## Watkins Manufacturing Corporation

## REPLACEMENT

## Of your Hawk Control Box 60Hz Vacanza 2012 - Current



TERMINAL BLOCK



GROUNDING LUGS

POWER CONNECTIONS FOR COMPONENTS

PERIPHERAL INTERFACE COMMUNICATION

ZONE LIGHTING

CONTROL AND HI-LIMIT
THERMISTOR

SERVICE SWITCH

USB PROGRAMMING PORT

PRESSURE SWITCH

CONTROL PANEL

SPA LIGHT

# ⚠ IMPORTANT

The replacement Hawk Control Box must be updated to the current software version via the USB port (using a formatted USB drive) and the software jumpers must be configured according to spa model via control panel. Refer to the Control Box Software section in CDR portal to download the current software version, Jumper Configuration Instructions and How to Format USB Drive Instructions.

### Control Box Removal

- **Step 1.** Disconnect power to the spa and access the equipment compartment.
- Step 2. On the front of the control box, remove the screws and open the control box cover.
- **Step 3.** Disconnect the power supply from the terminal block.
- Step 4. Locate and disconnect the connections inside of the box, i.e. pump(s), control panel, ozone, and spa light.
- Step 5. On the left side of the control box, disconnect the copper bonding wire(s).
- **Step 6.** Inside the control box, disconnect the heater by removing the black heater wires, ground wire and bonding screws using a nut driver. Unplug the High Limit, Control Thermistor and the Pressure switch.
- **Step 7.** On the bottom of the equipment compartment, remove the mounting screws.
- **Step 8.** Lift the control box away from the base of the equipment compartment and remove.
- **Step 9.** If the control box is being returned with a warranty claim, be sure to package it in original factory packaging (use the packaging from the replacement box).

#### Control Box Installation

- 1. There are two legs on the bottom of the control box. Align tabs of these tabs to the old holes located at the bottom of the equipment compartment and tighten the screws of the leg tabs to the floor of the equipment compartment.
- **2.** On the left side insert the heater power cord through the access hole and connect the black wires to terminals J18 and J19. Connect the green ground wire to to the heater ground terminal.
- 3. On the right side of the control box, connect the High Limit, Control Thermistor and the Pressure Switch Input.
- 4. On the right side, connect the ribbon cable for the Control Panel.
- 5. Connect Jet Pumps and all other components back to original flag terminals.

#### Wiring the Line Voltage Conduit to Terminal Block TB-1



If the line voltage is wired incorrectly, damage to the control box may occur.

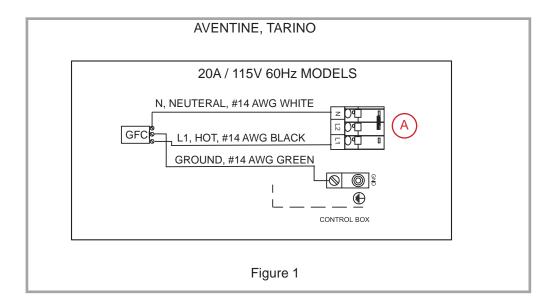
#### **ELECTRICAL REQUIREMENTS**

ALL SPAS MUST BE WIRED IN ACCORDANCE WITH ALL APPLICABLE NATIONAL AND LOCAL ELECTRICAL CODES. ALL ELECTRICAL WORK SHOULD BE DONE BY AN EXPERIENCED, LICENSED ELECTRICIAN. WE RECOMMEND THE USE OF APPROPRIATE ELECTRICAL CONDUIT, FITTINGS, AND WIRE FOR ALL CIRCUITS.

- 1. The wiring instructions are located below.
- 2. Refer to the illustrations at the bottom of the page and locate the spa model and operating voltage.
- 3. Wire the terminal block (TB-1) as shown: Figures 1 4

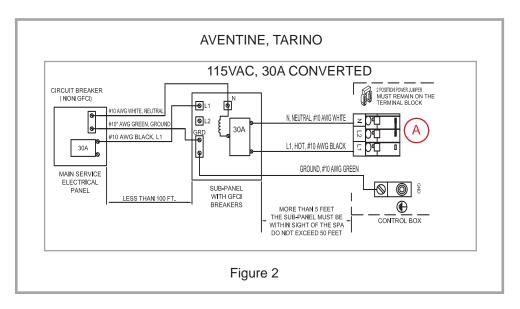
### **Input Wiring**

- 1. Connect the White (Neutral) wire from the GFCI breaker to TB-1, terminal N.
- 2. Connect the Black (Hot) wire from the GFCI breaker to TB-1, terminal L1.
- 3. Connect the Green (Ground) wire from the sub panel ground bar to the source grounding lug.
- 4. Verify power jumper (A) is set across terminals N-L2 on TB-1



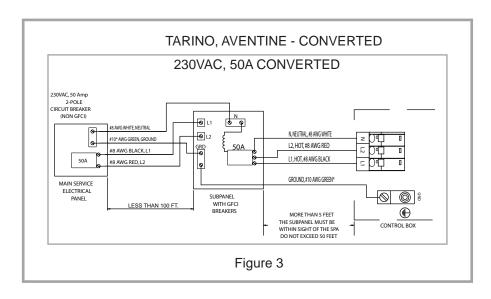
## Input Wiring - Converted Model 115Vac 30 Amp Service

- 1. Connect the White (Neutral) wire from the sub panel 30 amp breaker terminal N to TB-1, terminal N.
- 2. Connect the Black (Hot) wire from the sub panel 30 amp breaker terminal L1 to TB-1, terminal L1.
- 3. Connect the Green (Ground) wire from the sub panel ground bar to the source grounding lug.
- 4. Verify power jumper (A) is set across terminals N-L2



## Input Wiring - Converted Model

- 1. Connect the White (Neutral) wire from the sub panel 50 amp breaker terminal N to TB-1, terminal N.
- 2. Connect the Red (Hot) wire from the sub panel 50 amp breaker terminal L2 to TB-1, terminal L2.
- 3. Connect the Black (Hot) wire from the sub panel 50 amp breaker terminal L1 to TB-1, terminal L1.
- 4. Connect the Green (Ground) wire from the sub panel ground bar to the source grounding lug.
- 5. Remove power jumper (A). Figure 2.



## Input Wiring - Permanent Connected 230 Vac 50Amp Service

- 1. Connect the White (Neutral) wire from the sub panel 50 amp breaker terminal N to TB-1, terminal N.
- 2. Connect the Red (Hot) wire from the sub panel 50 amp breaker terminal L2 to TB-1, terminal L2.
- 3. Connect the Black (Hot) wire from the sub panel 50 amp breaker terminal L1 to TB-1, terminal L1.
- **4.** Connect the Green (Ground) wire from the sub panel ground bar to the source grounding lug.

