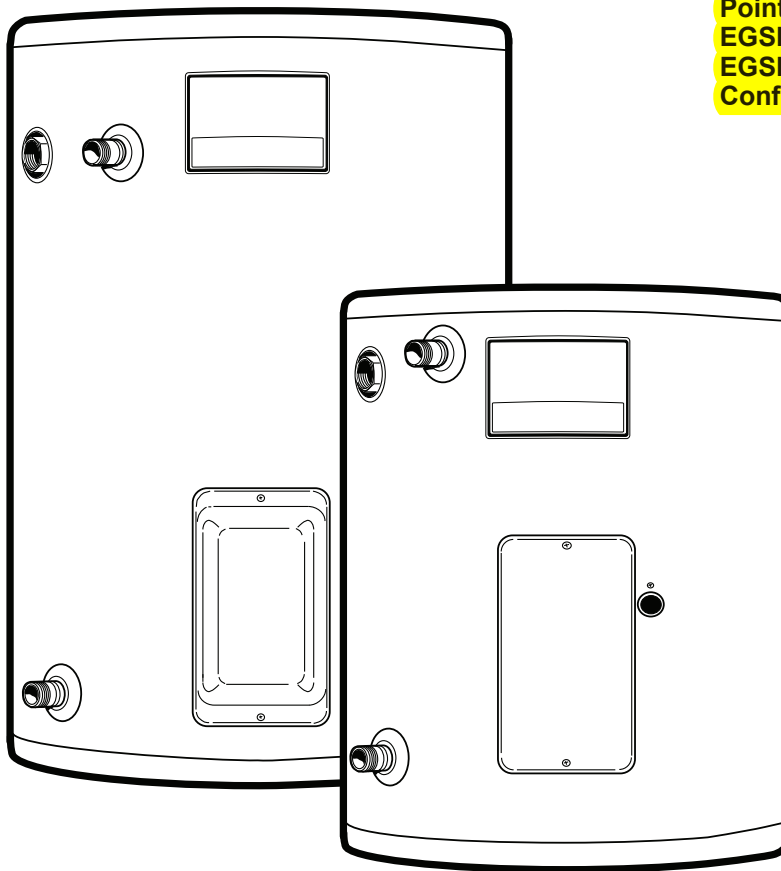




Electric Water Heaters CONVERSION KIT INSTRUCTIONS

FOR INSTALLATION BY QUALIFIED SERVICE PERSONNEL ONLY



Point-of-Use Electric
EGSP6, EGSP10, EGSP15,
EGSP20, and EGSP30
Configuration

**▲ CAUTION: TEXT PRINTED OR OUTLINED IN RED
CONTAINS INFORMATION RELATIVE TO YOUR SAFETY.
PLEASE READ THOROUGHLY BEFORE ATTEMPTING ANY
CONVERSION.**



LISTED

EGSP - AP16545 (04/12)

FOREWORD

The purpose of this manual is to explain how to change the voltage and wattage of a Rheem/ Ruud commercial electric water heater when changing the elements. This manual is not intended to explain the reconstruction of commercial electric water heaters in the field.

The addition of heating elements or subtraction of heating elements in the field is not approved by UL, Inc., and therefore, is not allowed and should not be attempted.

Please note the limitation that both the heater required and the heater to be converted must be found in this manual. Before attempting any conversion read the detailed instructions.

▲ SAFETY

Be sure to disconnect appliance from electrical supply before working on or near the electrical system of the heater. Never touch electrical components with wet hands or when standing in water.

REQUIRED ABILITY

CONVERSION OF ANY WATER HEATER LISTED IN THIS MANUAL REQUIRES ABILITY EQUIVALENT TO THAT OF A LICENSED ELECTRICAL TRADESMAN.

NOTICE!!

You **MUST** use Factory Authorized Replacement Parts when converting electric water heaters per this Procedure.

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CONVERSION MATERIALS

1. Element Plug Remover: or 1-1/2" deep well socket and ratchet.
2. Screwdrivers: Two required. One #2 Phillips and one slotted screwdriver.
3. Conversion kit: Includes conversion instructions. Replacement electrical elements, conversion kit label, and caution label.

Heaters being converted should always be placed in a well lit area. Heater maybe completely removed from carton or Cut a 3-sided flap into front of carton, cut should be on top, bottom and right side, Leave the left side of the flap for hinge effect. Cuts made approx 4" from edges of carton will allow proper repackaging when conversion is completed.

CONVERSION GUIDELINES

For Single Phase EGSP Series Only.

Be sure to read and understand the following guidelines before starting any conversion.

1. EGSP series water heaters factory configured for 208, 240, 277 or 480 volt operation **MAY** be converted **ONLY** as follows:
 - a. Element wattages and/or voltage up to the maximum allowed per "Maximum Input Chart" on page 5.
2. EGSP series water heaters factory configured for 120V operation **MAY** be converted **ONLY** as follows:
 - a. Element wattages **ONLY** up to a maximum of 3000 watts. Refer to "Maximum Input Chart" on page 5.
 - b. You **CAN NOT** convert these models to 208, 240, 277 or 480 volts.
3. The following factory configurations **MAY NOT** be changed during conversion of **any** water heater under any circumstances:
 - a. Original manufacturer's thermostat **MAY NOT** be removed or replaced. The internal wiring must stay in the water heater. It cannot be added to, removed or replaced.
 - b. Any water heater manufactured as a two wire single phase **CAN NOT** be converted to 3 phase.

MAXIMUM VOLTAGE AND WATTAGE CONVERSION CHARTS

Y = Conversion allowed **N = Conversion not allowed**

****Conversion not allowed for EGSP6 and EGSP10 models.**

† See note 2 on page 4.

NOTE: THERE ARE NO KITS AVAILABLE IN 4500 WATTS FOR THE EGSP6 & EGSP10 IN THE FOLLOWING VOLTAGE 240V, 277V, & 480V.

EGSP MODELS (Point-of-Use Electric) 6, 10, 15, 20 & 30 gallons					
ELEMENT WATTAGE	2 WIRE CONFIGURATION SINGLE PHASE OPERATION				
	120V†	208V	240V	277V	480V
1500	Y	Y	Y	N	N
2000	Y	Y	Y	Y	Y
2500	Y	Y	Y	N	N
3000	Y	Y	Y	Y	Y
4500	N	Y	Y**	Y**	Y**
6000	N	N	Y	Y	Y
Max. Wattage	3,000	5,000	6,000	6,000	6,000

AVAILABLE KITS FOR THE EGSP6, 10, 15, 20, & 30

VOLTAGE	ELEMENT KW INPUT	KIT WATTAGE	KIT NUMBER
120	1.5	1500	SP20370
	2.0	2000	SP20371
	2.5	2500	SP20372
	3.0	3000	SP20373
208	1.5	1500	SP20374
	2.0	2000	SP20375
	2.5	2500	SP20376
	3.0	3000	SP20377
	4.5	4500	SP20378
240	1.5	1500	SP20380
	2.0	2000	SP20381
	2.5	2500	SP20382
	3.0	3000	SP20383
	4.5	4500	SP20384
	6.0	6000	SP20385
277	2.0	2000	SP20386
	3.0	3000	SP20387
	4.5	4500	SP20388
	6.0	6000	SP20389
480	2.0	2000	SP20390
	3.0	3000	SP20391
	4.5	4500	SP20392
	6.0	6000	SP20393

CONVERSION PROCEDURE

NOTICE!!

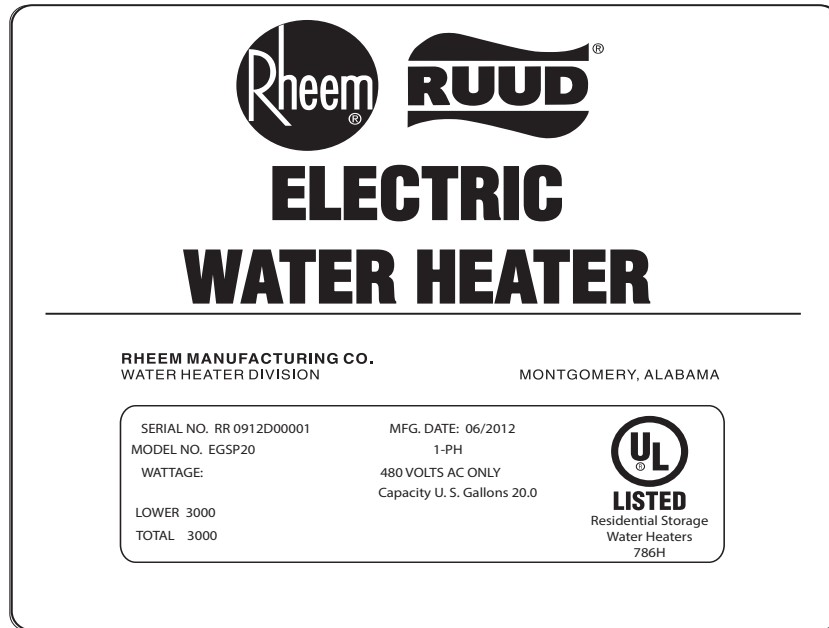
ANY DEVIATION FROM THE FOLLOWING PROCEDURE WILL RELEASE THE MANUFACTURER FROM ANY LIABILITY AND WARRANTY.

1. Determine new element wattage and voltage (if applicable).
Select the necessary elements needed: Determine KIT NUMBER used for the conversion.
ie: 2000W 480 Volt
2. Unpack the water heater and remove the access panels to the element and remove the insulation pad over the thermostat(s).
3. Remove the thermostat protective cover if applicable.
4. Remove the element wires from the retaining screws of the element.
5. With an element wrench, unscrew the old element from the heater tank.
6. Be sure to place a NEW gasket on the replacement element. Insert the new element into the tank using an element wrench. Snug the element up firmly.
7. Wire the element by attaching the water heater red and black leads to the elements.
8. When the conversion is complete, replace the thermostat protective covers over the thermostats and elements. Reposition the insulation and the access panels.
9. Proceed to “New Rating Label Instructions” (page 7) for details.
10. After you install the new rating plate and nameplate overlay, re-package the water heater. Mark new wattage and voltage information on the carton label.

NEW RATING LABEL INSTRUCTIONS

RATING LABEL MODIFICATION OF SINGLE ELEMENT ELECTRIC WATER HEATERS.

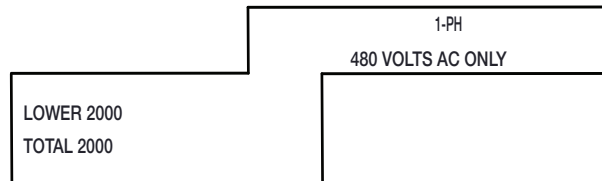
The following is a sample of the standard rating label supplied on the front of the EGSP.



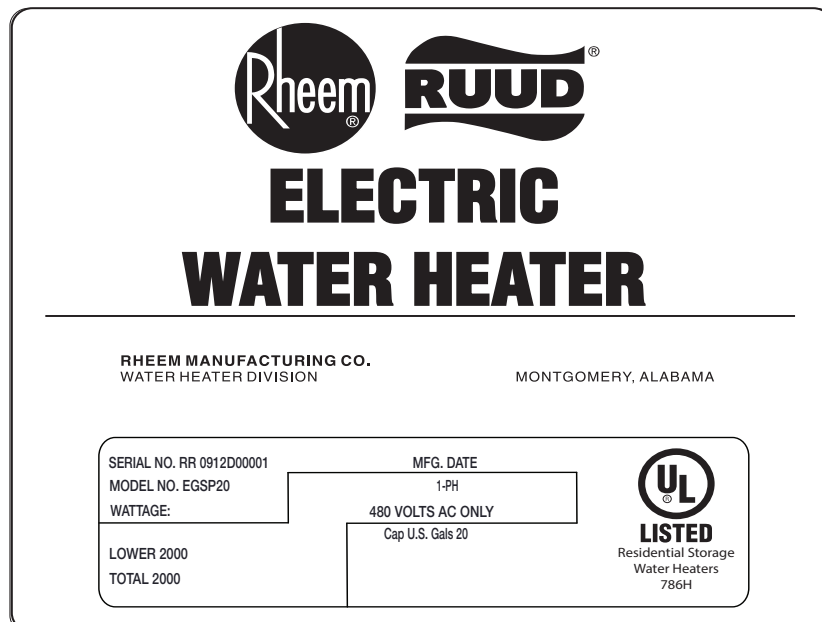
CONVERTED RATING LABEL

THE VOLTS, WATTS, AND PHASE INFORMATION OF THE RATING LABEL MUST BE MODIFIED BY COVERING THEM WITH CONVERSION LABEL PROVIDED IN THE CONVERSION KIT.

BE SURE THE NEW RATINGS ON THE LABEL MATCH THE CONVERSION YOU HAVE JUST COMPLETED.

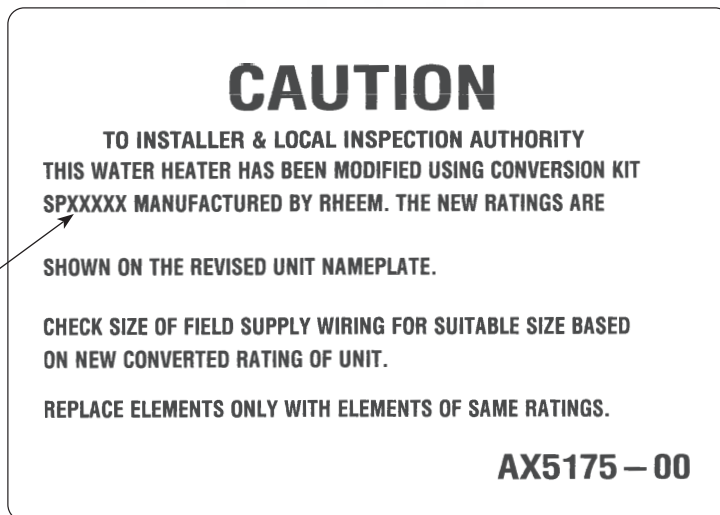


PEEL OFF THE BACK OF THE LABEL AND PASTE OVER THE ORIGINAL AS SHOWN ON THE REVISED RATING LABEL BELOW.



ADDITIONAL LABELING INSTRUCTIONS

Verify that this number matches the conversion kit that was ordered.



Peel off the back of the caution label and attach to the upper right hand corner of the control panel door.

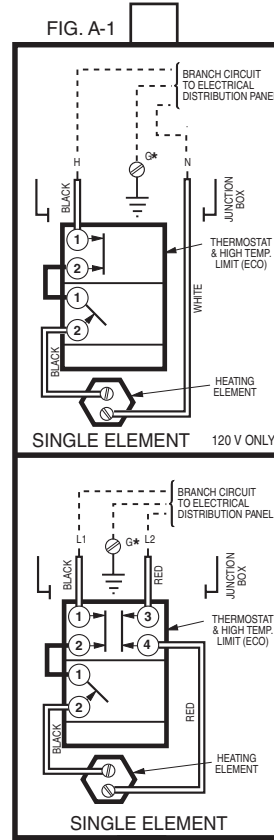
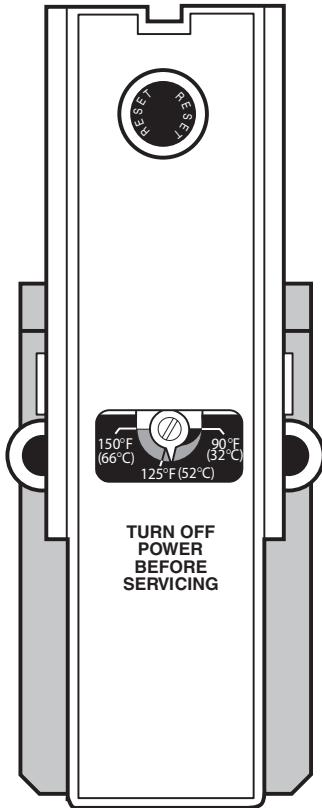
Close and tape cardboard flap on front of carton.

NOTICE: NEVER OPERATE THE HEATER WITHOUT FILLING IT WITH WATER PER THE FILLING INSTRUCTIONS. FAILURE TO DO SO WILL DAMAGE INTERNAL PARTS.

Using a black magic marker, cross out the heater identification on the carton as appropriate. In bold letters, write the new electrical specifications on the carton, which matches those on the revised rating label.

WIRING DIAGRAMS

Models with Therm-O- Disc Type 59T Thermostat



* Grounding conductor may be required.
Refer to Wiring Section of Manual

NOTES
