

ChlorMaker Optional Kits



CMIL-KIT

CMIL-KIT: Concealed electrode



CM-PS-HIDE

CM-PS-HIDE: Concealed Power Supply



CM-CELL-HIDE

CM-CELL-HIDE: Concealed Cell

Model Compatibility

CMIL-KIT: ChlorMaker only

CM-PS-HIDE: ChlorMaker, SmarterSpa, MegaChlor

CM-CELL-HIDE: ChlorMaker, SmarterSpa, MegaChlor

INSTALLATION INSTRUCTIONS

CMIL-KIT: This kit includes the parts needed to install the ChlorMaker electrode in-line with the Spa's existing plumbing which will remove the electrode from view. The Spa should have a continuously running small pump for consistent operation of the ChlorMaker. If the pump turns off the ChlorMaker should also turn off so chlorine generation will stop when there is no flow. **WARNING:** Making chlorine in the pipes when there is no water flow is dangerous and can lead to damage.

CM-HIDE: This kit allows for installing the power supply in the spa's equipment area. If there isn't a GFCI outlet near the spa this may be an easier option than installing an outside outlet. In colder areas it is recommended to install the power supply in a warmer area such as with the spa's equipment.

CM-CELL-HIDE: This kit allows for installing the cell/electrode in the spa's filter area. The cable grips are water tight and will keep water from leaking from the filter area in with the equipment.

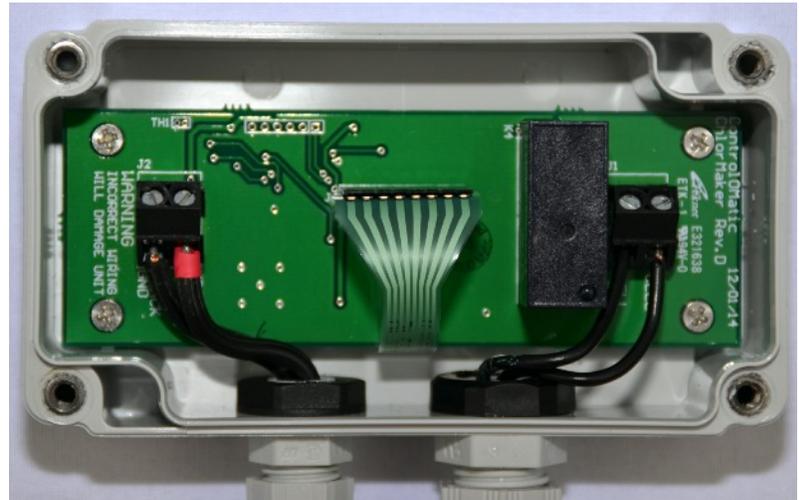
WARNING: The ChlorMaker is safety certified and using either of the installation options provided by these kits may void the certification for the ChlorMaker as well as the spa.

CM-PS-HIDE

This concealed installation kit allows the ChlorMaker power supply to be installed near the spa pack in the equipment area of the spa. **WARNING: Spa Dealers or Licensed Electricians are required to install this option.**

CM-PS-HIDE PIGTAIL INSTALLATION

- 1. Shut Down Main Power:** Shut down main power to the spa by turning off the circuit breaker. Open access panel to the spa exposing the spas plumbing area and the Spa Pack. The Spa Pack contains all of the spas electronic and electrical components.
- 2. Find 24-Hour Power Source Location:** Open the spa pack and locate a power source that has continuous 24-Hour power. The spa owners manual may be needed to identify a 24 hour power source connection. Route the black, white and green wire end of the power cord pigtail through the bottom of the Spa Pack. Connect the Black (Line), White (Common) and Green (Ground) to the 24-Hour 110 or 220 VAC Power Source.
- 3. Pump Not Continuous:** If the pump is on a limited number of hours per day the pigtail should be wired into the same circuit as the pump to ensure the ChlorMaker is off when there is no flow.
- 4. Power Cable Through Spa Skirt:** Drill a 5/8" hole below the ChlorMaker control box and below the black power cord exiting the control box. Install the cable grip in the hole and tighten it down.
- 5. Route ChlorMaker Power Cable:** Open the ChlorMaker control box and remove the black power supply cable, a small flat screwdriver will be required. **WARNING:** One of the wires will have red tape, make sure the red tape doesn't come off as reversing the wires will damage the control box. Disconnect the power cable inside of the control box. Feed the power cable from the cabinet side of the skirting through the cable grip and reconnect the cables to the control box. **WARNING:** The polarity of the power supply can't be reversed or the control circuit will be damaged; the wire marked with **RED** connects to the +5 terminal, and the other wire goes to the GROUND connection. If there is no red tape you may need to measure the voltage when the power supply is on to make sure the connection is correct.
- 6. Connect the Power Supply:** Route the cable to where the end of the 2 foot pigtail is and connect the cable to the power supply and plug the power supply into the pigtail.
- 7. Verify Operation:** Tighten all of the cable grips on the ChlorMaker box, reattach the ChlorMaker lid to the base and to the spa. Turn the spa back on and verify operation of the ChlorMaker. If the pump can turn off verify that the ChlorMaker turns off if the pump is off.

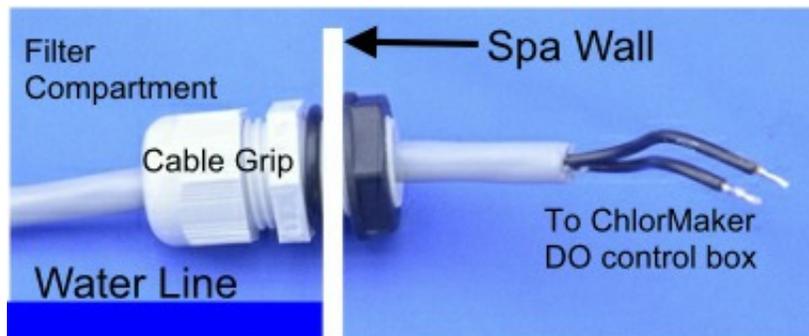


CM-CELL-HIDE

This concealed installation kit allows the ChlorMaker cell/electrode to be hidden in the spa's filter compartment. The filter compartment must be large enough for the cell to be easily accessed in the future and in a vertical orientation. The chlorine may be more concentrated in the filter area when the pump is off, installing in the filter area is recommended for spas with a 24 hour continuous circulation pump. **WARNING: Spa Dealers or Licensed Electricians are recommended to install this option.**

Cable Grip INSTALLATION

- 1. Shut Down Main Power:** Shut down main power to spa by turning off the circuit breaker. Open access panel to the spa exposing the spas plumbing area and the Spa Pack. The Spa Pack contains all of the spas electronic and electrical components.
- 2. Spa Skirt Hole:** Drill a 5/8" hole below the control box and below the cell/electrode cable exiting the control box. Install one cable grip with the nut on the inside of the spa skirt. Open the ChlorMaker control box and remove the electrode cable, a small flat screwdriver will be required. The electrode wires are not polarity sensitive.
- 3. Cell in Filter Compartment:** Drill a 5/8" hole in the spa's fiberglass shell inside the filter compartment and above the waterline. Make sure the location of the hole is above the spa's normal water line and provides a direct line or pass-through to the spa cabinet. NOTE: Some spas like Hot Spring Spas already have a pass through plug inside the filter compartment. In this case drill the hole through the center of the pass-through plug instead of the fiberglass shell.
- 4. Water-Tight Cable Grip:** Insert the threaded side of the water-tight cable grip into the 5/8" hole so the threads are on the side of the spa cabinet. Make sure the rubber gasket is on the water side of the threads as shown in the picture. Tightly fasten the hexagonal threaded nut on the equipment side or spa cabinet side of the hole.
- 5. Run the Cable:** Run the cable through the filter compartment cable grip and route the cable to the cable grip below the ChlorMaker control box and into the control box. Insert the wires into the terminals for the cell and tighten, the polarity of the cell doesn't mater. Tighten the cable grip nut on the water side of the spa wall. Make sure it is tightened just beyond hand-tight so the rubber seals inside and outside of the cable grip will seal properly.
- 6. Finishing Up:** Tighten the cable grips on the ChlorMaker box, reattach the ChlorMaker lid to the base. Turn the spa on and verify operation.



CMIL-KIT

The ChlorMaker in-line installation requires an existing circulation pump in the spas equipment area that is on 24 hours a day. These pumps are very small and usually have 3/4" vinyl tubing which makes installation relatively easy. If there isn't a 24 hour pump the ChlorMaker can be a challenge to install and isn't recommended for the following reasons:

1. The chlorine production will be unpredictable, the main pump is typically not on the same amount of time per day
2. The existing pump time will need to be increased to give the ChlorMaker enough time to make the needed amount of chlorine, this will lead to higher energy costs
3. There will not be a suitable location to install the cell; a bypass will be needed from the main plumbing.
WARNING: Do not install the cell with the main water flow, damage will occur.

The power supply will need to be controlled with the same voltage that turns on the circulation pump. You do not want the ChlorMaker making chlorine when there is no water flow because gasses will accumulate in the plumbing.

In-Line Installation

1. Open the spas equipment panel. Turn the SPA off at the circuit panel
2. Locate the continuous (24 Hour) circulating pump and the 3/4" tubing connected to the pump. If the pump has a different size tubing, adapters will be needed. The cell has 3/4" NPT female threads
3. Install the cell on the OUTPUT side of the pump. The tube will need to be cut and reconnected to the cell. Additional tubing may be needed if the existing tube is not long enough or is hard to access
4. The location of the cell should have no obstructions at the cable end of the cell. This is to allow for cell removal, replacement and cleaning
5. Water shut-off valves (not included) may be installed at (D) to aid in future maintenance and cleaning of the cell
6. Install the two pipe brackets (A) with the 2 screws. A suitable location also includes an appropriate mounting surface for the screws. Do not install the brackets to insulation
7. Install the two 3/4" barb fittings to the cell using Teflon tape. The cell should be mounted vertically to prevent chlorine gas from being trapped inside the cell. Based on the location of the install, decide if the 90 degree barb fitting should go on the side or the top (B and C)
8. Connect Tubing To Cell: Cut the existing tube and reconnect the ends to the two 3/4" barb fittings on the cell. Use the supplied clamps at (B and C) to securely fasten the tube to the barbs on the cell. Note that some water will spill from the cut tube even though the spa has been drained or shut-off
9. The cell cable (F) needs to be routed to the ChlorMaker box. Follow the instructions in CM-CABLE-HIDE part 2 to remove the cable and install the cable grip.
10. Remove the electrode from the drape over cell, apply Teflon tape and install the electrode into the in-line cell.
11. When the cell (E) is removed for cleaning or during installation, use the 1" plug to seal the hole

