirect water heater. The manufacturer will not be liable for damages caused by failure to comply with the installation and operating instructions outlined on the following pages.

CAUTION

The recommended water temperature setting for normal residential use is 120°F/49°C.

HANDLING

Before uncrating, check for shipping damage. Report any damage to your carrier. Note damage on bill of lading or delivery receipt and file a claim.

FAILURE TO FOLLOW THESE INSTRUCTIONS OR ALL APPLICABLE BUILDING CODES AND REGULATIONS VOIDS THE WARRANTY ON THIS INDIRECT WATER HEATER.

Read all instructions thoroughly before attempting installation or operation of your indirect water heater. Keep these instructions for future reference.

Local plumbing and electrical codes must be followed in the installation of this indirect water heater. In the absence of a local code use the UNIFORM PLUMBING CODE and the NFPA Code. Local codes may supersede instructions in this installation manual.

These instructions are a guide for the correct installation of the indirect water heater. The manufacturer will not be liable for damages caused by failure to comply with the installation and operating instructions outlined on the following pages.

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SECTION I: SPECIFICATIONS

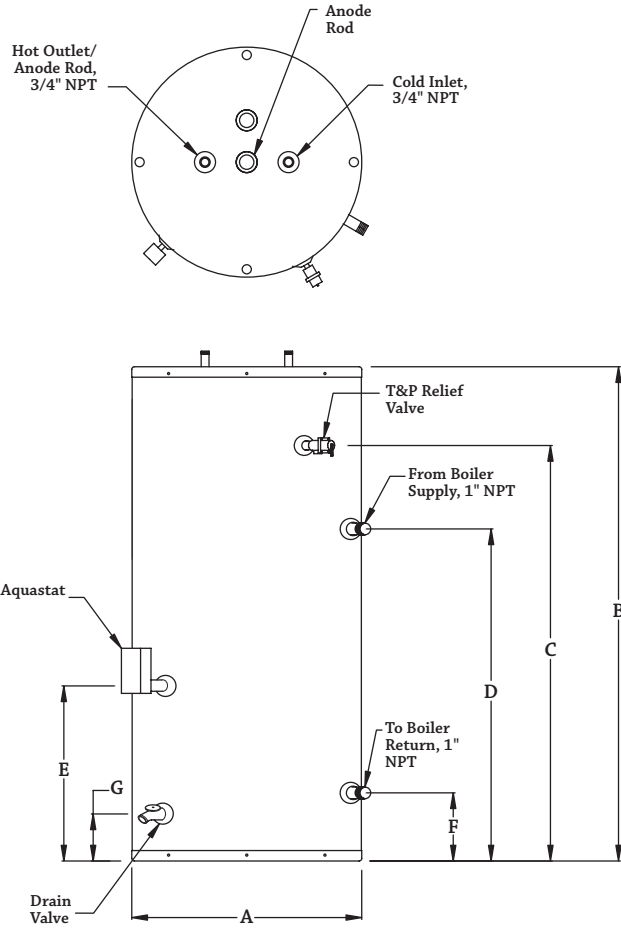


Figure 1: STID30, STID40, STID50

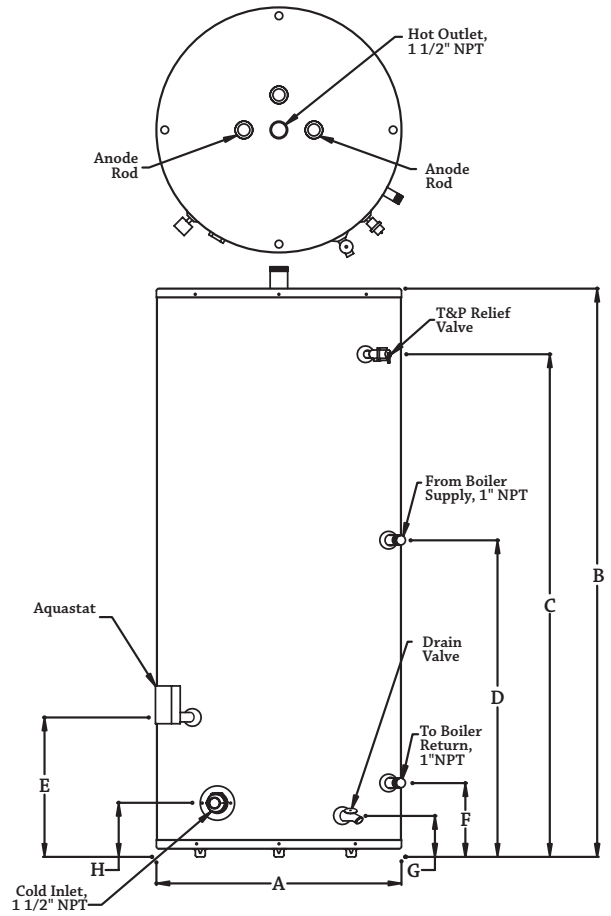


Figure 2: STID80, STID120

Table 1: Dimensions

Model	D i m e n s i o n s							
	A	B	C	D	E	F	G	H
STID30	22"	35 1/4"	27 3/4"	19 1/2"	11 3/4"	6 1/2"	4 1/2"	n/a
STID40	22"	42 1/4"	34 3/4"	31 1/2"	16 3/4"	6 1/2"	4 1/2"	n/a
STID50	22"	48 1/4"	39 3/4"	31 1/2"	16 3/4"	6 1/2"	4 1/2"	n/a
STID80	24"	64"	57 1/8"	33"	19 1/4"	8"	5"	5"
STID120	28"	65"	57 3/4"	33 3/4"	16 1/4"	8 3/4"	5"	6 1/2"

Foam insulation standard on indirect water heater models. Pressures, all: Test pressure, 300 PSI Working pressure, 150 PSI

Standard voltage, all: 120V, 60Hz, 1P. T&P valve installed; nipples supplied for top connection.

WARNING: Installation should be in accordance with all national and/or local codes.

CAUTION: The recommended water temperature setting for normal residential use is 120°F. Rheem recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding.

SECTION I: SPECIFICATIONS (cont.)

Table 2: Capacity & Performance

Model	Capacities		Performance					
	Actual Tank Volume (gal)	Coil Volume (gal)	First Hour Rating (gal)*	Continuous Draw Rating (GPH)*	First Draw Rating (gal)*	Minimum Coil Output (BTU/Hr)**	Standby Loss Rating (°F/hr)	Heat Source Friction Loss (ft. w.c.)
STID30	30	1.4	119	92	27	59,000	1.5	2.3
STID40	38	2.3	198	165	33	105,000	1.5	3.4
STID50	45	2.3	205	165	40	105,000	1.1	3.4
STID80	75	2.8	259	189	70	120,000	0.8	3.5
STID120	110	2.8	291	189	102	120,000	1.2	3.5

NOTES:

* Based on 77°F rise with 58°F potable water inlet temperature at 14 GPM heat source flow rate. Heat source temperature was 180°F.

** Minimum Coil output based on continuous boiler operation over 30 minutes. See Section III for additional considerations.

All data obtained through testing in accordance with GAMA INDIRECT-FIRED WATER HEATER TESTING STANDARD IWH-TS-1_MARCH 2003

Table 3: Performance (cont.)

Model	FIRST HOUR RATING (gal) @ COIL OUTPUT (Btu/hr)						
	180°F 8 GPM*	180°F 10 GPM*	180°F 12 GPM*	200°F 8 GPM*	200°F 10 GPM*	200°F 12 GPM*	200°F 14 GPM*
STID30	115 @ 56,000	117 @ 57,000	118 @ 58,000	138 @ 71,000	144 @ 75,000	149 @ 78,000	154 @ 81,000
STID40	173 @ 89,000	183 @ 96,000	191 @ 101,000	214 @ 115,000	226 @ 123,000	235 @ 129,000	243 @ 134,000
STID50	180 @ 89,000	190 @ 96,000	198 @ 101,000	221 @ 115,000	233 @ 123,000	242 @ 129,000	250 @ 134,000
STID80	233 @ 104,000	245 @ 111,000	254 @ 117,000	277 @ 132,000	292 @ 141,000	304 @ 149,000	314 @ 155,000
STID120	265 @ 104,000	277 @ 111,000	286 @ 117,000	309 @ 132,000	324 @ 141,000	336 @ 149,000	346 @ 155,000

NOTES:

First Hour Rating = First Draw + Continuous Draw

* Coil Input (temperature, flow rate). Ratings based on 77°F rise with 58°F inlet potable water.

All data obtained through testing in accordance with GAMA INDIRECT-FIRED WATER HEATER TESTING STANDARD IWH-TS-1_MARCH 2003

SECTION II: GENERAL INFORMATION

LOCATION

The indirect water heater should be located in a central location to the piping system, as close as practical to the boiler and in an area not subject to freezing temperatures. Leave sufficient space for servicing and maintaining the indirect water heater.

NOTICE: Long heating supply runs can lengthen recovery times.

WATER TREATMENT/FILTRATION

In areas where poor water conditions are suspected (i.e. lime, iron, and other minerals), it is essential that the water be tested and appropriate action taken to prevent damage to the indirect water heater and ensure the quality of the water.

TEMPERATURE CONTROL

Water temperature from the heat source / boiler to the indirect water heater is controlled by an immersion aquastat. This control operates the circulator, and provides limited control for domestic hot water temperature. The proper temperature setting for domestic hot water use is 120°F/49°C. If hotter water is required a tempering device or anti-scald device must be installed at the domestic hot water outlet of the indirect water heater or at the point of use.

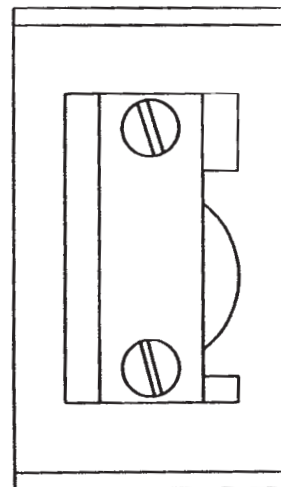
*CAUTION: Hot water in excess of 120°F
can cause scalding!*

Rheem recommends a tempering valve or anti-scald valve be installed and used according to the manufacturer's directions to prevent scalding. Many state and local codes now require installation of these devices. The tempering valve or anti-scald valve will ensure potable water temperatures at the desired set point with a higher degree of accuracy.

IMMERSION CONTROL

STID30 ● STID40 ● STID50 ● STID80 ● STID120

APPROXIMATE TEMPERATURE/TIME RELATIONSHIPS TO SCALDING	
120°F	More than 5 minutes
125°F	1 ¹¹ / ₄₂ to 2 minutes
130°F	About 30 seconds
135°F	About 10 seconds
140°F	Less than 5 seconds
145°F	Less than 3 seconds
150°F	About 1 ¹¹ / ₄₂ seconds
155°F	About 1 second



- TEMPERATURE SETTING:
120° all models

-Fixed Differential: 8°

SECTION II: GENERAL INFORMATION (cont.)

ANODE RODS

The anode rod is used as a sacrificial element within the volume of the storage tank. The purpose of the magnesium anode rod is to protect the inside of the tank against corrosion. Anode rods should be inspected twice in the first year and at least yearly once a time interval for inspection has been developed. Water conditions can influence the consumption rate of the anode rods. Please see the Maintenance section of this manual for instructions on how to change the anode rods in your Rheem indirect water heater.

CAUTION: Hydrogen gas is produced in a hot water system served by this indirect **water** heater that has not been used for a long period of time (2 weeks or more). Hydrogen gas is extremely flammable. To reduce the risk of injury under these conditions, it is recommended that the hot water faucet be opened for several minutes at the kitchen sink before using any electrical appliance connected to the hot water system. When hydrogen is present, there will probably be an unusual sound such as air escaping through the pipe as the water begins to flow. There should be no smoking or open flame near the faucet at the time it is open (UL 174).

TEMPERATURE AND PRESSURE RELIEF VALVE (T&P)

The T&P valve is factory installed. A discharge drain tube must be installed (responsibility of the installer) and shall terminate plain, not threaded, 6 inches above the floor drain. The drain tube material must be approved for temperatures of 120°F or greater, and a pressure of 150 PSI or greater.

BACK-FLOW PREVENTER (CLOSED LOOP SYSTEM)

Some local municipal codes and ordinances require the use of these devices on potable (domestic) water lines. Where back-flow preventers are required, it will be necessary to install a thermal expansion tank (designed for use with potable water) in order to prevent pressure build up in the indirect water heater and associated piping, which could cause the T&P valve to discharge. Follow the expansion tank manufacturer's recommendations when selecting a tank for your hot water system.

NOTICE: Working pressure of the indirect water heater is 150 PSI. Do not exceed 150 PSI.

SECTION III: PRE-INSTALLATION

BOILER AND CIRCULATOR SIZING

The ratings published in this manual for your Rheem indirect water heater can be obtained through proper selection of boiler output and circulator capacity. As noted, the ratings in Table 2 are based on a 77°F rise with 58°F potable water inlet temperature at a circulator pump flow rate of 14 GPM. The boiler was set at 180°F. See Table 3 for additional first hour ratings at pump flow rates of 8, 10, 12 and 14 GPM with 180°F and 200°F boiler water.

To determine the appropriate circulator for your system, follow these three steps:

- 1) Calculate the pressure drop of all straight pipe and fittings on the supply and return at the desired flow rate.
- 2) Add the pressure drop from Step 1 to the pressure drop through the indirect water heater coil (see Table 2 for friction loss) to obtain a total pressure drop.
- 3) Select a circulator pump that will provide adequate flow at the total pressure drop.

A pump performance curve should accompany every circulator pump. Figures 3-5 contain performance curves for Taco and Grundfos circulator pumps, recommended by Rheem.

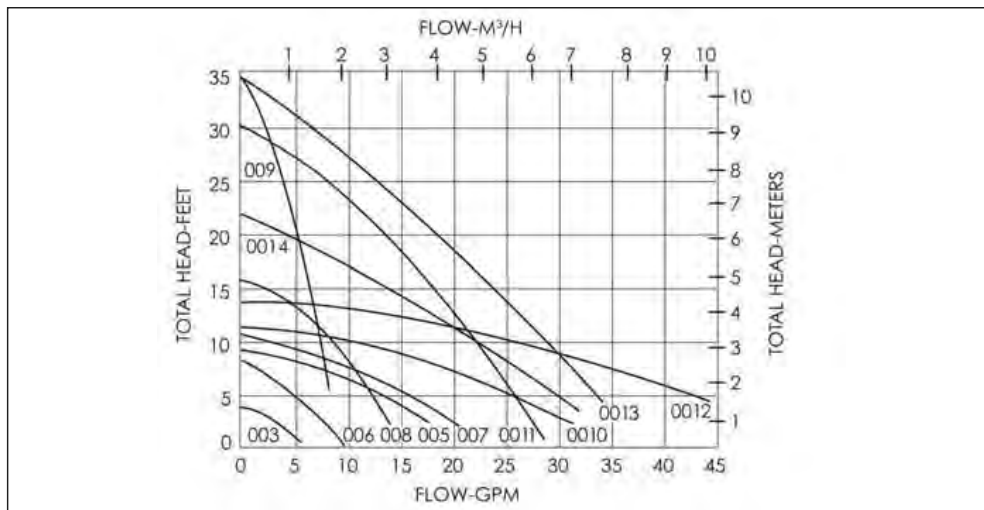


Figure 3: Taco 00 Series performance curves

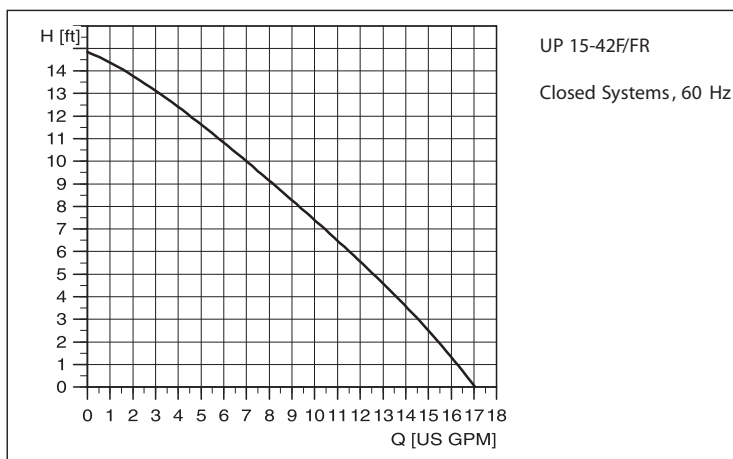


Figure 4: GRUNDFOS UP 15-42F performance curve

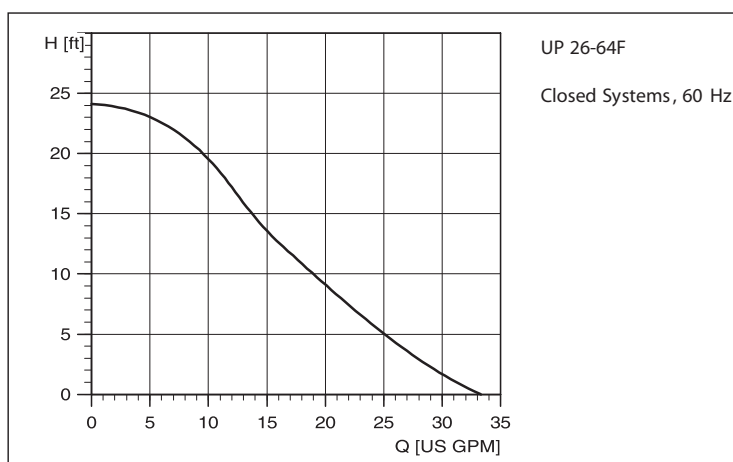


Figure 5: GRUNDFOS UP 26-64F performance curve

NOTICE: Zone valves on the heat source supply to the indirect water heater are not recommended and will drastically reduce performance.

System performance can also vary based on the heating capacity of the boiler. If the minimum coil output (assume coil output = boiler output) listed in Tables 2 and 3 is not met, the output (first hour rating) of the indirect water heater will not be met at the selected flow rate. To approximate the reduction in first hour rating as a result of low boiler capacity, use the following formula:

$$\text{New first hour rating} = (\text{First hour rating}) * (\text{Actual boiler output}) / (\text{Minimum coil output})$$

For example, the first hour rating of a STID50 at a 77°F rise with a 14 GPM heat source flow rate using a boiler having a DOE heating capacity (output) of 60,000 BTU/Hr would be:

$$\text{New first hour rating} = (205 \text{ gal}) * (60,000 \text{ BTU/Hr}) / (94,000 \text{ BTU/Hr}) = 131 \text{ gal}$$

SECTION IV: INSTALLATION

WATER CONNECTIONS

All piping between the boiler and the indirect water heater should be new copper with a minimum size of 3/4" ID for models STID30, STID40, and STID50. Use 1" minimum copper for models STID80 and STID120. Elbows should be minimized. A flow check valve must be installed on the return line.

All piping to the inlet (cold) and outlet (hot) domestic water connections should be new copper with a minimum size of 1/2" ID for models STID30, STID40, and STID50. Use 3/4" ID minimum for models STID80 and STID120.

All piping should conform to local codes and ordinances. At a minimum, refer to ILHR 84 code if local codes are not in place. It is recommended that all piping be adequately insulated with approved material to ensure minimum heat loss. If a re-circulation line is used for domestic water, be certain that all lines are well insulated and the circulator is temperature controlled. Install isolation valves to permit proper servicing. It is also recommended to install a union on the domestic outlet to facilitate replacement of the hot outlet / anode nipple on models STID30, STID40, and STID50.

See Figures 6 and 7 for proper water connection installation.

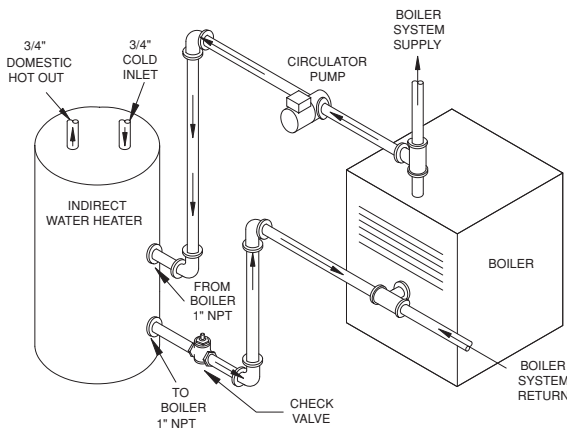


Figure 6: STID30, STID40, STID50 water connections

NOTICE: Indirect water heater may be connected to a steam boiler provided that all piping to and from the boiler are below the water line of the boiler. Boiler must also be protected by a low water cut off safety device.

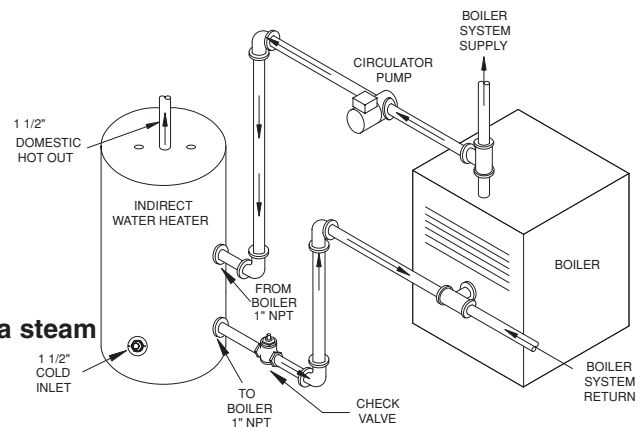


Figure 7: STID80, STID120 water connections

SECTION IV: INSTALLATION (cont.)

See Figure 8 for piping your Rheem indirect water heater to a low-mass boiler (diagram recommended by boiler manufacturer).

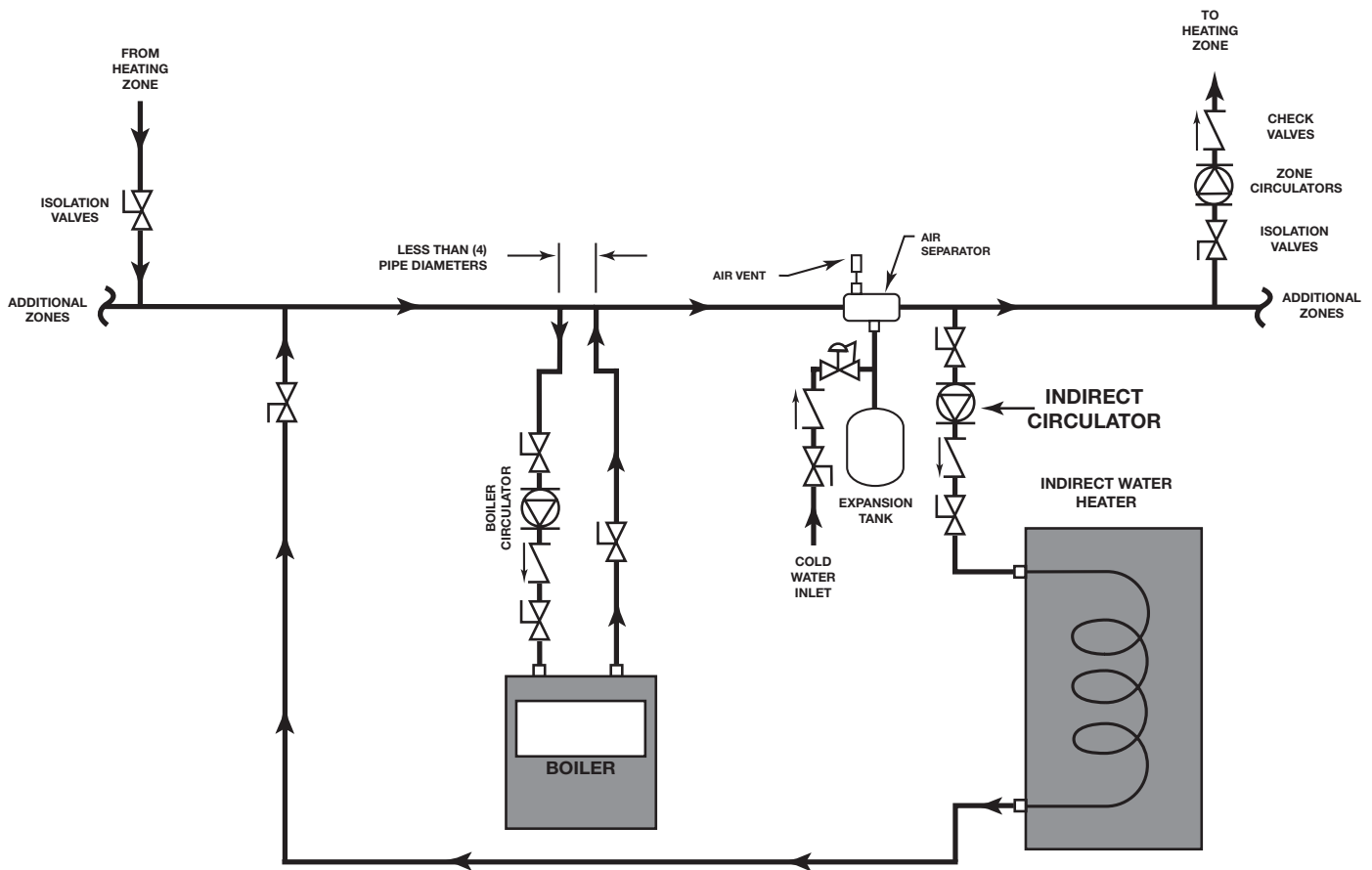


Figure 8: Rheem Indirect Water Heater with Low-Mass Boiler

SECTION IV: INSTALLATION (cont.)

ELECTRICAL CONNECTIONS

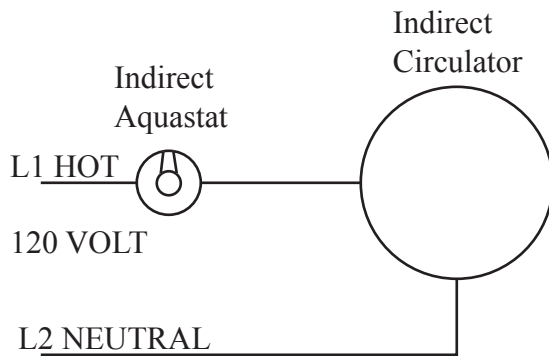


Figure 9: Boiler Maintaining 180°F

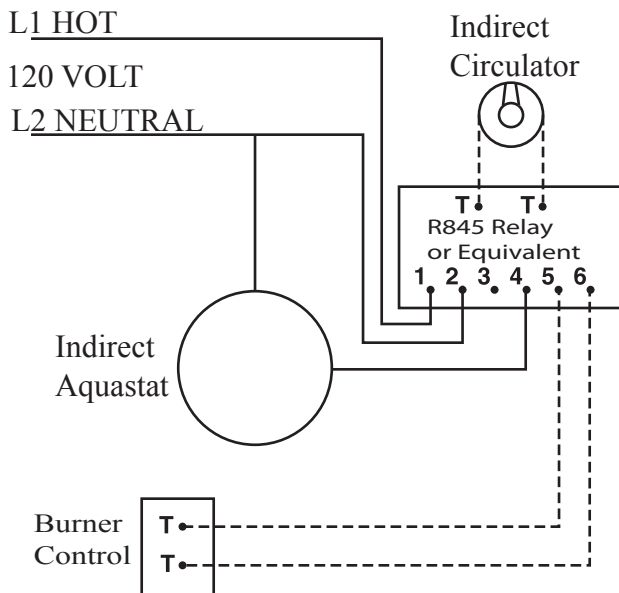


Figure 10: Cold Start Boiler

Figures 9 and 10 are general wiring diagrams. For a maintaining temperature boiler, Figure 9 should closely match your system. For cold start boilers your wiring may resemble Figure 10, but will vary depending on the boiler type and controls or relays used. It is not possible to list all wiring variations here. When connecting to a cold start boiler, always remember that in principle an indirect water heater operates as another heating zone. The difference is when the indirect water heater calls for heat, the indirect water heater circulator must start rather than opening a zone valve; the system circulator stays off; and the boiler must light to reach high limit.

WIRING NOTES:

1. Dashed lines indicate low voltage (24 VAC)
2. Use jumper wire between terminals #1 and #3 on R845 relay

THERMOSTAT SPECIFICATIONS:

Thermostats can operate at low or line voltages.

24 volt	N/A
120 volt	8 amp
240 volt	5 amp

This equipment must be properly grounded to prevent a potential shock hazard, and to reduce deterioration of the anode due to electrolysis. Refer to local electrical codes and ordinances.

SECTION V: MAINTENANCE

WATER PIPING

On an annual basis, all piping should be checked for leakage at joints, shut-off valves, and unions.

T&P RELIEF VALVE

On an annual basis, the temperature and pressure relief valve should be checked for proper operation. First, attach a drain line to the valve to direct the water discharge to an open drain. This is very important because the temperature of the discharge could be very hot. Second, lift the lever at the end of the valve several times. The valve should operate freely and return to its original position properly. If water does not flow out of the valve, remove and inspect for corrosion or obstructions. Replace with a new valve if necessary. Do not repair the faulty valve as this may cause improper operation.

ANODE RODS

Anode rods should be inspected twice in the first year and at least yearly once a time interval for inspection has been developed. It is recommended to check the rod(s) six months after the heater is installed. If the anode rod had reduced in size by two-thirds of its original diameter of 3/4" or shows signs of pitting, it is time for replacement. Take the following steps when changing the anode rod(s):

1. Shut off water supply.
 2. Open any faucet to relieve tank pressure.
 3. Remove caps on indirect water heater top; push insulation aside.
 4. Use a 1 1/16" six-sided socket wrench and a breaker bar. Snap hard to break the anode rod seal.
 5. Remove rod(s) and replace with new rod(s).
 6. Turn water supply back on and leave faucet open until air is out of line.
 7. Turn faucet off and check that new rod(s) doesn't leak.
 8. Snap caps back into place.
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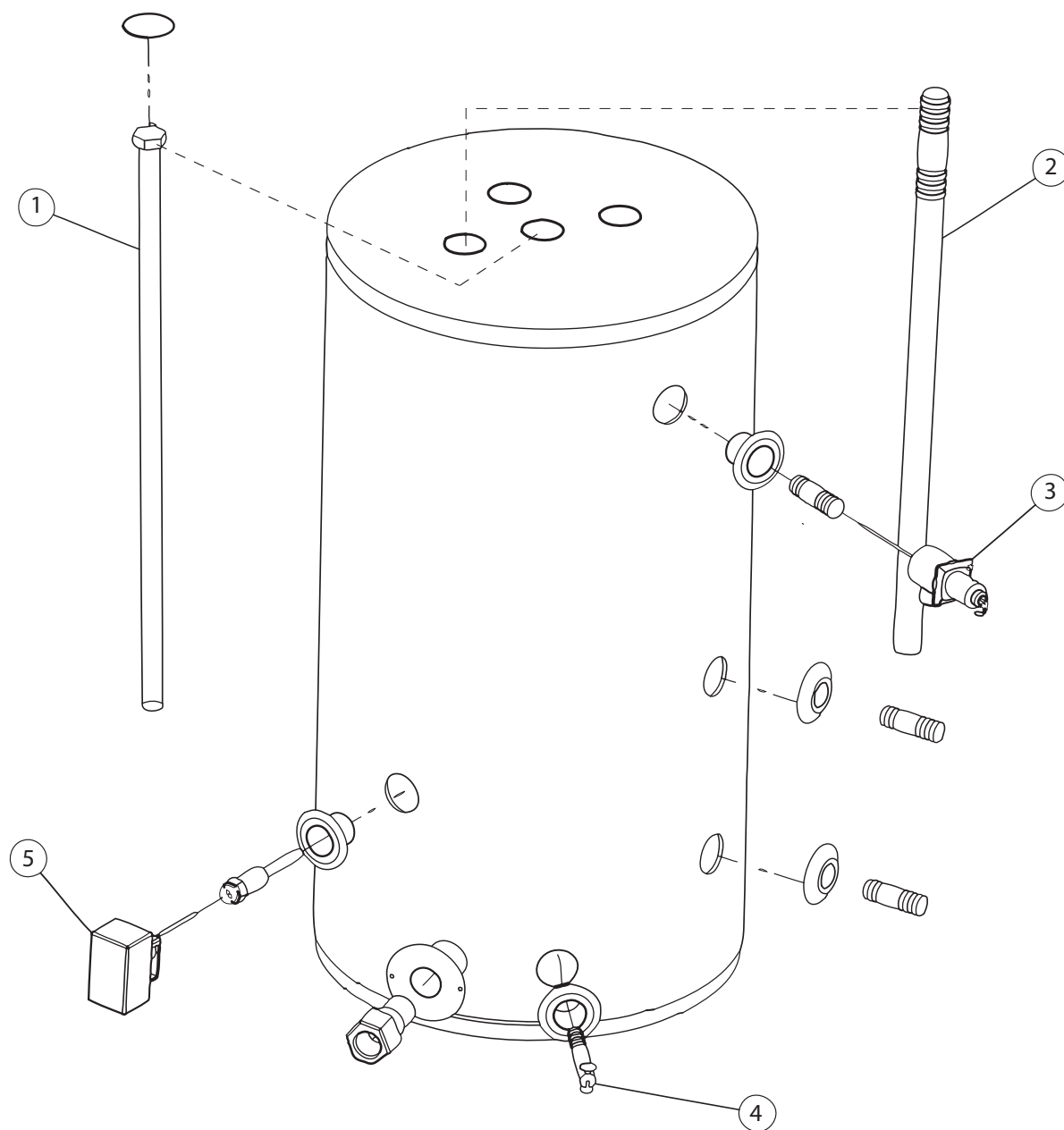
FLUSH THE TANK

The indirect water heater is glass lined. Elements in the water such as lime, iron and other minerals may accumulate in the heater. It is recommended that the tank be drained and flushed thoroughly once a year to prevent buildup in the tank.

SECTION VI: TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
No hot water at faucet	Boiler does not operate	Refer to boiler installation instructions
		Check main service switch
		Check fused disconnect
	Circulator does not operate	Check power supply
		Replace as necessary
		Check aquastat setting
	Improper aquastat setting	Turn tank aquastat to safe temperature setting
Water at faucet too hot	Electrical problem (relay, wiring, etc.)	Check fuse and replace
		Check circuit breaker and reset (if applicable)
		Check power supply
	Scale build-up	If boiler, circulator, and tank are operating satisfactorily, coil may have scale coating. See Section VI for tank flushing procedure.
Insufficient hot water	Aquastat set too high	Lower aquastat setting to safe level
	Tempering valve not properly set or defective	Check manufacturers instructions
Boiler cycles more than 5 times per day during hottest months	Aquastat set too low	Raise aquastat setting to safe level. See Section III
	Undersized boiler with no priority to domestic hot water	Rewire for priority
	Peak use of hot water is greater than tank storage capacity	Determine peak usage, compare to tank capacity, and add additional storage (storage tank) if necessary
	Faulty tank aquastat	Replace aquastat
Scale, hard white particles from faucets, popping sound from tank	Excessive demand	Reduce demand or consider larger tank
	Faulty aquastat	Replace aquastat
	Boiler high limit set too low	Increase boiler high limit setting
Rust staining; bad taste and odor in water	Lime, water hardness above 7 grains–120ppm	Water treatment; softener; etc.
Rotten egg odor	Iron/minerals in water supply	Filtration
Air from hot water fixture	Hydrogen Sulfide	Flush tank with chlorine solution and install aluminum anode rod(s)
Reduction in recovery	Electrolysis or air introduced by water supply	Properly ground heater & replace anode rod(s). Check well pump system.
Inlet/Outlet fitting corrosion	Dip tube broken or compromised by high chlorine in water	Replace dip tube
T&P Valve dripping water	Galvanic corrosion of dissimilar metals	Install dielectric unions
T&P gushing water	Excessive water pressure (above 150 psi)	Check incoming water supply pressure; closed loop system (System Plus) requires expansion tank
	Excessive water temp. (above 210 °F)	Adjust or replace aquastat and T&P valve

SECTION VII: PARTS LIST



No.	Description	Applicable Models
1	Anode	All models.
2	Anode Outlet	STID 30, STID 40, STID 50
3	T&P Relief Valve	All models.
4	Drain Valve	All models.
5	Aquastat	All models.

LIMITED WARRANTY
For Rheem/Ruud™ Indirect Water Heaters.
GENERAL

The Rheem Water Heater Operation of Rheem Manufacturing Company (Rheem) warrants this Indirect water heater, and its component parts, to be free from defects in materials and workmanship, under normal use and service, for the appropriate Applicable Warranty Periods. At its option, Rheem will repair or replace a malfunctioning Indirect water heater, or defective component part, in accordance with the terms of this Limited Warranty, if it fails in normal use and service during the appropriate Applicable Warranty Periods. The replacement Indirect water heater must be supplied by Rheem. Any replacement component part must be a Rheem authorized component part. The replacement Indirect water heater unit, or replacement component part, will be warranted only for the unexpired portion of the original unit's appropriate Applicable Warranty Period.

EFFECTIVE DATE

The Effective Date of warranty coverage (or the beginning of the Applicable Warranty Periods) is the date of installation or the manufacture date of the water heater (which ever came first) if properly documented. Otherwise, it is the date of manufacture of the water heater plus ninety (90) days.

APPLICABLE WARRANTY PERIODS

The Applicable Warranty Periods will vary depending on the ownership and/or use (or water heating application) of the unit as follows:

LIFETIME RESIDENTIAL LIMITED WARRANTY COVERAGE – As long as the Indirect water heater is installed in a single family dwelling owned by its original owner/end user, Rheem will furnish a replacement unit (if the tank leaks) or replacement component part(s) (as Rheem deems appropriate) provided the unit has not been moved from the original installation site or been rendered inoperable by an event listed in the Warranty Exclusions section of this Limited Warranty. This warranty coverage applies only to the original Indirect water heater purchased and installed at each site. It does not apply to any in-warranty replacement Indirect water heater. The owner/end user must be able to provide proof that he or she purchased the Indirect unit in order to qualify for Lifetime Residential Limited Warranty Coverage.

10 YEAR RESIDENTIAL LIMITED WARRANTY COVERAGE – If the Indirect water heater is installed in a single family dwelling owned by persons other than the original owner/end user, the Applicable Warranty Periods are ten (10) years from the Effective Date for the tank and the component parts provided the unit has not been moved from the original installation site or rendered inoperable by an event listed in the Warranty Exclusions section of this Limited Warranty. This warranty coverage applies only to the original Indirect water heater purchased and installed at each site. It does not apply to any in-warranty replacement Indirect water heater.

3 YEAR COMMERCIAL LIMITED WARRANTY COVERAGE – If the Indirect water heater is installed in a multiple family dwelling or any other type of commercial business, the Applicable Warranty Periods are three (3) years from the Effective Date for the tank and the component parts provided the unit has not been moved from the original installation site or rendered inoperable by an event listed in the Warranty Exclusions section of this Limited Warranty. This warranty coverage applies only to the original Indirect water heater purchased and installed at each site. It does not apply to any in-warranty replacement Indirect water heater.

WARRANTY EXCLUSIONS

This Limited Warranty will not cover:

- a) Service trips to the installation site to teach you how to install, use, or maintain this Indirect water heater or to bring the Indirect water heater's installation into compliance with local building codes and regulations.
- b) Damages, malfunctions, or failures resulting from failure to install the Indirect water heater in accordance with applicable building codes/ordinances or good plumbing and electrical trade practices.
- c) Damages, malfunctions, or failures resulting from improper installation or failure to operate and/or maintain the Indirect water heater in accordance with the manufacturer's instructions provided.
- d) Performance problems caused by improper sizing of the boiler and/or the Indirect water heater.
- e) Damages, malfunctions, or failures caused by operating the Indirect water heater with the anode rod removed or with modified, altered, or unapproved parts installed.
- f) Problems associated with the chemistry of the water being heated (For example: rotten egg smell or inappropriate use of water softening equipment);
- g) Damages, malfunctions, or failures caused by using the Indirect water heater to perform functions it was not designed to perform, abuse, accident, fire, flood, freeze, lightning, acts of God, and the like.
- h) The replacement of the anode rod. The anode rod must be replaced as a result of normal use of the Indirect water heater.
- i) Tank failures (leaks) caused by operating the Indirect water heater in a corrosive or contaminated atmosphere.
- j) Damages, malfunctions, or failures caused by operating the Indirect water heater with an empty, or partially empty, tank.
- k) Damages, malfunctions, or failures caused by operating the Indirect water heater at water temperatures exceeding the maximum setting of the operating, or high limit, control.
- l) Tank failures caused by operating the Indirect water heater when it is not supplied with potable water, free to circulate at all times.
- m) Damages, malfunctions, or failures caused by subjecting the tank to pressures greater than those shown on the rating label.
- n) Damages, malfunctions, or failures resulting from the use of any attachment, including any energy saving device, not authorized by Rheem.
- o) Indirect units installed outside the fifty states (and the District of Columbia) of the United States of America and the ten Provinces of the Dominion of Canada.
- p) Indirect units moved from the original installation location.
- q) Indirect water heaters that have had their rating labels altered or removed. An Indirect water heater should not be operated if the rating label is removed.

LABOR, MATERIALS, SHIPPING, AND PROCESSING COSTS

This Limited Warranty does not cover any labor expenses for service, repairs, reinstallation, permits, or removal and disposal of a leaking Indirect water heater or a defective component part of an Indirect water heater. All such expenses are the owner's responsibility.

This Limited Warranty does not cover any reinstallation material costs for pipe, valves, fittings, or any other materials and/or services required to repair or replace a malfunctioning Indirect water heater or defective component part of an Indirect water heater. All such expenses are the owner's responsibility.

Rheem will pay the transportation costs for an "in-warranty" replacement Indirect water heater, or "in-warranty" replacement Indirect water heater component part, to a convenient delivery point (selected by Rheem) near the place the original Indirect water heater, or original Indirect water heater component part, was purchased: such as a local Rheem or Ruud water heater Distributor. The owner of the Indirect water heater will be responsible for any local freight charges, including the cost of returning an Indirect water heater, or defective component part of an Indirect water heater, replaced "in-warranty" to a convenient location (selected by Rheem): such as a local Rheem or Ruud water heater Distributor. Rheem does not authorize, recommend, or receive any benefit from any warranty claims processing or similar fees charged by others to process warranty claims for any Rheem or Ruud Indirect water heater or component part. Rheem will not reimburse any party for these, or any other, fees not specifically covered in this Limited Warranty document.

HOW TO OBTAIN WARRANTY CLAIM ASSISTANCE

Any claim for warranty assistance must be made promptly. Rheem reserves the right to deny any warranty claim filed more than ninety (90) days after an incident covered by this Limited Warranty occurs. First, determine if your Indirect water heater is "in-warranty" (that is, within the Applicable Warranty Periods that apply). You can determine your unit's warranty status by obtaining the complete model number, the complete serial number, and the date of original installation and accessing the "Warranty Verification" functionality on the Rheem Water Heating website (www.rheem.com) or contacting Rheem Warranty personnel (telephone number (800) 621-5622). To establish Lifetime Residential Limited Warranty Coverage you must be able to provide proof that you purchased the Indirect unit that is the subject of your warranty claim.

If your Indirect water heater is "in-warranty", refer to the Use & Care Manual provided with it or contact the Rheem Technical Service Department (telephone number 1-800-432-8373) to obtain the technical assistance you need to repair or replace your defective Indirect unit. You may also use the plumber of your choice or select a plumber, or mechanical contractor, from your local Yellow Pages to assist you – at your expense. Be prepared to provide the plumber, mechanical contractor, or Rheem Technical Service person you call with the complete model number, the complete serial number, and the date of original installation or the date of the owner's purchase of the defective Indirect water heater in addition to an explanation of your Indirect water heater problem.

If an exact replacement unit is not available, Rheem will provide you with the current model of your Indirect water heater, or component part, or a replacement unit with comparable operating features. If government regulations or industry certification or similar standards require the replacement Indirect water heater, or replacement component part, to have features not found in the malfunctioning Indirect water heater, or defective Indirect water heater component part, you will be charged for the difference in price represented by those required features. If you pay the price difference for those required features and/or to upgrade the size and/or other features available on a replacement new Indirect water heater, you will also receive a complete new Limited Warranty (with the full Applicable Warranty Periods the original unit entitled you to) for the replacement Indirect water heater.

Rheem reserves the right to inspect, or require the return of, each Indirect water heater or defective component part replaced under the terms and conditions of this Limited Warranty. Each "in-warranty" Indirect water heater replaced under this Limited Warranty must be made available to Rheem (with the original rating label and all the component parts intact) in

exchange for the replacement Indirect water heater. Each defective "in-warranty" Indirect water heater component part replaced under this Limited Warranty must be returned to Rheem in exchange for the replacement Indirect water heater component part. Warranty compensation is subject to validation of "in-warranty" coverage by Rheem Warranty Claims personnel.

- To obtain warranty compensation for an "in-warranty" Indirect water heater replacement, you must provide Rheem with: (at Rheem's option) either the Indirect water heater replaced "in-warranty" (with the original rating label and all the component parts intact) or the complete original rating label (photocopies are not acceptable) removed from the Indirect water heater replaced "in-warranty"; the complete model number and the complete serial number of the Indirect water heater that replaced the original Indirect water heater; and, the date the originally installed Indirect water heater failed. The owner may also be required to provide proof he/she is the original owner/end user of the Indirect water heater being replaced or the date of installation of the original Indirect water heater to establish its "in-warranty" status.

- To receive warranty compensation for an "in-warranty" Indirect water heater defective component part you must provide Rheem with: the complete model number and the complete serial number of the Indirect water heater from which the defective component part was removed; and, the date the defective component part failed. The owner may also be required to provide proof he/she is the original owner/end user of the Indirect water heater being repaired or the date of installation of the Indirect water heater being repaired to establish its "in-warranty" status.

- Warranty claim documentation should be mailed promptly to **Rheem Water Heaters, Claims Department, 101 Bell Road, Montgomery, Alabama 36117.**

EXCLUSIVE WARRANTY, LIMITATION OF LIABILITY

This Limited Warranty is the only Warranty given by the Rheem Water Heater Operation of Rheem Manufacturing Company (Rheem) for this Indirect water heater. No one is authorized to make any other warranties on behalf of Rheem. ANY IMPLIED WARRANTIES, INCLUDING MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE APPLICABLE WARRANTY PERIODS SPECIFIED PREVIOUSLY. RHEEM'S SOLE LIABILITY, WITH RESPECT TO ANY DEFECT, SHALL BE AS SET FORTH IN THIS LIMITED WARRANTY AND ANY CLAIMS FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGE FROM WATER LEAKAGE) ARE EXCLUDED. Some states do not allow limitations on how long an implied warranty lasts, or for the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This Limited Warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

We suggest you immediately complete the information below and retain this Certificate of Limited Warranty in the event warranty service is required. Reasonable proof of original purchase and current ownership or the original date of installation of your Indirect water heater (whichever is applicable) may be required to establish its "in-warranty" status. Otherwise, the Effective Date of the Limited Warranty will be the date of manufacture plus ninety (90) days.

DO NOT RETURN THIS DOCUMENT TO RHEEM. **KEEP IT WITH YOUR WATER HEATER OR BUSINESS RECORDS.**

Name of Owner/Business Location
where this Water Heater is Installed: _____

Water Heater Installation Location Address: _____

Date Water Heater was Installed: _____

Name of Rheem Retailer: _____

Address of Rheem Retailer: _____

Telephone Number of Rheem Retailer: _____

Complete Model Number of Water Heater: _____