

Watkins Manufacturing Corporation

INSTALLATION

Of your **ACE System**

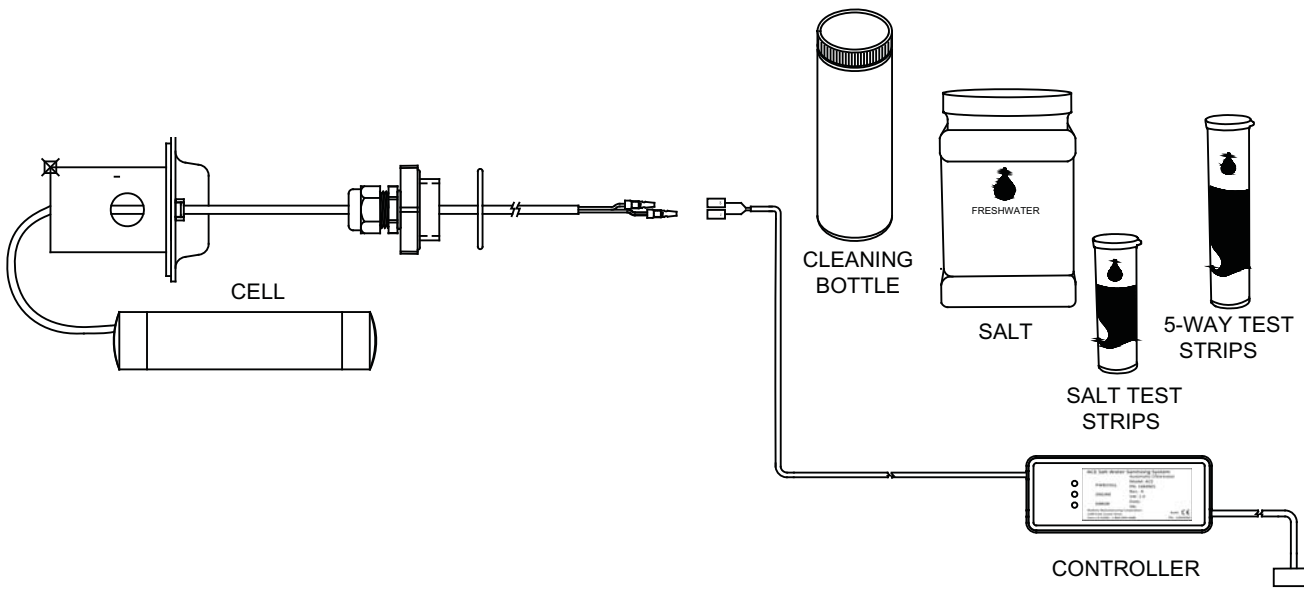


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INSTALLATION REQUIREMENTS

KIT INCLUDES

Vanishing Act



Controller
(PN 77401)



ACE Cell
(PN 76078)



$\frac{3}{4}$ " Vinyl Tubing
(PN 70315)



Test Strips



Spa Salt



Cell Cleaner Bottle



$\frac{3}{4}$ " Coupling



TOOLS REQUIRED

Cordless Drill



Large Channellock
Pliers



Needle-nose Pliers



Phillip Screwdriver



Phillips Screwdriver Bit



Hose Pinch-Off Pliers
(3 pairs)



CELL INSTALLATION

STEP 1 REMOVE PLUG

Remove “Pass-Through Plug” from inside filter compartment (Figure 1.1 & 1.2).

NOTE

Make sure water level is below Pass-Through Plug before removing plug.

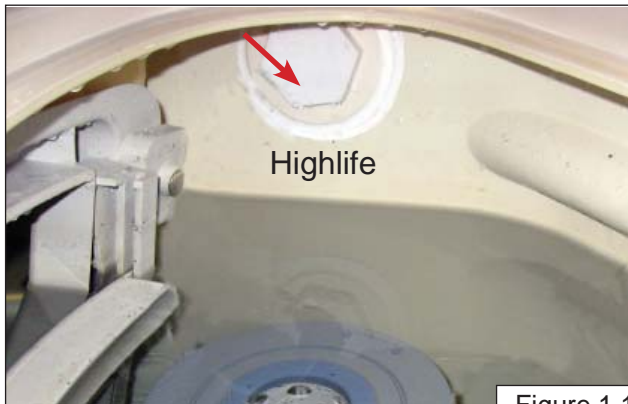


Figure 1.1

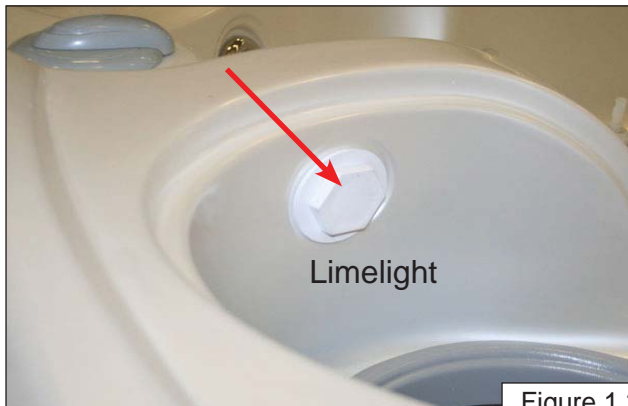


Figure 1.2

STEP 2 INSERT NEW ACE WIRES

Insert new Pass-Through Fitting (attached to ACE cell with wires), pull wires into equipment compartment (Figure 2.1). Tighten Pass-Through Fitting.



Figure 2.1

If string is attached to plug (Figure 2.2), cut string and securely attach end of the string to the cell wires. Pull cell wires into equipment compartment using the pink string (Figure 2.3) then tighten Pass-Through Fitting (Figure 2.1).

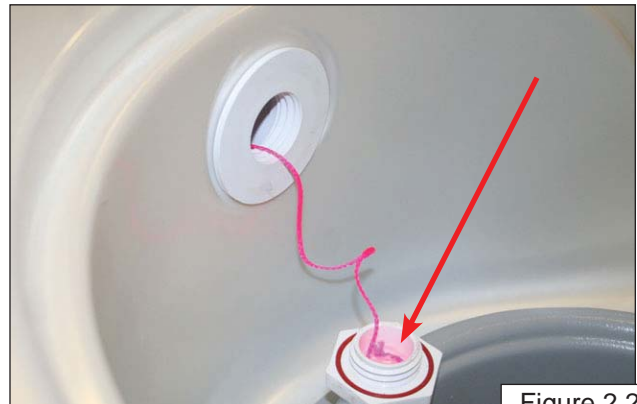


Figure 2.2

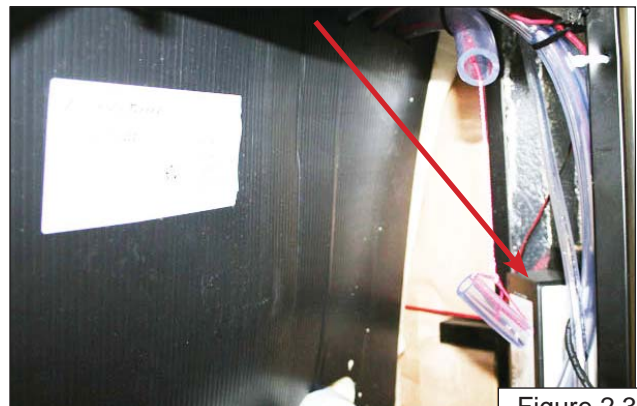


Figure 2.3

CELL INSTALLATION

STEP 3 REMOVE FILTER CAP

Remove gray filter cap on Highlife spas and single filter cap on Limelight spas.



Figure 3.1

STEP 4 CHANGE CABLE LENGTH

LIMELIGHT ONLY

The ACE cell is configured for operation in Highlife spas. **When used in Limelight spas**, the cell's cable length needs to be extended to one of two additional lengths. The cable is premarked showing the two new strain relief locations.

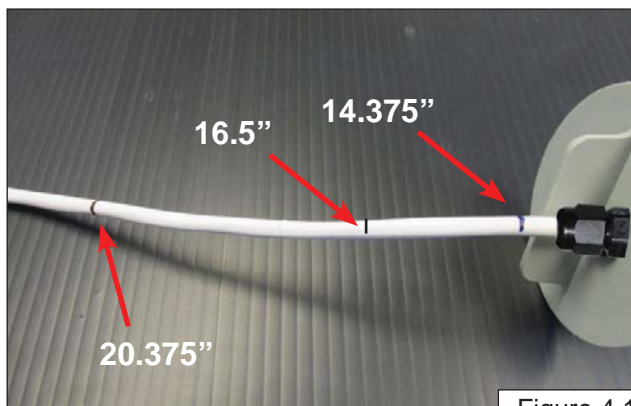


Figure 4.1

Locate the appropriate mark:

1. a. For Pre-2018 Limelight models except Gleam use the first mark. (14.375" from bottom of cell, *Figure 4.1*)
- b. For the Gleam use the 3rd longer mark (20.375" from bottom of cell *Figure 4.1*)

c. For 2018 - current models, use the 2nd mark (16.5 from bottom of cell.

Figure 4.1

2. Loosen the strain relief on the filter cap. (*Figure 4.2*).



Figure 4.2

3. Align the top of the strain relief at the appropriate mark so that the mark is barely visible.
4. Tighten the strain relief.

STEP 5

INSERT CELL

Lower Cell into center of filter (*Figure 5.1*).



Figure 5.1

Tighten new filter cap to filter standpipe (*Figure 5.2*). Ensure Cell is fully seated by feeling for the suction of the pump pulling the Cell in while the pump is on.

CELL INSTALLATION



Figure 5.2

REMOVE OZONE

STEP 1 REMOVE POWER

Disconnect Power to spa.

STEP 2 REMOVE OZONE WIRES

DANGER



Disconnect Power to spa before opening the IQ2020 Control Box to prevent possible electrocution

Open IQ 2020 Control Box and remove power wires from Ozone unit.

STEP 3 REMOVE OZONE INJECTOR

- Cut new $\frac{3}{4}$ " tubing to fit between (Figure 6.1 A & B) (your equipment compartment may look different).
- (Optional) Use supplied coupling to connect new tubing between Figure 6.1A and Injector.
- Remove Ozone Injector hose assembly from spa inside equipment compartment by first loosening the hose clamps at both ends of the hose assembly (heater outlet and return

REMOVE OZONE

wall fitting (Figure 6.1 A & B)). Slide hose clamp on wall fitting side to heater side.

IMPORTANT: If water is in the spa, use the Hose Pinch-Off pliers. Pinch-Off between circulation pump and Heater, Bleedline on back of heater, and between heater outlet and wall fitting (Figure 7.1 & 7.2).

- Remove tubing at heater outlet side first, remove both hose clamps and place onto each end of new tubing. Place new tubing onto heater outlet side (Figure 6.1A)
- Remove tubing at wall fitting side (Figure 6.1B) and quickly replace new tubing onto wall fitting to minimize the amount of water entering into the equipment compartment.
- Place hose clamps back onto each end of new tubing (Figure 6.1 A & B).

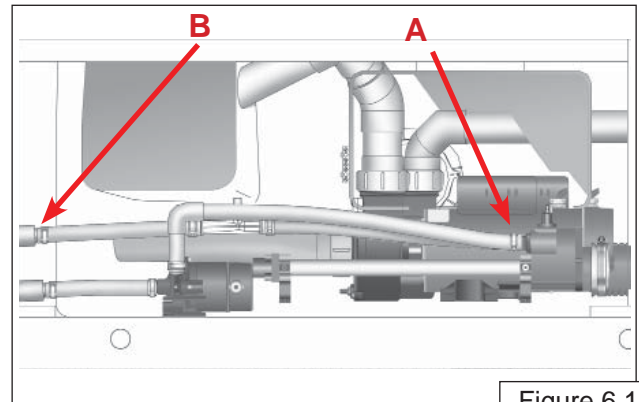


Figure 6.1

STEP 4 REMOVE OZONE UNIT

Remove the Ozone Unit and Ozone tubing from spa wall.

CONTROLLER WIRING

STEP 1 ATTACH CONTROLLER

Attach Controller to:

- ACE Cell (Figure 8.1a)

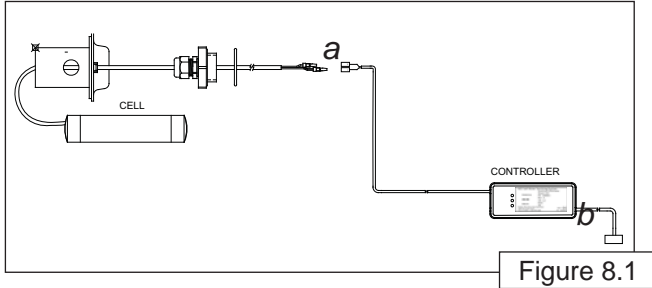


Figure 8.1

UPDATE THE CONTROLLER WITH THE LATEST SOFTWARE RELEASE

NOTICE: When installing this ACE Controller:

- Load the latest control box software per DETECTIVE
- Set Configuration Menu Jumpers as follows:

SPA SIZE A (J33)	DISABLE (-)
SPA SIZE B (J34)	DISABLE (-)
AUTO WATER CARE (J35)	DISABLE (-)

J33, J34, J35 refer only to Limelight Spas with red LED display in control head.

DANGER



Disconnect Power to spa before opening the IQ2020 Control Box to prevent possible electrocution

ACE WIRING TO IQ 2020

STEP 1 COMM WIRES TO SPA

Attach Comm wire from Controller (Figure 8.1b) to IQ 2020 control Box (Figure 9.1a).

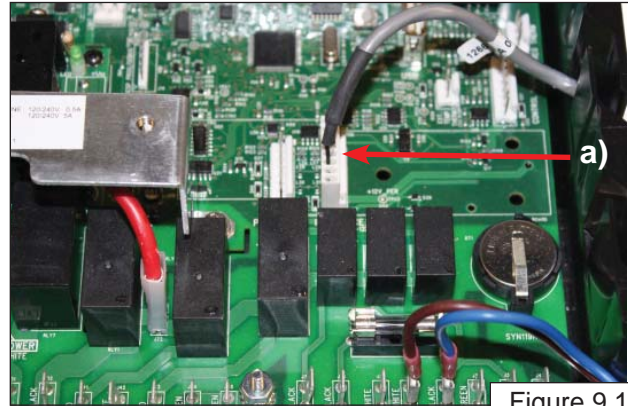


Figure 9.1

STEP 2 CLOSE SPA

Close IQ 2020 Cover & Equipment Compartment. Reconnect power to spa.

