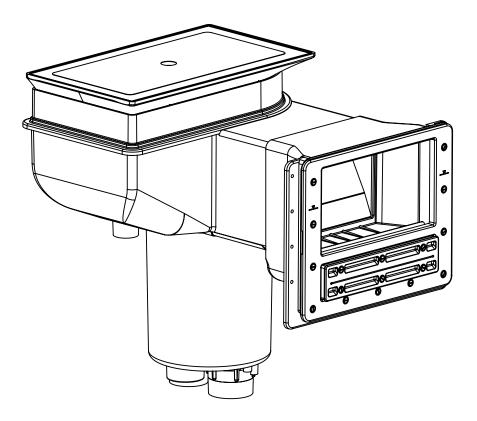


# LIA GENIE TM

The Automatic Way to Keep Pools Clean and Healthy



INSTALLATION INSTRUCTIONS

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Rev. Date: 07/11/2011

Document ID: HM038 Aqua Genie Installation

# **OPERATING & MAINTENANCE INSTRUCTIONS**

# AquaGenie SKIMMER/FEEDER

AquaGenie removes floating debris from surface water much faster than ordinary skimmers. In addition, it provides a constant controlled supply of chlorine to pool water automatically. AquaGenie catches fine dirt, leaves, pollen, floating germ-laden scum before it becomes suspended in the pool water or settles to the bottom. (Ten times as much water must be run through filter to remove suspended dirt as to remove dirt caught while still on the surface.)

# **Operation**

The **AquaGenie** feeder is operated by water being returned by the filter to the pool. This clean water is directed down and out through a nozzle slot in the orifice plate. The sheet-like jet of water created by this action causes counter currents which increase the effectiveness of the **AquaGenie's** skimming action. Pressure built up in the pressure chamber (behind the orifice plate) diverts some of this water through the tubing into the feeder tray. In the feeder tray a supply of chlorine is being constantly dissolved. Chlorineladen water now pours over the tray's V-notch into the main sump of the AquaGenie, where it disinfects the water being drawn into the skimmer. Chemically treated water is then sent to the filter for removal of solids and is returned to the pool. If you desire to return the filtered water to the pool through an auxiliary return fitting, or through a jet nozzle installed on optional stairs, it's important to maintain water flow to the **AquaGenie**. If the pool is equipped with such an auxiliary return, there should be a valve on the return line to the AquaGenie, and another valve on the line to the auxiliary return fitting. When using the auxiliary return line, don't close the valve on the **AquaGenie** return line. Keep it "cracked open" enough to continue a flow of water to the **AquaGenie**. Enough back pressure will develop to keep the feeder operating. As long as water is leaving the feeder tray over the Vnotch, it is being chlorinated and returned to the circulatory system. For full benefit of Aqua-Genie's automatic skimming and chlorinating, do not use auxiliary returns unnecessarily. Keep **AquaGenie** operating normally, with full flow as continuously as possible.

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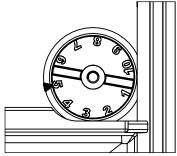
# AquaGenie Canister

Carefully read directions and cautions on **AquaGenie** canister .Insert canister in feeder tray with canister cap being near the outside wall of the feeder tray. To prevent the possibility of a highly concentrated chlorine solution remaining in the feeder, or entering the pool, the feeder tray will receive no water from pressure chamber, and will automatically drain if the filter pump is shut down, or if there is a power failure.

Never put any material in the feeder tray other than AquaGenie canisters and Trichloro tablets. Contact with other brands of chlorine tablets may cause a violent reaction or explosion

# Adjusting Chlorine Levels Start with an initial setting of 5 on the chlorinator

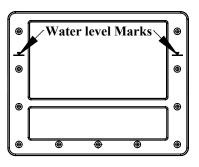
Start with an initial setting of 5 on the chlorinator adjustment valve. Check your chlorine level and adjust to the desired level. 1 is the lowest setting with 10 being the highest. (see Sketch #1). When replacing cartridge turn to lowest setting before removing.



Sketch #1

# Maintenance

Always maintain water level of pool up to the water level marks on the **AquaGenie** face plate (see Sketch #2). Flow should be over the weir. Always bring water level up to marks as soon as possible.



Sketch #2

## **Vacuuming**

1. Clean baskets before vacuuming. Backwash filter before and during the procedure, if the condition of the filter bed hampers flow.

2. Screw a plastic insert fitting in the vacuum adapter plate (5). Fill vacuum hose with water, attach hose to fitting and drop adapter plate over basket (or simply insert vacuum hose in adapter plate).

The adapter plate is tapered to seal against the seat in the **AquaGenie's** main sump.

3. Debris vacuumed off the bottom will be caught in the basket. Some material (hair and grass, for example) may pass through to the pump strainer. Finer material will be caught in the filter.

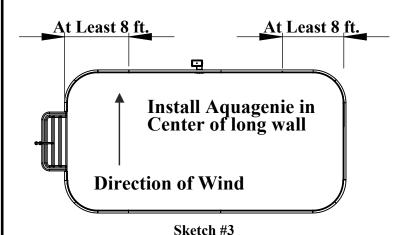
# INSTALLATION INSTRUCTIONS

#### INSTALLATION INSTRUCTIONS

Read Completely Before Starting Installation. Refer to exploded view and parts list for proper nomenclature

# LOCATIONS OF AQUAGENIE

AquaGenie should be located near the center of a long side of the pool. Vary the location to orient the AquaGenie's mouth towards the prevailing winds as with ordinary skimmers. The action of AquaGenie will be effective as long as It is installed at least eight (8) feet from either end. Choosing the correct location is important, but is not as critical as with ordinary skimmers. (see sketch #3)



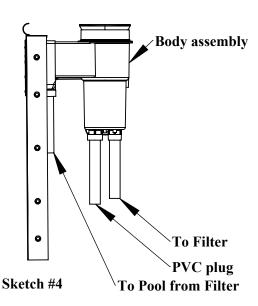
#### PIPE ADAPTERS

Insert pipe adapters into the pressure throat port and the bottom port of the **AquaGenie**. Use the proper sealant (Permatex #51 Pipe Joint Compound or equal) for threaded connections and PVC cement for rigid pipe connections.(See sketch #4).

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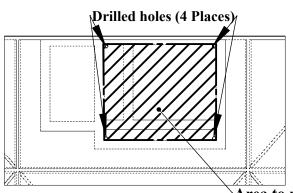
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# AQUAGENIE INSTALLATION ON FOAM WALL PANELS

Foam wall panels are designed with embossed area for AquaGenie mounting location. Drill holes (3/8" dia.) at each inside corner of large embossed area form the back of panel. Make cutout by using a straight edge on front of panel to connect the holes. (See Sketch # 5). Using a jig saw, cut from face of panel to remove the shaded area shown in the sketch. Place **AquaGenie** in cutout and use holes as a template, mark holes. Using a 3/32" drill bit, drill pilot holes at marked holes. Holes should not be drilled all the way through but a maximum of ½"deep. Place **AquaGenie** in cutout and mount from back with  $(8) \# 10 \times 3/4$  hex washer head type AB screws. (See Sketch # 5)



Sketch #5

#### Area to remove

**Knockout for Overflow** 

# **CUTTING NOTE**

The best results will be obtained by using a jig saw with 8 T.P.I. (fast cut, medium finish) blade. If jig saw is not available, use keyhole saw with 8-10 tooth combination blade. To prevent material buildup on saw blade, a cutting lubricant (water) should be used.



Sketch #7

#10 x 3/4" Hex Washer Head type AB Screw

Foam Wall Panel

O

# STEEL PANEL POOLS WITH FACTORY CUT OUT

Apply a small amount of proper sealant (Dow Corning or General Electric food grade silastic or equal) to one of the large gaskets and place it on the face of the **AquaGenie** body. Make sure the mounting holes align. Now align the holes in the assembly with the holes in the panel and mount with four #10 x 3/4" long slotted pan head screws. (See Sketch #7)

# **BLOCKING UP**

It is recommended to support the AquaGenie with a piece of l-112" pvc pipe in the proper receptacle, located in the bottom of the unit, and support on a level concrete block. *Do not* disturb the **AquaGenie** while providing this support. Shim until the pier bears the weight of the **AquaGenie** 

#### **PIPING**

Use as few elbows as possible in the piping of the entire recirculation system. Each elbow reduces the efficiency of the **AquaGenie** in particular and the entire filtration system in general.Be sure to double clamp the return line when it connects to the adapter in the pressure throat.Follow piping layout as closely as possible. (See Sketch #7)

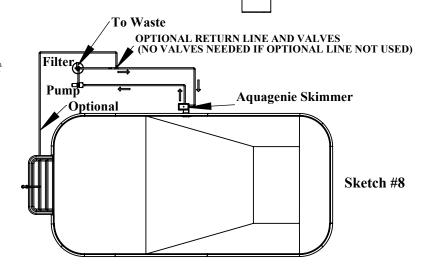
# **OPTIONAL OVERFLOW**

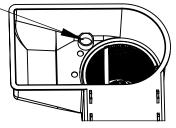
Remove knockout from bottom of skimmer body. Glue in a 1" x 5- 13/16" PVC pipe. (See Sketch #9)

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Sketch #9

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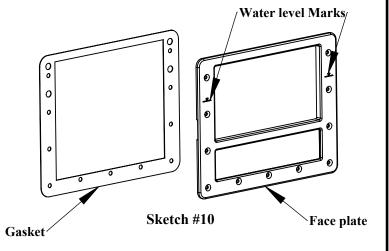
#### INSTALLING FACE PLATE

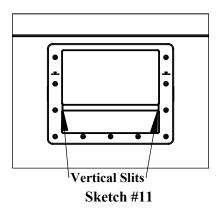
Apply a small amount of sealant to one side of one of the large gaskets (#2) to hold it temporarily while assembling. Place the adhesive side of the gasket on the face plate, aligning the holes. (see sketch #10) Before positioning the face plate assembly, make two small vertical slits in the vinyl liner as indicated on sketch #11. The purpose of these slits is to permit easier removal of the vinyl from behind the horizontal bar of the face plate after installation of AquaGenie. Carefully position the face plate/gasket assembly on the vinyl liner, covering the face of the AquaGenie. Pierce the liner through the top two holes of the face plate prior to inserting screws .Screw two Phillips head Hi-Lo screws into these holes using only a #3 Phillips screwdriver bit. Using any other size screwdriver bit will damage the screw head and prevent making a leak-proof seal. **DO NOT** completely tighten the two screws at this time. Allow the heads to project about \(\frac{1}{8}\)" from the countersink in the face plate. Now pierce the remaining holes through the face plate, and tighten screws to within 1/8" of countersink. Relieve tension on the vinvl liner *inside* the face plate by making crosswise slits in the vinyl as shown in sketch #12. At this point you may tighten all screws completely. (Uneven pressure may distort the face plate and cause uneven seating of gasket seal.) Excessive torque may break the corrosionresistant screws. After the face plate has been installed, carefully cut out the vinyl liner using a sharp knife. Cut the top edge and the two sides of the skimmer opening, and the top, bottom and two sides of the orifice opening. Grasp the triangular piece of vinyl remaining at the bottom of the skimmer opening to remove it. The vinyl from behind the horizontal bar will be removed at this time. (See Sketch #13)

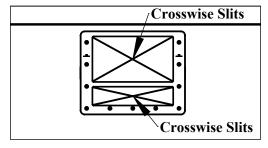
Only assemble the orifice plate after all piping is competed and flushed.

### ASSEMBLY OF ORIFICE PLATE

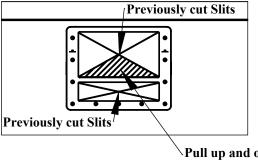
Apply a small amount of Permatex to the back of the orifice plate. Place a small gasket on the top, as marked, being certain all holes are aligned, and all edges are aligned. Before mounting the orifice plate to the AquaGenie, make sure that when assembled, the nozzle slot slopes downward. (See Sketch #14 on next page)







Sketch #12



Sketch #13

Pull up and out after cutting to remove triangular vinyl from behind horizontal bar.

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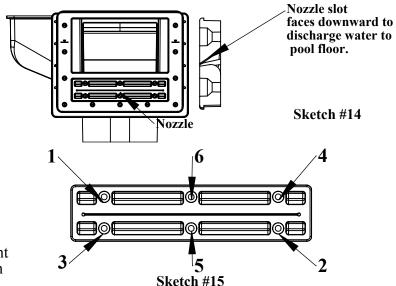
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Secure the assembly using six Hi-Lo screws. Again, use only a #3 Phillips screw driver. Tighten the screws evenly in the order shown on Sketch #15. Develop your final screw pressure by following this sequence 3 or 4 times, similar to the technique of tightening an engine head. The orifice plate is not designed to fit flush with the face plate. The amount of protrusion will vary with the type of pool wall (foam, steel, or wood). Do not over tighten! A torque of 20"-1 lb. maximum is permitted. Excessive torque may break the corrosion-resistant screws

### **BACKFILL**

All backfill around the feeder must be free draining coarse sand or fine gravel. It should be very carefully tamped into place with an implement such as a shovel handle in layers to give maximum support.



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# **AQUAGENIE BILL OF MATERIALS**

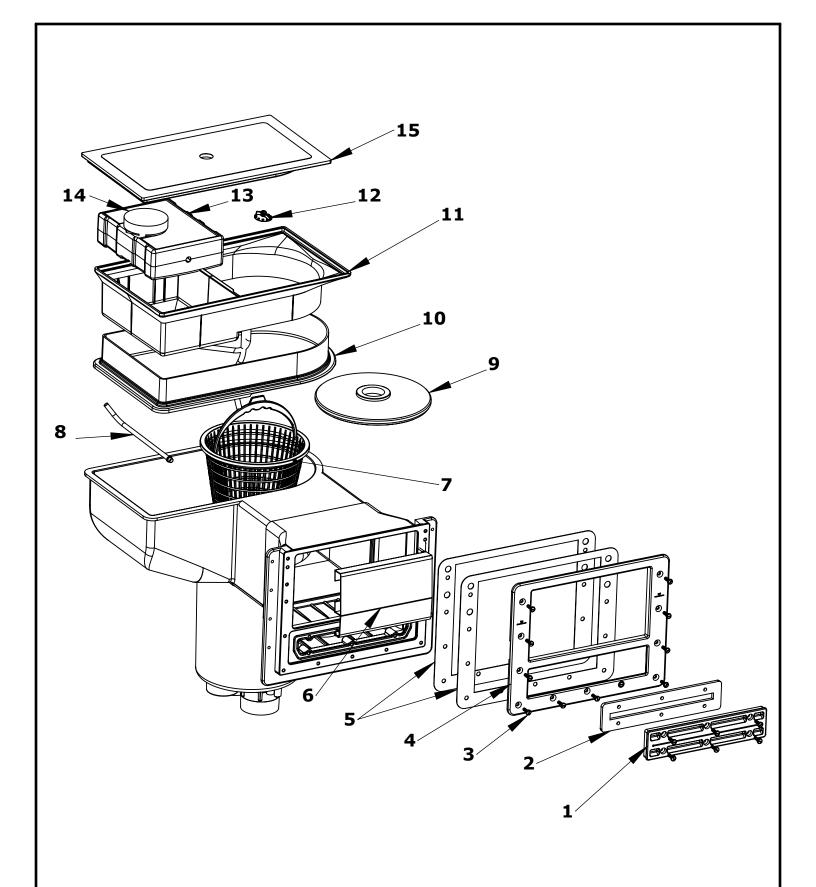
Item#	Part#	Description	# Required
1	HG110	ORFICE PLATE	1
2	HO2190	ORFICE PLATE GASKET	1
3	H00635	SCREW SET	1
4	HG105	FACE PLATE	1
5	HO1616	FACE PLATE GASKETS	2
6	HG150	WEIR ASSEMBLY	1
7	HG130P	BASKET (INCLUDES HANDLE)	1
8	H01691	SS FEEDER TUBE (WITH ORING)	1
9	HG115	VACUUM ADAPTOR	1
10	HG140	EXTENSION COLLAR	1
11	HG120	COLLAR FEEDER	1
12	HG155	VALVE ASSEMBLY (WITH HOSES AND O RINGS)	1
13	HG145	CARTRIDGE ASSEMBLY (WITH CAP AND LABEL)	1
14	H01664	CARTRIDGE CAP ONLY	1
15	HG125	COVER	1
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For replacement parts see your Dealer or visit www.aquagenie.com

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# Winterizing

We recommend using the patented AquaGenie Winter Cover, to order ask for part # H03116N to order go to aquagenie.com

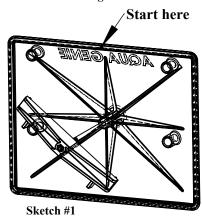
#### **Installing Winter Cover Gasket**

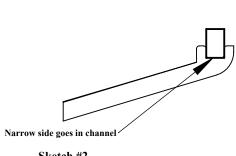
To install gasket

1.Start at the top center of the gasket channel (See Sketch#1)

2.Gasket is installed with narrow side of the gasket installed in channel(See Sketch #2)

2. Work gasket into channel making sure is well seated .

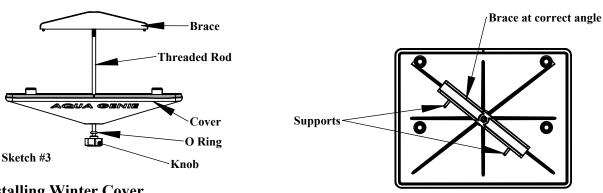




Sketch #2

#### **Assemble Winter Cover**

1.Place threaded rod through hole in winter cover ,assemble in the correct order. (See Sketch#3) Note: O Ring goes between Knob and cover.



#### **Installing Winter Cover**

1. Remove Aquagenie Cover to gain access for installation .(See Sketch #5)

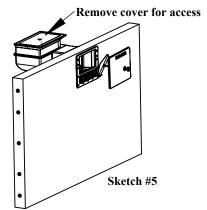
2. Orient brace from top to bottom corner of cover ,with supports facing down. (See Sketch #4)

3. Guide the assembled Winter Cover through Weir opening (you do not have to remove weir assembly) (See Sketch #5).Brace goes behind lip in pressure throat

4. Hold the cover against the faceplate with one hand and rotate the brace until it is horizontal

5. Turn knob by hand until gaskets seats on faceplate. Brace will tighten against lip on pressure throat. (See Sketch#6) (Caution: over tightening will distort the gasket)

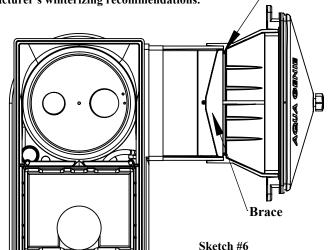
6. Drain water in basket well and follow pump and filter manufacturer's winterizing recommendations.



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Sketch #4

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Lip on pressure throat