Section 1: Description

The following instructions illustrate replacing the Gecko in.ye Heater-Controller model in the Endless™ Original Series and WaterWell pools with a Poolside Water Quality System.

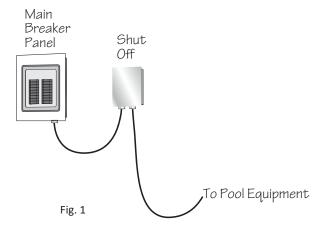
Section 2: Materials/Tools Required

- 5 Gallon Bucket
- Towel
- Phillips Head Screwdriver
- Flat Head Screwdriver
- Needle Nose Pliers

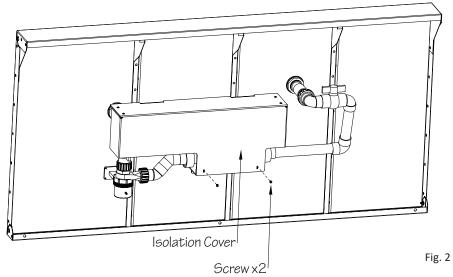
Section 3: Service Instructions

Heater-Controller Replacement

1. Turn off power to the pool equipment at the main breaker or shutoff (Fig. 1).



2. Remove the Isolation Cover by removing the two screws at the bottom of the cover (Fig. 2).



3. Isolate the Water Quality System equipment from the pool water by closing the Ball Valve before the pump and Ball Valve on the return side of the plumbing. The valve is fully closed when it is perpendicular with the plumbing as shown in Figure 3.

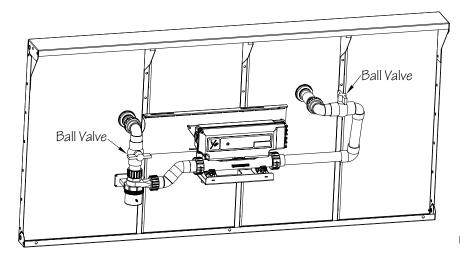
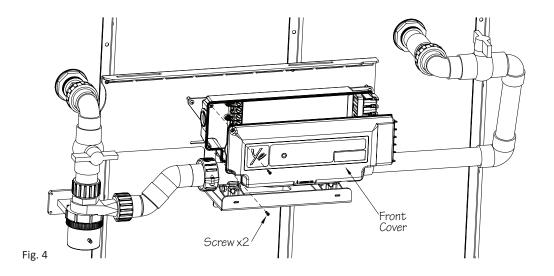


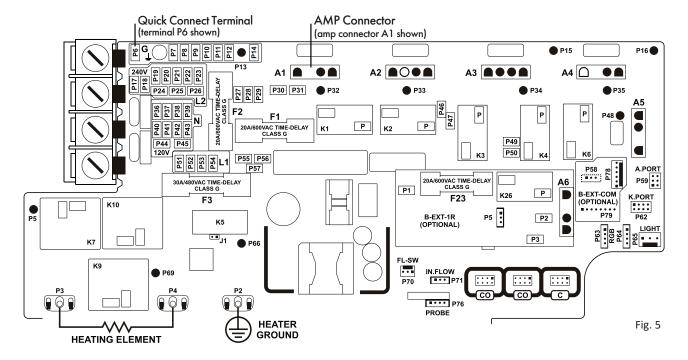
Fig. 3

4. Remove the front cover of the Gecko Heater-Controller by removing the two screws (Fig. 4).



Endless Pools D90082 0323

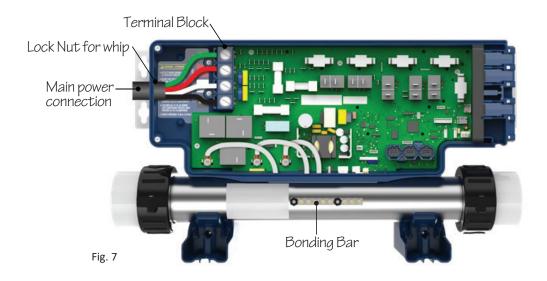
5. The next step is unplugging all equipment from the controller. Each component is connected to the controller board with either three female quick connect terminals or a single amp connector (Fig. 5). PRIOR TO REMOVING THE WIRES FROM THE CONTROLLER, TAKE NOTE OF THE QUICK CONNECT TERMINAL ID OR AMP CONNECTOR ID ON THE IN.YE BOARD TO AVOID MIS-WIRING THE COMPONENTS IN THE REPLACEMENT CONTROLLER (i.e., Circulation Pump = green wire to P6, black wire to K1, white wire to P24). TAKE PICTURES OF THE WIRING IF NECESSARY. Use needle nose pliers to remove any female quick connect terminal.



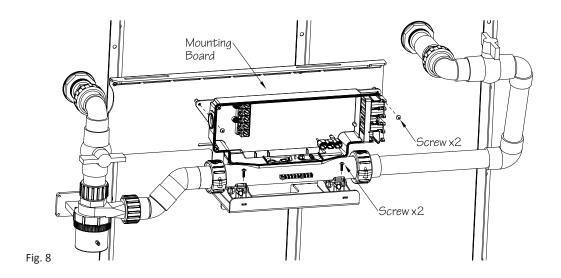
6. Once the components are unplugged from the controller, trace the cords to the appropriate cable clamp on the right side of the controller. Slide the clamp out of the slot and open the clamp to remove the cord (Fig. 6).



7. Remove the incoming power wires from the Terminal Block. Remove the electrical whip from the enclosure by removing the lock nut on the inside of the controller. Remove the copper bonding wires from the Bonding Bar (Fig. 7).



8. Remove the four screws that secures the controller to the Mounting Board (Fig. 8).



9. There is a Union on each end of the controller. Place a bucket under the first Union. Crack the Union clockwise to loosen and allow the water in the plumbing to drain into the bucket. Once water is drained, completely unthread unions to remove the controller from the plumbing assembly (Fig. 9).

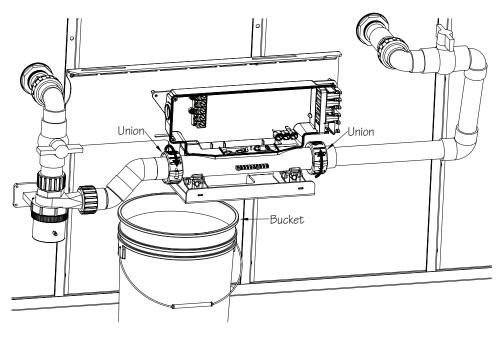
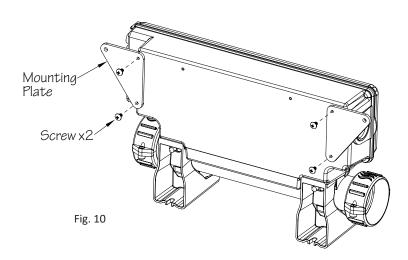
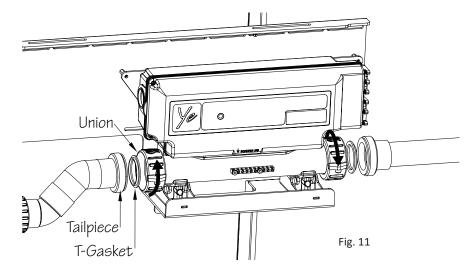


Fig. 9

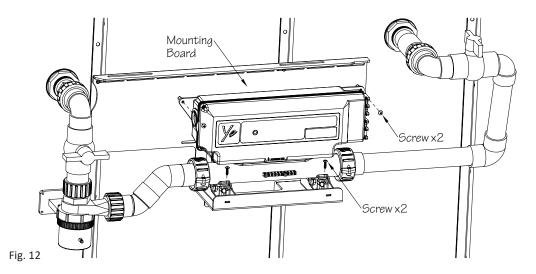
10. Remove the two Mounting Plates from the back of the controller by removing the screws. Attach the plates to the replacement controller (Fig. 10).



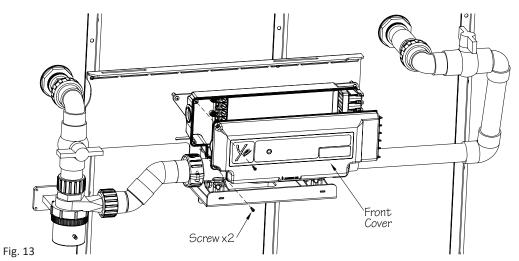
11. Position the replacement controller on the Mounting Board and align the inlet and outlet unions with the plumbing. Make sure a T-Gasket is installed between the Union and the Tailpiece. The raised section of the T-Gasket must sit in the groove of the Tailpiece. Thread each Union onto the Tailpiece. Do not over tighten (Fig. 11).



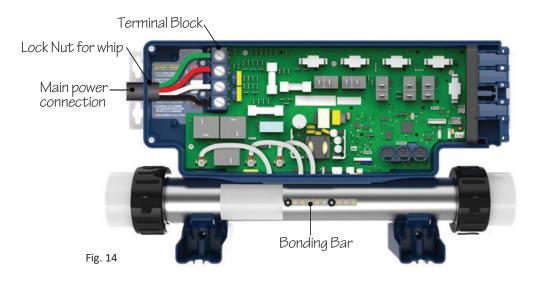
12. Secure the controller to the Mounting Board with four screws (Fig. 12).



13. Remove the front cover of the controller by removing the two screws (Fig. 13).



14. Secure the electrical whip to the controller and attach the incoming power wires to the Terminal Block. Re-attach the copper bonding wires to the Bonding Bar (Fig. 14).



- 15. Re-wire all pool equipment to the controller referencing the notes and pictures that were taken of the quick connect terminal and amp connector IDs when removing the components from the old controller. Call customer service with questions about wiring.
- 16. Once all components are wired to the controller, remove the cable clamps on the right side of the controller (Fig. 15).



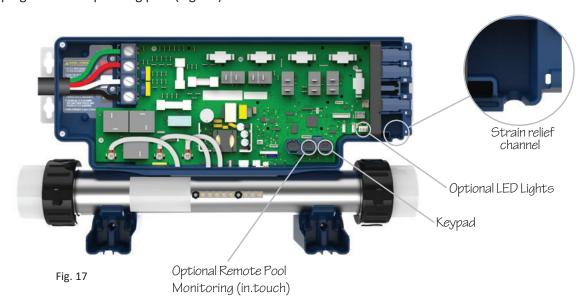
17. Place the cord for each component into a clamp. Each clamp can accept up to two cords. Reinstall the clamp into its original position (Fig. 16).



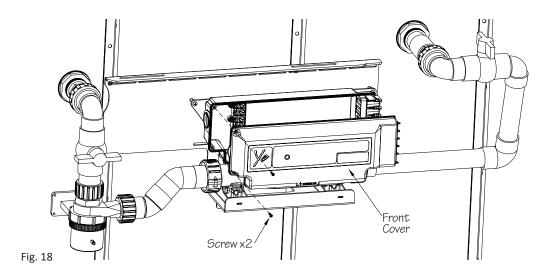


Fig. 16

18. Route the cord for the keypad, optional LED Lights (if present), and optional Remote Pool Monitoring System (if present) through the strain relief on the bottom right hand side of the controller and then plug into corresponding port (Fig. 17).



19. Re-install the front cover of the controller (Fig. 18).



20. Open the Ball Valve on the return side of the plumbing to allow the plumbing to fill with water. Then, open the Ball Valve above the pump (Fig. 19).

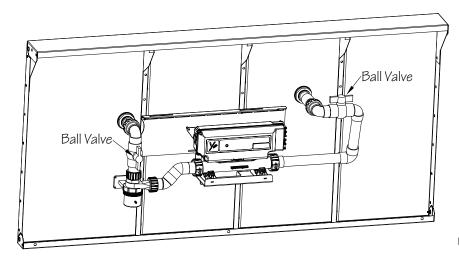


Fig. 19

Start Up Procedure

The Heater-Controller MUST be programmed for the Water Quality System to function. The programming of the controller is done on the keypad display. Refer to the chart below to determine the appropriate Low-Level configuration for the product purchased. Proceed to the following page to program the controller.

Low-Level	Endless Pools Model
LL1	Endless Pools Spa Series (shipped after 11/1/2011) WITHOUT Optional Gas Heater
LL2	 Original Endless Pool, Performance Endless Pool, High-Performance Endless Pool, Elite Endless Pool, Dual Propulsion Endless Pool, WaterWell, Fastlane Pool, Fiberglass Pool WITHOUT Optional Gas Heater (MAX TEMP 92F). Swim Spa (shipped prior to 11/1/2011) WITHOUT Optional Gas Heater (MAX TEMP 92F).
LL3	Endless Pools Spa Series (shipped after 11/1/2011) WITH Optional Gas Heater
LL4	 Original Endless Pool, Performance Endless Pool, High-Performance Endless Pool, Elite Endless Pool, Dual Propulsion Endless Pool, WaterWell, Fastlane Pool, Fiberglass Pool WITH Optional Gas Heater (MAX TEMP 92F). Swim Spa (shipped prior to 11/1/2011) WITH Optional Gas Heater (MAX TEMP 92F).
LL5	 Original Endless Pool, Performance Endless Pool, High-Performance Endless Pool, Elite Endless Pool, Dual Propulsion Endless Pool, WaterWell, Fastlane Pool, Fiberglass Pool WITHOUT Optional Gas Heater (MAX TEMP 98F). Swim Spa (shipped prior to 11/1/2011) WITHOUT Optional Gas Heater (MAX TEMP 98F).
LL6	 Original Endless Pool, Performance Endless Pool, High-Performance Endless Pool, Elite Endless Pool, Dual Propulsion Endless Pool, WaterWell, Fastlane Pool, Fiberglass Pool WITH Optional Gas Heater (MAX TEMP 98F). Swim Spa (shipped prior to 11/1/2011) WITH Optional Gas Heater (MAX TEMP 98F).
LL7	SwimFit Pool (MAX TEMP 92F)
LL8	Streamline Pool (MAX TEMP 92F)

PROGRAMMING HEATER-CONTROLLER LOW-LEVEL:

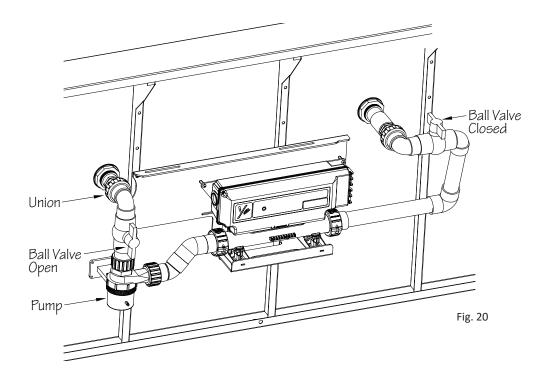
- Restore power to the pool equipment. The system will go through a boot up cycle. At the end of the
 cycle the keypad will display L or LL with a blinking number, representing the Heater-Controller
 configuration (Low-Level) number.
- 2. Use the Up Button on the keypad to toggle to the appropriate Low-Level for the model of pool present, **referencing the chart on the previous page.**
- 3. Press the Light Button on the keypad to store the setting. The system will go through another boot up cycle that can last up to 5 minutes. At the end of the cycle, the keypad will display the water temperature. If the keypad is flashing **FLO**, air may need to be removed from the plumbing. Refer to the procedure on the following page for removing air.

CHANGING HEATER-CONTROLLER LOW-LEVEL:

- 1. Press and hold the Pump Button on the keypad until **L or LL** with a blinking number is displayed. Remove your finger from the Pump Button when this happens. **NOTE:** It will take approximately 30 seconds for the **L or LL** to appear on the screen while holding Pump Button.
- 2. Use the Up Button on the keypad to toggle to the appropriate Low-Level for the model of pool present, **referencing the chart on the previous page.**
- 3. Press the Light Button on the keypad to store the setting. The system will go through a boot up cycle that can last up to 5 minutes. At the end of the cycle, the keypad will display the water temperature. **NOTE:** If the Light Button is not pressed within 25 seconds, then the programming change will not take effect.

Removing Air From Water Quality System

- 1. Shut off the power to the pool equipment.
- 2. Close the Ball Valve on the return side of the plumbing. The Ball Valve on the suction side (above the pump) should be left in the open position.
- 3. Prior to completing this step, **cover the pump with a towel to prevent it from getting wet.** Partially crack the Union open that is at the top of the pre-plumbed assembly above the pump (Fig. 20). This will allow any air trapped in the plumbing to escape. Once all air has been released, tighten the Union, open the Ball Valve, and re-supply power to the equipment. Allow up to 5 minutes for the controller to fully re-boot.



4. Once the system is fully operational, re-install the Isolation Cover (Fig. 21).

