### **ELECTRICAL INSTALLATION GUIDE**

#### CONNECTION TO POWER SUPPLY

**WARNING:** YOUR SEISCO® MUST BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL. DAMAGE TO YOUR UNIT, SERIOUS PERSONAL INJURY OR DEATH MAY OCCUR IF INSTALLED OR HANDLED IMPROPERLY. CARE MUST ALWAYS BE USED TO AVOID ELECTRICAL ACCIDENTS WHEN INSTALLING OR SERVICING. NEVER USE PARTS THAT ARE NOT ORIGINAL EQUIPMENT OR APPROVED ALTERNATE REPLACEMENT PARTS.

**NOTE:** THIS WATER HEATER MUST BE INSTALLED TO MEET THE CURRENT NATIONAL ELECTRIC CODE, AND ANY APPLICABLE LOCAL PLUMBING, ELECTRICAL, HEATING AND AIR CONDITIONING CODES.

Install wiring (see wiring diagram) from the unit to the Main Power Circuit Breaker Panel. Connect the wiring to the unit as shown on the wiring diagram attached to the inside of the unit's cover.

#### WARNING

MOST MODELS REQUIRE MULTIPLE POWER SOURCES. WHEN WIRED DIRECTLY TO THE BREAKER BOX, THEY REQUIRE MORE THAN ONE DOUBLE POLE CIRCUIT BREAKER.

RISK OF ELECTRICAL SHOCK. HEATING ELEMENT IS NOT GROUNDED. ALL UNITS CAN HAVE MULTIPLE POWER SUPPLIES. DISCONNECT ALL POWER SUPPLIES BEFORE SERVICING.

IF USING STRANDED WIRE, MAKE SURE THAT ALL STRANDS ARE IN SECURELY PLACED IN THE TERMINAL BLOCK. A LOOSE STRAND IN CONTACT WITH THE CIRCUIT BOARD CAN IMPAIR PERFORMANCE OR DAMAGE THE BOARD.

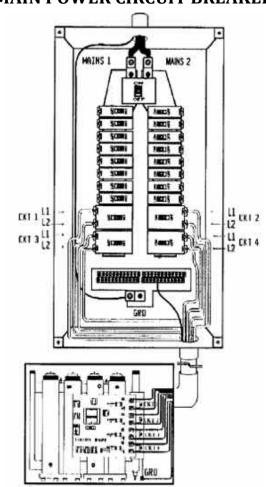
#### HEATER SUPPLY SIDE CONNECTION

FOR TWO CHAMBER MODELS INSTALLED WITH A SINGLE BREAKER AND WITH JUMPERS INSTALLED ON THE CIRCUIT BOARD, ONE PAIR OF WIRES SHOULD BE ATTACHED WITHIN THE UNIT AT POWER CIRCUIT 1 (CKT 1)-ONE WIRE TO L1 AND ONE WIRE TO L2. FOR TWO CHAMBER MODELS INSTALLED WITH A TWO BREAKERS AND WITH JUMPERS REMOVED (OR FOUR CHAMBER MODELS WITH JUMPERS INSTALLED), A SECOND PAIR OF WIRES MUST ALSO BE ATTACHED AT POWER CIRCUIT 2 (CKT2)- ONE TO L1 AND ONE TO L2.

FOR FOUR CHAMBER MODELS WITH JUMPERS REMOVED, A THIRD AND FOURTH PAIR OF WIRES ARE REQUIRED FOR POWER CIRCUITS 3 AND 4 (CKT 3 & CKT 4).

JUMPERS ARE FACTORY INSTALLED ON SMALLER KW MODELS AND ARE INCLUDED IN THE BOX FOR OPTIONAL INSTALLATION ON LARGER KW MODELS. CONSULT THE WIRING DIAGRAM OR SEISCO CUSTOMER SERVICE FOR ADDITIONAL INFORMATION.

#### MAIN POWER CIRCUIT BREAKER



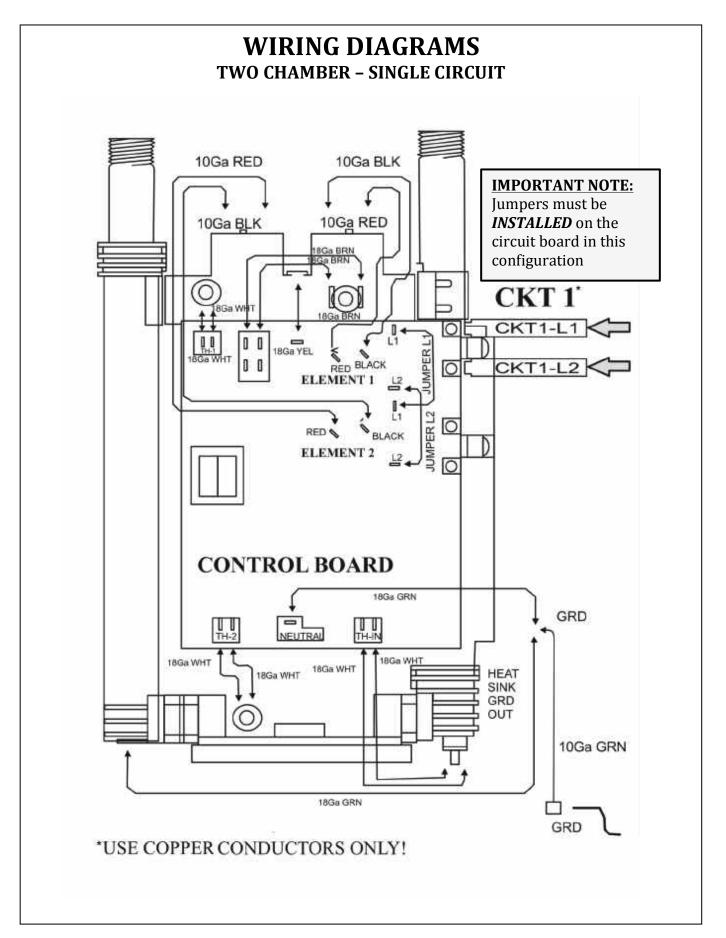
WHERE REQUIRED BY CODE USE A DISCONNECT SWITCH ADJACENT TO THE WATER HEATER. WHEN MAKING THIS TYPE OF INSTALLTION, BE SURE THE MAIN FEEDER WIRES USED ARE PROPERLY SIZED.

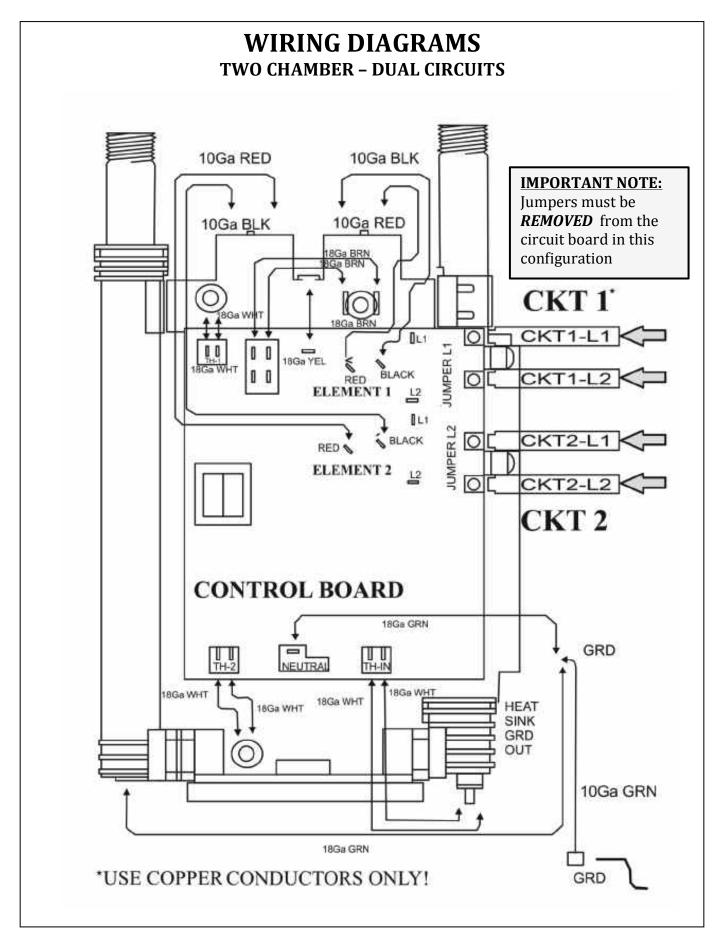
# **PRODUCT SPECIFICATIONS**

| PHYSICAL DESCRIPTION |        |        |       |                    |                               |  |  |  |
|----------------------|--------|--------|-------|--------------------|-------------------------------|--|--|--|
| Model<br>& Number    | Height | Width  | Depth | Pipe Size<br>(NPT) | Approx.<br>Shipping<br>Weight |  |  |  |
| Two<br>Chamber       | 15 ¾ " | 10 ¼ " | 6 ¼ " | 3/4 "              | 17 lbs.                       |  |  |  |
| Four<br>Chamber      | 15 ¾ " | 15 ¾ " | 6 ¼ " | 3/4 "              | 23 lbs.                       |  |  |  |

| RATINGS - ELECTRICAL |                   |                  |                              |  |                              |  |  |
|----------------------|-------------------|------------------|------------------------------|--|------------------------------|--|--|
| Model<br>& Number    | Kilowatts<br>(KW) | Voltage<br>(VAC) | Maximum<br>Amperes<br>(AMPS) | Number of Circuit Breakers , Type & Amp Rating |                              |  |  |
|                      |                   |                  | (AMI 5)                      | Without Jumpers                                | With Jumpers                 |  |  |
| RA-14                | 14                | 240              | 58                           | (2) 2-pole, 30A <sup>1</sup>                   | (1) 2-pole, 60A              |  |  |
| RA-16                | 16                | 240              | 67                           | (2) 2-pole, 40A                                | (1) 2-pole, 70A¹             |  |  |
| RA-18                | 18                | 240              | 75                           | (2) 2-pole, 40A <sup>1</sup>                   | (1) 2-pole, 75A              |  |  |
| RA-22                | 22                | 240              | 91                           | (4) 2-pole, 25A <sup>1</sup>                   | (2) 2-pole, 50A              |  |  |
| RA-28                | 28                | 240              | 116                          | (4) 2-pole, 30A                                | (2) 2-pole, 60A <sup>1</sup> |  |  |
| RA-32                | 32                | 240              | 134                          | (4) 2-pole, 40A                                | (2) 2-pole, 70A <sup>1</sup> |  |  |

<sup>&</sup>lt;sup>1</sup>Optional wiring method shown in italics – **VERIFY CORRECT JUMPER INSTALLATION** on control board when using a single breaker for two Chamber Models or 2 breakers for Four Chamber models. Be sure to **REMOVE JUMPERS** when using two breakers for two chamber models or 4 breakers for four chamber models. Jumpers are included with heater when not factory installed for use with optional wiring methods.





# **WIRING DIAGRAMS FOUR CHAMBER - DUAL CIRCUITS** 10 GA RED 10 GA BLK 10 G. RED 10 GA BLK **IMPORTANT NOTE:** 10 GA BLK 10 GA RED 10 GA BLK 10 GA RED Jumpers must be **INSTALLED** on the circuit board in this configuration ELEMENT 1 CKT1-L1 < CKT1\* ELEMENT 2 CKT1-L2 CKT2-L1 **CONTROL BOARD** CKT2\* ELEMENT 3 CKT2-L2 18 DA WHT ELEMENT 4 GRD HEAT 18 By YEL TRIGA WI SINK GRD OUT 10GA GRN 18 GA WHIT 18 Go GRN \*USE COPPER CONDUCTORS ONLY!

## **WIRING DIAGRAMS FOUR CHAMBER - FOUR CIRCUITS** 10 GA RED 10 GA BLK 10 GA RED 10 GA BLK **IMPORTANT NOTE:** 10 GA RED 10 Gn BLK 10 GA BLK Jumpers must be **REMOVED** from the circuit board in this configuration DOTAL CKT1\* D(T1-L2 DOTS L1 CKT2\* ELEMENT 2 DOM: FE DKT3-L1 CONTROL BOARD CKT3\* ELEMENT 3 DKTTHE 11 2 SEE GA WHIT DOTEL1 ELEMENT 4 CKT4 1300 DOTALE GRD 10 Ga YEL 16 GA DRIV HEAT TH GA YEL SINK 18 CAW GRD 10GA GRN 18 GA WHIT 18 GA GRN \*USE COPPER CONDUCTORS ONLY!

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