BRADFORD WHITE®
CORPORATION

Light Duty Commercial Electric
Voltage and Wattage Conversion Instructions

Conversion to be performed by a Qualified Service Person only.

Underwriters Laboratories Inc. recognizes this procedure as herein presented and no deviation from these instructions are allowed.

LD-20L
LD-30L
LD-30R
LD-40L
LD-40S
LD-50L
LD-50S
LD-65R
LD-80R
LD-120R

LDWH-6U
LDWH-12U
LDWH-20L
LDWH-30L

LD-6U
LD-12U
LD-12UT
LD-20U
LD-30U

238-46411-00C 5/13

The conversion procedure outlined in the instruction manual is to be executed only by Qualified Service Personnel.

Read these instructions first before proceeding with the conversion.

The purpose of this instruction manual is to instruct about the changing of wattage and voltage for Light Duty Commercial Electric water heaters manufactured by Bradford White Corporation. ETL recognizes this procedure as herein presented and no deviation from these instructions are allowed.

Special factory prepared kits must be used for these conversions. Below is a list of the kits that have been prepared for the various wattages and voltages.

These instructions do not allow for the modification that adds or deletes the number of heating elements originally supplied with the water heater; therefore such a modification must not be attempted.

Voltage and Wattage conversion kit part numbers:

Element Wattage	Non-Simultaneous Max Wattage	Simultaneous Max Wattage	Voltage			
			120	208	240	277
1500	1500	3000	265-46409-01	265-46409-05	265-46409-13	265-46409-16
2000	2000	4000	265-46409-02*	265-46409-06	265-46409-05	265-46409-17
2500	2500	5000	265-46409-03*	265-46409-07	265-46409-06	265-46409-18
3000	3000	6000	265-46409-04*	265-46409-08	265-46409-14	265-46409-19
3500	3500	7000	N/A	265-46409-09	265-46409-07	N/A
4000	4000	8000	N/A	265-46409-10	265-46409-08	265-46409-20
4500	4500	9000	N/A	265-46409-11	265-46409-09	265-46409-21
5000	5000	10000	N/A	265-46409-12	265-46409-15	265-46409-22
5500	5500	11000	N/A	265-46409-46*	265-46409-10	265-46409-40
6000	6000	12000	N/A	265-46409-47*	265-46409-48*	265-46409-23

* These kits contain only one (1) element. These are non-simultaneous kits only.

Element Wattage	Non-Simultaneous Max Wattage	Simultaneous Max Wattage	Voltage		
			380	415	480
1500	1500	3000	265-46409-24	265-46409-41	265-46409-32
2000	2000	4000	265-46409-43	265-46409-24	265-46409-33
2500	2500	5000	265-46409-25	265-46409-43	265-46409-34
3000	3000	6000	265-46409-26	265-46409-25	265-46409-35
3500	3500	7000	265-46409-27	265-46409-26	N/A
4000	4000	8000	265-46409-29	265-46409-27	265-46409-36
4500	4500	9000	265-46409-30	265-46409-28	265-46409-37
5000	5000	10000	265-46409-31	265-46409-29	265-46409-38
5500	5500	11000	265-46409-44	265-46409-30	265-46409-42
6000	6000	12000	265-46409-45	265-46409-31	265-46409-39

Tools required for conversion:

1. 1 ½" deep-well socket or wrench.
2. Phillips head screwdriver.
3. ¼" nut-driver or socket.
4. Thread lubricant.

⚠ WARNING

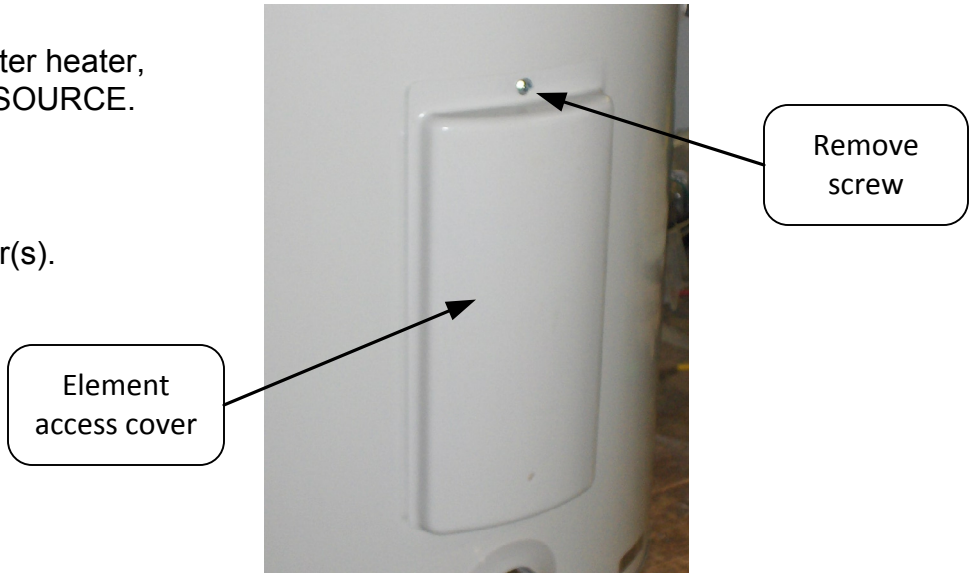
High voltage potential exposure. To avoid personal injury, be sure water heater is disconnected from power source prior to performing the procedure.

Element(s) Removal:

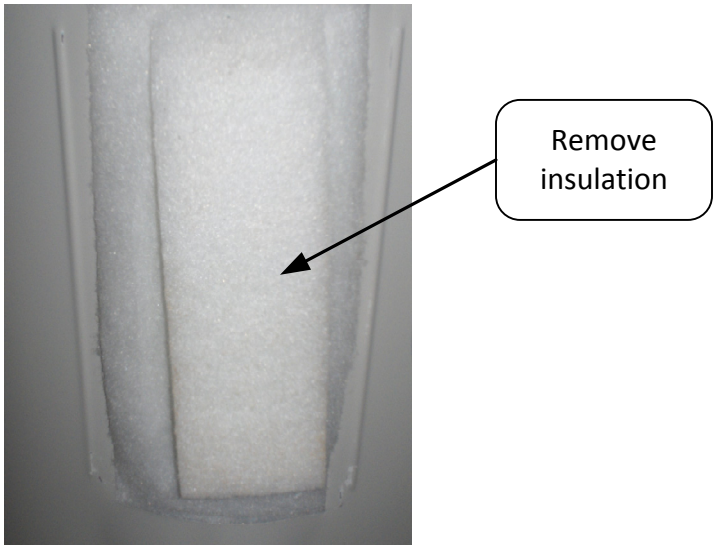
1. Turn off electrical power to water heater, DISCONNECT FROM POWER SOURCE.

2. Drain water heater.

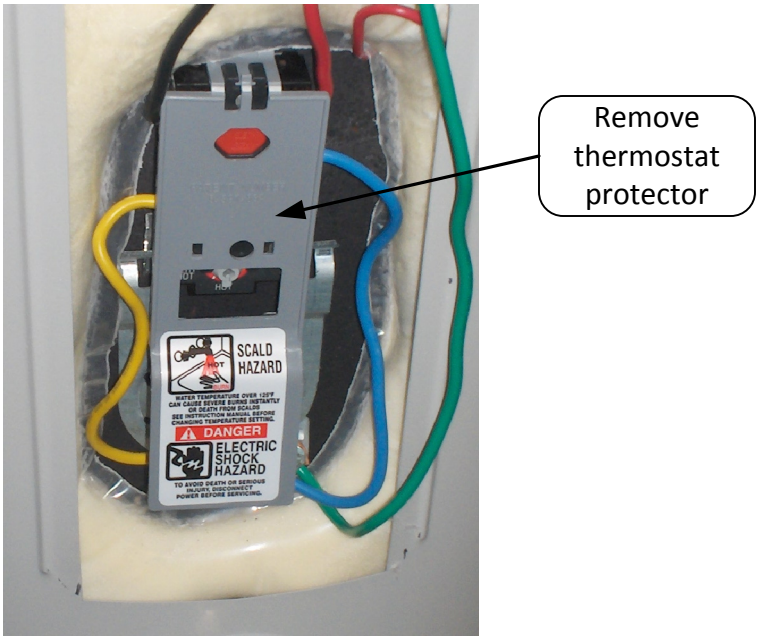
3. Remove element access cover(s).



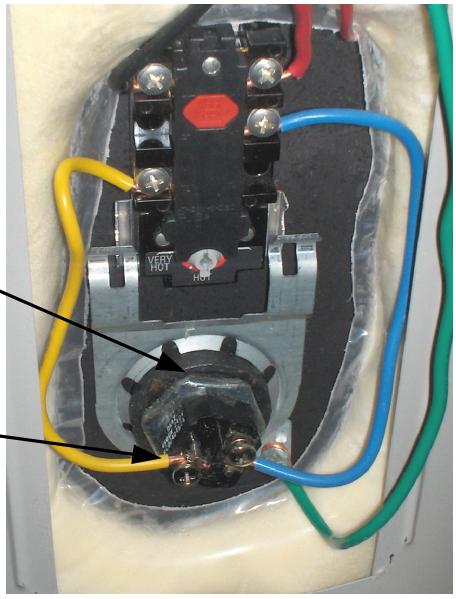
4. Remove Insulation.



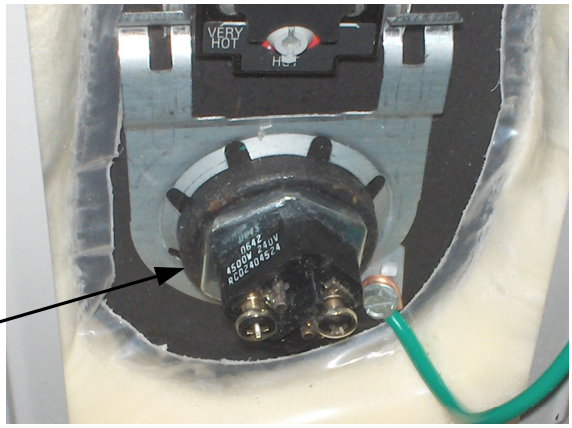
5. Remove thermostat(s) protector.



6. Disconnect wire leads from element(s) terminal block.



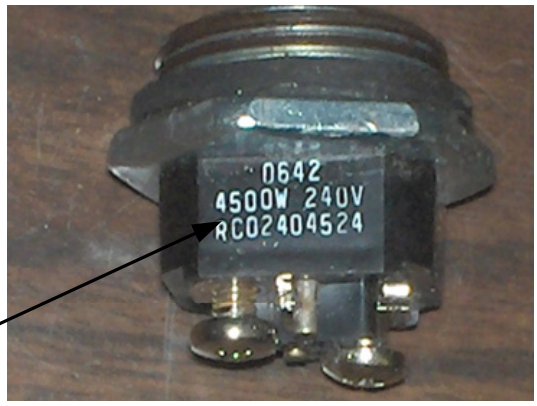
7. Remove element(s) from tank using 1½" deep well socket or wrench. Unscrew element(s) counter-clockwise to remove from tank.



Element(s) Installation:

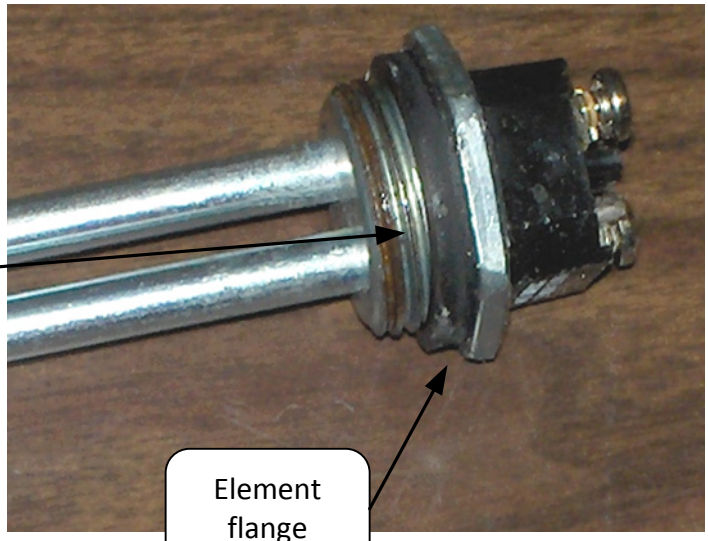
8. Check element terminal block for proper electrical rating.

Note: Some elements have a dual rating, so be sure to check all surfaces on element terminal block.



9. Apply new gasket(s) to new element(s) from conversion kit.

Note: Make sure gasket is seated flat against element flange without rolls or gaps.



10. Thread new element(s) clockwise into tank. Tighten element(s) with a 1 ½" deep well socket or wrench. Do not over tighten. Over-tightening may damage gasket.

Note: Clean any debris from element(s) fitting to tank. Lubricate element(s) threads as needed with thread lubricant.

11. Be sure tank is filled with water and check for leaks.

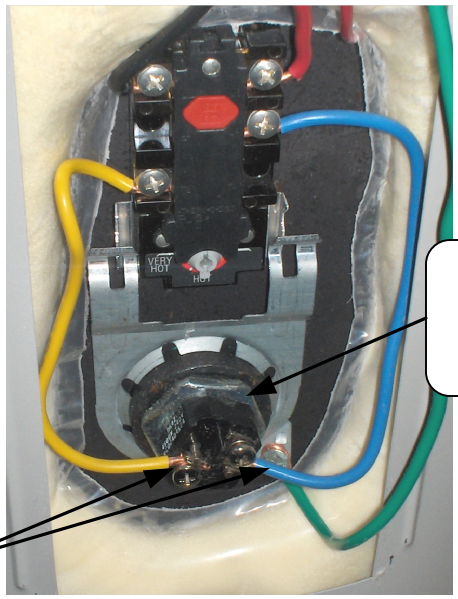
12. Reconnect wire leads to element(s) terminal block.

13. When converting from 208, 240, or 480 volt to 120 of 270 volt it is acceptable to tag the red wire with white electrical tape to identify wire. It is also acceptable to tag the white wire with red electrical tape when converting from 120 or 270 volt to 208, 240, or 480 volt.

14. Replace thermostat(s) protector and insulation.

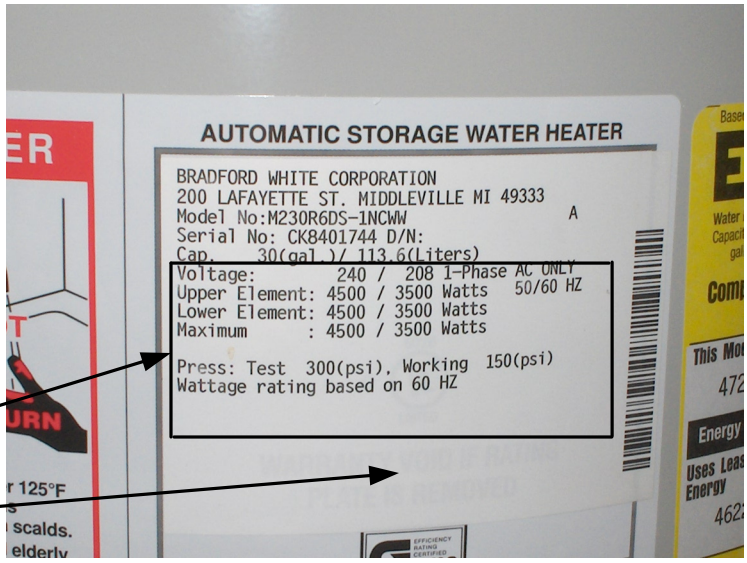
15. Replace access cover(s).

16. Restore electrical power.



17. Place appropriate label (supplied with kit) so it covers electrical information on water heater rating plate.

Note: Be certain not to cover model number, serial number and capacity information.



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