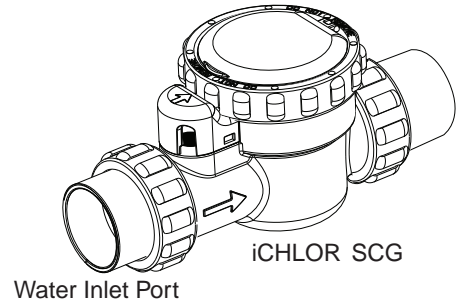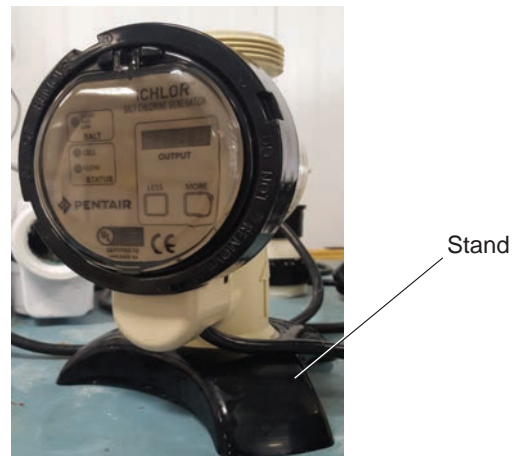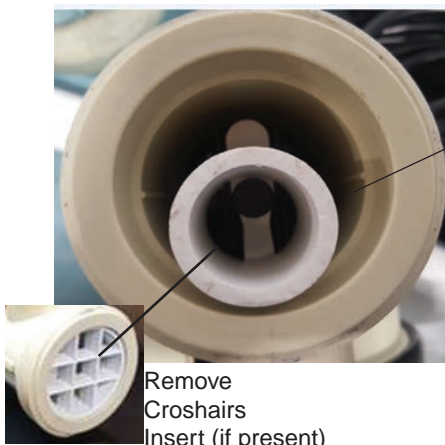**PENTAIR**

iCHLOR® SALT CHLORINE GENERATOR (SCG)
TEST KIT (P/N 523449)
INSTALLATION INSTRUCTIONS

What you will need to perform the iCHLOR SCG test:

- Pentair iCHLOR SCG Power Supply (PC100)
- Cell Stand
- Stand O-Ring
- Flow Switch Activator (PVC Pipe – 1"diameter x 1.78" length)
- 1 gallon of water [*not included in kit*]
- Pool Salt (99.8% or higher pure NaCl) [not included in kit]

iCHLOR SCG

Water Inlet Port

1. Make 3500 ppm salinity test solution. Use calibrated salt meter to confirm salinity. It is recommended to use 12-13 grams of salt to one gallon of water. The TDS in tap water will affect the amount of salt needed. The water temperature should be around 77°F (room temperature).

2. Place the O-Ring in the Stand.

3. Remove the iCHLOR Crosshair Insert if present in the Water Inlet Port of the iCHLOR SCG. Insert PVC pipe into the Water Inlet Port of the iCHLOR SCG to activate flow switch, then thread the Water Inlet Port onto the Stand.

Flow Switch Activator (PVC Pipe)

Stand

Remove Croshairs Insert (if present)

4. To apply power to the iCHLOR SCG, connect power cable to the iCHLOR Power Supply, then plug the iCHLOR SCG Power Supply into a 120VAC wall outlet.
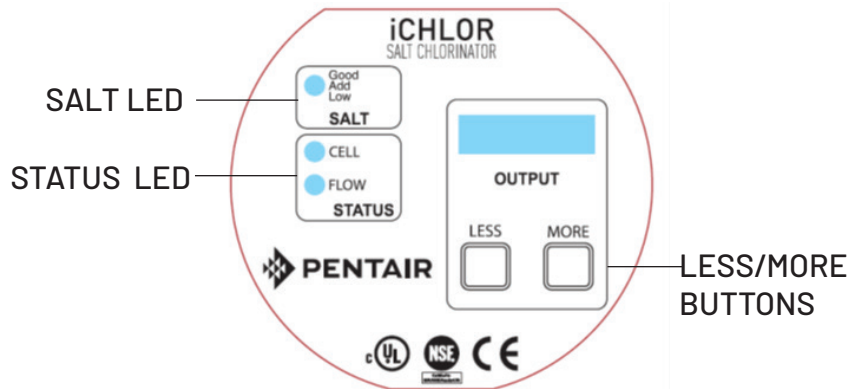
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5. Set the Chlorine output to "0 %" by pressing the LESS button when Output is flashing on the digital display.

   The digital display will stop flashing after a few seconds after the desired setting is programmed.

6. Pour test solution into water outlet port of the iCHLOR® SCG and fill until water level is above the cell blades.

7. Verify that the FLOW LED is GREEN on the iCHLOR SCG control panel, indicating flow switch is activated and unit is operating.

• If FLOW LED is red, the flow switch has not been activated. Check that Step 3 has been completed, and that the Stand is fully threaded into the iCHLOR SCG.

• If FLOW LED remains red, then Flow Switch has a malfunction and needs to be replaced.

• If CELL LED has a "short flash RED", the unit has deteced a malfunction on the temperature sensor and the Flow Switch needs to be replaced.

8. The SALT LED will flicker between RED to GREEN for about 2 minutes as it takes readings. After 2 minutes the SALT level LED will display. If the SALT LED is flashing GREEN after 2 minutes, then the unit has detected a salinity level above 4500 ppm. Verify salinity of test water.

9. Press and hold the MORE button for 3 seconds to enable "Diagnostic Mode". The SALT and STATUS LEDs will light up in sequence when the diagnostic mode is activated.

iCHLOR Salt Chlorine Generator Test Kit Installation Instructions

10. After "Diagnostic Mode" has been enabled press MORE to advance to the next screen. You will not be able to go back to the previous screen. You can only advance by pressing the MORE button to view the next screen. See table below for the sequence of the diagnostic mode tests.

The unit will default out of the Diagnostic Mode after about five seconds if no buttons are pressed. Repeat step 9 to return to Diagnostic Mode.

Description	Pass/Fail Criteria	
Total Cell Hours	Displays hours iCHLOR® SCG has been operating.	The iCHLOR SCG is designed to operate for approximately 10,000 hours before replacement is needed.
Water Temperature	Displays current water temperature.	Water Temperature must be above 52°F to produce chlorine.
Water Salt Level	3500 ppm ± 300 ppm	If salinity is low, acid wash cell blades and retest. (See "Acid Wash Cleaning" in iCHLOR® User's Manual).
Cell Voltage	11.7 V ± 2V for iChlor15 19.6 V ± 2V for iChlor30	If voltage is high, acid wash cell blades and retest. (See "Acid Wash Cleaning" in iCHLOR User's Manual). If voltage display is blank, press the LESS button while on this screen for the unit to take cell voltage reading.
Firmware Revision	Displays Revision (r XXX)	

Optimum Pool Water Chemistry Conditions for Salt Water Pools

Free Chlorine: 2.0 - 4.0 ppm. Above 4.0 ppm may cause corrosion of metal components

Combined Chlorine (Chloramines): None (super chlorinate to remove all chloramines)

pH: 7.2 - 7.8 (USE MURIATIC ACID to lower pH and Soda Ash to raise pH.)

Cyanuric Acid:	30 - 50 ppm
Total Alkalinity:	80 - 120 ppm
Calcium Hardness:	200 - 400 ppm
TDS (includes salt):	3000 minimum to 5700 to 6000 maximum ppm
Salt:	3000 - 4500 ppm (ideal 3600 ppm)
Metals (Copper, Iron, Manganese):	None
Nitrates:	None
Phosphates:	Less than 125 ppb
Saturation Index	-.3 to .3 (zero (0) best)

Customer Support: Phone: 800.831.7133

PENTAIR

P/N 523450 4/2019