

Profile Ponding Pondin

PRO 5000 SKIMMER

CARE AND OPERATING INSTRUCTIONS

PRODUCTS # 02475 and 02474 FOR PUMPS WITH FLOW RATES OF 1200 TO 5500 GPH

11/07

WARNING!

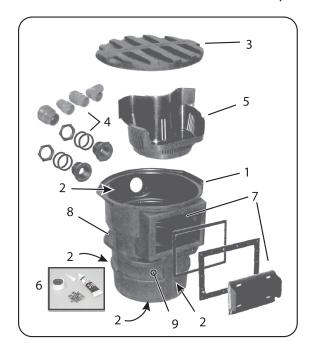
PONDS ARE DANGEROUS TO SMALL CHILDREN! NEVER LEAVE CHILDREN UNSUPERVISED NEAR A POND.

1

CONGRATULATIONS!

Thank you for purchasing your new PRO 5000 Skimmer. You now own one of the most advanced and efficient pond skimmers ever designed. Your PRO 5000 Skimmer has a number of features that set it apart:

- (1) Sturdy molded plastic construction
- (2) Maximum bulkhead placement versatility for optional drains / auxiliary water inlets
- (3) Reinforced Skimmer lid
- (4) Included bulkhead fittings for 1-1/2" and 2" tubing
- (5) Large capacity leaf basket. Pro 5000 Model 02474 also includes a Debris Filter Pad in the leaf basket.
- (6) Silicone sealer, Teflon tape and stainless steel screws included
- (7) Extra tall and wide Skimmer intake and weir
- (8) Anchoring fins to permanently stabilize Skimmer
- (9) Horizontal or vertical pump capable Low profile for minimal visual impact



The PRO 5000 Skimmer is large enough to accommodate a pump horizontally or vertically; its ribbed body strong enough to easily withstand soil and water pressures without caving in or shifting; the large weir and door are versatile enough to handle flows from 1200 to over 5000 gallons per hour. For larger than 10'x 20' ponds you should use two skimmers and two pumps. The reinforced lid easily supports the weight of a coping stone to conceal the low profile skimmer at the pond's edge (as well as the occasional visitor). The large capacity leaf basket with fish-safe wings allows for longer times between cleanings while keeping fish safely away from the pump intake, and the top handle keeps your hands away from debris and out of the water. All fittings and hardware to connect your Skimmer to either 1½" or 2" plumbing are included, as are stainless steel screws, Teflon tape and black silicone sealer. For maximum versatility, multiple flat panels accommodate optional overflow drains, multiple returns, and mid-water or bottom intakes to allow year-round operation even under surface ice. These features will reduce maintenance and afford you years of service and trouble-free operation.



ELECTRICAL PRECAUTIONS

Always use a properly grounded outlet. Do not immerse the plug in water. DO NOT REACH INTO THE WATER TO REMOVE THE PLUG. TURN OFF CIRCUIT FIRST. A "drip loop" in the cords should be used. A "drip loop" is a loop in the cord below the level of the receptacle or plug that prevents water from traveling along the cord. The national Electric Code requires that a ground fault interrupter circuit (GFCI) be installed in every branch circuit supplying the fountain or pond equipment. Your dealer can supply GFCI units. NEVER REMOVE GROUND PIN FROM PLUG.

WARNING: FOR YOUR PROTECTION, ALWAYS UNPLUG THE UNIT FROM ITS POWER SOURCE BEFORE INSTALLING OR SERVICING. DO NOT REACH, REMOVE OR DISASSEMBLE BEFORE YOU DISCONNECT POWER.

HOW YOUR SKIMMER WORKS

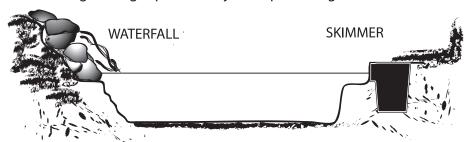
As the water inside the skimmer is pumped out, surface water pours in to equalize the water level, carrying floating leaves and surface debris into the skimmer basket before they can settle to the pond bottom. This "pulling" movement also reduces surface water tension, which facilitates the exchange of oxygen and carbon dioxide, helping the pond to "breathe". Proper placement of one or more skimmers around the perimeter of the pond can also eliminate areas of slow-moving or stagnant surface water in which mosquito larvae thrive. The PRO 5000 Skimmer can be fitted with a variety of pumps that return the water to the pond via a waterfall, fountain or return jet. The pump should always be shut off before emptying the basket. After the basket is back in place turn on the pump. See electrical warnings.

3 BEFORE YOU DIG, consider:

A) LOCATION

In a typical installation with the pump housed in the Skimmer, it can be set wherever the pump cord will reach an electric source; however, there are certain guidelines that will maximize the Skimmer's efficiency while minimizing esthetic impact. We recommend sealing the Skimmer to the liner so the Skimmer sits outside the pond perimeter for easier access to the basket and pump for cleaning and servicing. Its low profile of only 3" from top of weir opening to top of Skimmer makes it easy to conceal at water's edge with a flagstone or plantings. It should be located on the side of the pond farthest from the return, stream or waterfall for maximum circulation of the pond water. Since waterfalls and streams are typically visual focal points facing the viewer on the far side of the pond, setting the skimmer on the near side will help make it less noticeable and within easy reach for servicing. In larger ponds subject to prevailing winds from a

certain direction, the Skimmer may be placed where leaves and debris are likely to collect. Finally, make certain that the Skimmer is close enough to the electrical source for the pump cord to safely reach.



B) IN THE NEW POND...

If you are installing your Skimmer in a new pond, once the location of the pond and the Skimmer are set, decide where and how the pumped water is to be routed. The easiest way to conceal plumbing and filtration is to lay it all out before excavating, so this is the time to consider filtration and the type of return you would like, whether it be a stream or waterfall, a jet or fountain of water, or a simple return below the water's surface. You should know in advance if you will need biological or mechanical filtration, and plan accordingly so that you can set up the filtration elements before starting to dig. For example, to filter a pond stocked with Goldfish or Koi, you might wish to install a PONDMASTER Pressurized Filter in the return line, then a ProLine 5000 Biological Filter and Falls to create a waterfall into the pond or into a stream. Another choice might be to route the water to a fountainhead such as the PONDMASTER Aquabelle, for a decorative effect in a reflecting pool. If greater circulation of a larger pond is the goal, a return hose can be run directly to a deep pocket or a stagnant corner to create a current back to the skimmer.

C) IN THE EXISTING POND...

If your ProLine 5000 Skimmer will be housing a pump in an existing pond, the ideal location will be close enough for the pump's power cord to reach the power source, where the basket is accessible for cleaning and the water is at least 12" deep. You must also have enough slack in the liner so the skimmer opening can be sealed to it without wrinkles or pulling. Finally, the surface water must be able to flow into the Skimmer without obstruction. You may have to excavate around the existing edge to gain enough slack or even deepen the area in front of the liner opening by excavating under the existing liner from the outside.

4. OTHER OPTIONS

Although the most common configuration is to house the pump in the Skimmer and draw water in through the weir, your ProLine Pro 5000 may be connected in a variety of ways. For remote operation without a pump in the Skimmer, as when using an external, above-ground pump, your Skimmer may be plumbed to the pump with a bulkhead fitting installed on the back panel and the appropriate length of hose. There are also situations when an auxiliary inlet of water is desired, such as when the weir is blocked and/or inoperable during icing in winter, or when a mid-water or bottom drain inlet is desired for circulation, bulkhead fittings may be installed on the front panel or on the bottom as required. See separate section for details on Bulkhead Fitting Installation.



CHOOSING THE CORRECT PUMP

A good rule of thumb for garden ponds from 500 to 5000 gallons is to circulate the entire volume of the pond every 1-2 hours to ensure good circulation while providing enough flow for an esthetically pleasing waterfall, stream or fountainhead. Your Pro5000 Filter and Falls was therefore designed to perform equally well with pumps of 1000 to 5000 GPH capacity.

To minimize friction and maximize water flow, the bigger the diameter of the hose the better. Even upsizing from 1-1/2" to 2" Flex PVC hose can make a major difference in actual water flow.

We recommend our Pondmaster 1200 and 1800 submersible pumps for smaller ponds under 1000 gallons; our 2000 and 3000 HY-Drives and Pro 2100 and 2600 pumps for greater head heights; and for even greater flows, our Pro 3200-XP, 4000-XP and 4800-XP Hy-Drive pumps. If an above-water rather than submerged pump is desired, check out our single-speed X-2520, X-4140, or X-6120 X-Series External Pumps.

PONDMASTER PUMP REFERENCE CHART Name Model # GPH @ 1' GPH @ 5' GPH @ 10' Shutoff						Wattage Range*
Model 12	#02722	1200	800	600	13'6"	100 - 65
Model 18	#02728	1500	925	725	15'6"	125 -85
HY-Drive 1600	#02663	1750	1450	1050	17′0″	125 - 110
HY-Drive 2000	#02685	2250	1250	750	15′0″	195 -190
HY-Drive 2100	#02665	2100	1775	1325	22′10″	192 - 142
HY-Drive 2600	#02667	2600	2500	2025	26′7″	275 - 220
HY-Drive 3000	#02690	2800	2100	1350	15′3"	290 - 265
HY-Drive 3200	#02680	3700	2450	950	12′0″	195 - 185
HY-Drive 4000	#02675	4100	2800	1575	13′0″	240 - 225
HY-Drive 4800	#02670	5200	4100	2550	18'6"	255 - 240
HY-Drive 6000	#02683	5500	4700	3700	22'8"	690 - 550
X-2520	#02775	3100	1950	1250	10′10″	150 -100
X-4140	#02776	4300	4050	3050	13′5″	195 -125
X-6120	#02777	5350	5150	4750	15'6"	285 - 175

^{*} Watts decrease as pump loads increase during normal usage. Examples show range between 0' & shut-off; watts continue to decrease as flow decreases.



INSTALLATION OF PRO SKIMMER

Your PRO 5000 Skimmer is designed to easily seal to any flexible EPDM, PVC or Butyl Rubber lined pond, either new or existing. If you are installing your Skimmer in an existing pond, drain the pond down 1 to 2 feet before starting. If you are considering installing a lower, secondary water inlet, drill the hole for the bulkhead fitting before sealing the Skimmer to the liner. (See separate insert sheet for more information.)

EXISTING POND

PARTIALLY

DRAIN POND

WATERFALL

AREA

Dig a 30" square hole at the perimeter of the pond where you will be locating your Skimmer according to the guidelines set out in Section 3.

The depth of the hole depends on the maximum water level in your pond. The bottom of the hole should be 22" below the maximum water level, that point at which the pond starts to overflow into an overflow drain (See NOTE). This will allow the water level to drop 7" without any loss of Skimmer function.

NOTE: If your pond doesn't have an overflow drain, consider installing one in the back panel of the Skimmer now, following the instructions on separate insert sheet. To keep water flowing into the skimmer when the level drops more than 7", consider installing a secondary water inlet near the

ROCK COPING

GROUND LEVEL

MAXIMUM
WATER
22" LEVEL

ROCK

SHELF

EXPOSED

BOTTOM OF

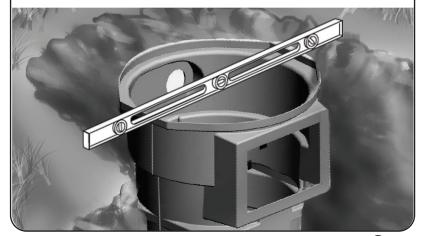
SKIMMER TRENCH

LINER

bottom of the skimmer (... also covered on the separate instruction sheet.)

If you are working around an existing pond, be careful to expose the liner without damaging it. You will need enough slack to allow the liner to rest up against the Skimmer without pulling or wrinkling. (You may have to excavate more to get enough play in the liner.)

Set the Skimmer in the hole and check for fit and level.



Pro Tip: If your coping sits on a Rock Shelf set at the height of the bottom of the Skimmer opening, the liner will stay concealed even when water levels drop 7" below maximum. See Illustration above. For complete details, see the ProLine by PONDMASTER Pond Installation DVD "Tips and Techniques for the Professional Installer".

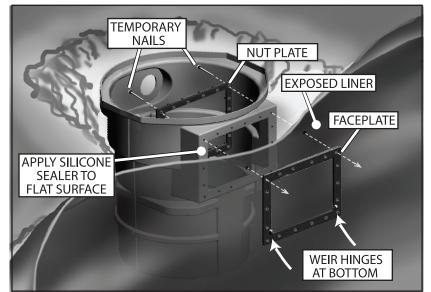


ATTACH SKIMMER TO LINER

Carefully clean and rinse the liner inside and out with water, then dry it with paper towels or a clean cloth. The surfaces to be sealed must be clean and dry for the sealer to bond properly. If more aggressive cleaning is required, contact your liner manufacturer for the proper cleaning solution. Set the skimmer in the hole and check again that the liner will sit freely up against it without wrinkling or pulling.

1) Apply a ¼" bead of the supplied Silicone Sealer around the Skimmer opening, making sure there are no spaces or voids in the bead.





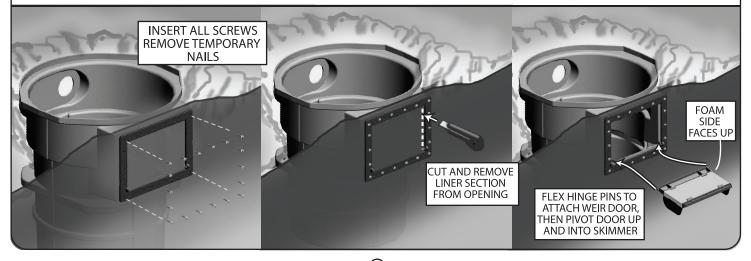
- 2) Insert a temporary nail into a top corner hole of the nut plate so the nail protrudes out of the flat face.
- 3) Insert nutplate with the nail into top corner hole of the Skimmer so the nail protrudes out through the Skimmer face.
- 4) Align the liner on the face of the Skimmer, making sure the liner sits flat on the face of the Skimmer without wrinkling or pulling.
- 5) Holding the nail in place with one hand, push the nail through the liner.
- 6) Push the second nail through the other top corner hole of the Nut Plate, Skimmer and liner.
- 7) Align the Face Plate with the Weir door hinges positioned at the bottom. (FIGURE 2).

Check that all the components are lined up. Then, screw the faceplate into the nut plate to securely seal the liner to the Skimmer (FIGURE 3). Carefully install the screws into the open holes, alternating from one side to the next, screwing them down until snug. Finally, remove the temporary nails and attach the last two screws. A little sealer should squeeze out all around the faceplate. Again, be careful not to over-tighten or strip out the screw holes.

Once all the screws are in and snug, the liner can be cut out of the Skimmer mouth using a sharp blade or knife (FIGURE 4). Wipe off the excess sealant around the opening. Wait until the sealer has set before filling.

Install weir door by flexing hinge pins inward, then snapping into door opening as shown in FIGURE 5.

FIGURE 3 FIGURE 4 FIGURE 5



8

ATTACHMENT OF BULKHEAD FITTINGS

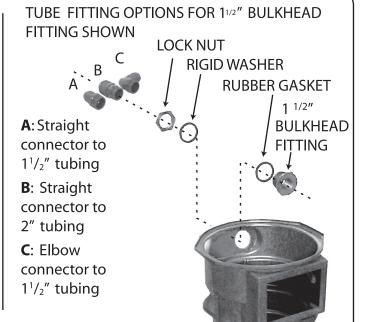
Assembly of 1/2" Bulkhead fitting shown. For increased flow install the 2" Bulkhead assembly with the larger 2" fitting (Not Shown) in the same manner.

Slide Rubber Gasket over Bulkhead fitting and insert through opening in skimmer wall. Place Rigid Washer over Bulkhead threads before attaching Nut. Notes:

- 1) The Lock Nut is a left hand thread - turn counter clockwise to tighten.
- 2) The Lock Nut is marked with the word "TIGHTEN" on one side. This side must be facing away from washer.

Choose the appropriate fitting to attach to hose.

Wrap threads of tube fittings with Teflon tape before screwing into Bulkhead fitting.





- (1) Skimmer Lid
- (2) Fittings for 1 1/2" Bulkhead
 - A) 1 1/2" FPT x 2" Barb
 - B) 2" FPT x 2" Barb
 - C) 1 1/2" FPT x Barb Elbow
- (3) Leaf Basket
- (4) 1 1/2" x 3" Bulkhead assembly parts
 - A) Lock Nut
 - B) Plastic Washer
 - C) Rubber Gasket
 - D) 1¹/₂" x 3" Bulkhead Fitting
- (5) 2" x 3" Bulkhead assembly parts
 - A) Lock Nut
 - B) Plastic Washer
 - C) Rubber Gasket
 - D) 2" x 3" Bulkhead Fitting
- (6) 2" Male PT X 2 Slip Adapter
- (7) Skimmer Drum
- (8) Backing Plate
- (9) Faceplate
- (10) Weir Door assembly
- (11) Parts Bag
 - A) Silicone sealer
 - B) Teflon tape
 - C) Stainless steel screws
- (12) Debris Filter Pad UPC 12451 (Included with Pro5000 Skimmer 02474 only)

REPLACEMENT PARTS

Please call 631.234.5261

or

visit our website for

replacement part

information.

(13) Cable Tie for Debris Filter Pad

LIMITED ONE YEAR WARRANTY

E.G.Danner Manufacturing, Inc will repair or replace any Pro 5000 Skimmer found to be defective within one year of original purchase. Wearable items are not covered by this warranty. For warranty repair, return only the part that is defective to our factory. Please include a dated proof of purchase and \$20.00 for postage and handling. Damages or injuries resulting from negligence or misuse of the product are not covered by this warranty. This warranty gives you specific legal rights. You may have other rights which vary from state to state.

> DANNER MFG. INC. ● 160 Oval Drive, Islandia, NY 11749-1489 Phone 631-234-5621 ● Visit our website at www.Dannermfg.com

INSTALLATION GUIDE to OPTIONAL FEATURES for PRO 5000 SKIMMER

In order to	You will need to	Then install
install a SECOND PUMP in your PRO 5000 SKIMMER:	bore a 3" diameter hole through the Upper Rear Bulkhead	#12475 2" Quick Connect Kit and second pump in Pump Bag, - OR - #12465 2" Bulkhead Fitting, #12944 Slip by Male Adapter, 2" PVC hose to suit
install an 1½" OVERFLOW DRAIN in your PRO 5000 SKIMMER:	bore a 3" diameter hole through the Upper Rear Bulkhead	# 12465 1½" Bulkhead Fitting, #12899 1½" MPT by 1½" Barb Adapter, 1½" hose to suit
install a 2" OVERFLOW DRAIN in your PRO 5000 SKIMMER:	bore a 3" diameter hole through the Upper Rear Bulkhead	#12465 2" Bulkhead Fitting, #12944 Slip by Male Adapter, 2" PVC hose to suit
install a MIDWATER or SECONDARY LOWER INLET in your PRO 5000 SKIMMER, to provide flow to pump regard- less of ice or basket blockage.	bore a 3" diameter hole through the Front Bulkhead Panel near bottom before installing Skimmer; cut corre- sponding hole in liner	#12465 2" Bulkhead Fitting in corresponding hole through liner to seal liner and bulkhead to Skim- mer. Inlet should be screened to keep debris from entering pump
install a DEEP WATER INLET to pull water into skimmer from bottom drain regardless of ice or basket blockage.	bore a 3" diameter hole through the bottom of Skimmer	#12465 2" Bulkhead Fitting, #12944 Slip by Male Adapter, 2" PVC to bottom drain or as necessary

POND ACCESSORIES - Available at your Pondmaster Proline dealer

ltem 12927	1-1/2" Ball Valve, FPT x FPT
ltem 12935	2" Ball Valve, FPT x FPT
ltem 12465	1-1/2" Bulkhead Fitting, for water-tight connections to Skimmer, Filter and Falls
ltem 12470	2" Bulkhead Fitting, for water-tight connections to Skimmer, Filter and Falls
ltem 12944	2" MPT x 2" Slip Adapter
ltem 12475	2" Quick Connect Kit, including 2" Bulkhead Fitting
ltem 12485	2" Quick Connect Kit, for connection of pump in Skimmer (02475)
ltem 02141	Gorilla PVC Cement, no primer necessary, non-toxic, low odor, water cleanup
ltem 02139	20 oz. Black Waterfall Foam, high density, UV resistant
ltem 02865	Pond Fix with Barley Extract, starter bacteria for ponds with Barley
ltem 12440	2" x 25' Black PVC Flexible Hose. Preferred by professionals, accepts all standard fittings.

ProLine Pond Installation DVD "Tips and Techniques for the Professional Installer"

PondMaster P- and PUV-Series Pressure Filters

Pro 3000 and Pro 5000 Filter and Falls

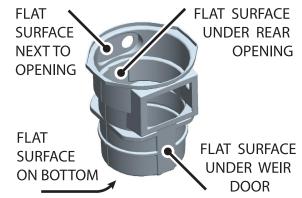
Pondmaster MagDrive, HyDrive, Waterfall and External Pumps

INSTALLATION OF AUXILIARY BULKHEAD FITTINGS

There are times where an auxiliary bulkhead fittings may be necessary or desired to maintain the flow of water to the pump or provide an overflow for excess water.

These situations include:

- When the mouth of the skimmer becomes blocked by very heavy leaf falls or ice
- Where water levels drop below the mouth of the skimmer due to drought or leakage
- During servicing to maintain flow at lower water levels
- Where a bottom drain or secondary inlet might be desired for increased circulation
- Where an overflow port is desired to provide protection during heavy rain.



Your PRO 5000 Skimmer is designed to accept a secondary water inlet up to 2" in diameter on any of the flat surfaces on the face of the Skimmer. The Pro Filter and Falls drum can also be fitted similarly to provide an alternate inlet or a port for drainage. The following demonstrates the steps to install a 2" Quick Disconnect Adapter.

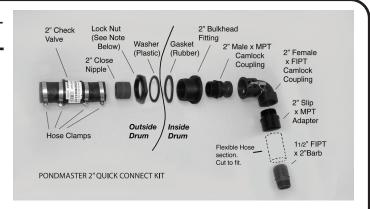
INSTALLATION of a 2" QUICK CONNECT KIT

With a power drill and 3" bit, bore hole as shown. Remove burrs and tool debris with a medium grit sand-paper.

Place rubber gasket onto bulkhead fitting and mount in hole with threaded end to outside of skimmer. Install plastic washer over threaded end, followed by lock nut. Note that the fitting is a left hand thread and must be hand tightened by rotating COUNTER CLOCKWISE. Wrap threads of close nipple with Teflon tape, insert in outside of bulk-head fitting as shown, and tighten by rotating clockwise. Install check valve on close nipple with included hose clamps.

Wrap threads of Male Cam-Lock Coupling with Teflon tape. Position male adapter on inside of bulk-head fitting as shown and tighten by rotating clockwise.

Wrap threads of 2" Slip Adapter with Teflon tape and install to Female Comical Coupling tightening in a clockwise direction. Lock the Female Cam-Lock assembly onto the Male Cam-Lock Coupling. Insert barb fitting into a generous length of 2" flexible PVC hose. Hose will be cut to fit later. Slide hose clamp over barb and tighten. Install hose assembly on pump and position in Skimmer alongside Female Cam-Lock assembly. Measure hose against Male Slip adapter. Remove Female Cam-Lock to cut hose and glue into Male Slip Adapter.

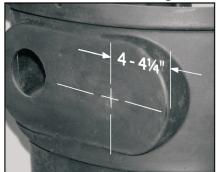




INSTALLING A SECONDARY BULKHEAD FITTING AT THE TOP OF THE PRO SKIMMER

With a power drill and 3" bit, bore hole as shown. Remove burrs and tool debris with a medium grit sand-paper.

Place rubber gasket onto bulkhead fitting and mount in hole with threaded end to outside of skimmer. Install plastic washer over threaded end, followed by lock nut. Note that the fitting is a left hand thread and must be hand tightened by rotating COUNTER CLOCKWISE. Wrap threads of close nipple with Teflon tape, insert in outside of bulk-head fitting as shown, and tighten by rotating clockwise. Install check valve on close nipple







INSTALLING A SECONDARY BULKHEAD FITTING FOR A MID LEVEL WATER INTAKE



First determine that you have enough slack in the liner to allow it to rest up against the flat panel of the Skimmer without pulling or wrinkling. Be sure to allow enough play necessary to accommodate sealing both the mouth of the Skimmer and the secondary inlet. Drill the size hole that your bulkhead fitting requires on the flat panel on the face of the Skimmer, leaving enough flat space around the hole for a 1/2" sealing surface. Do not drill within 1/2" of the edge of the flat area. It is easier, but not necessary, to bore the holes before sealing the Skimmer to the liner. (Fig. 1).

Carefully cut the liner exactly to the size of the hole you drilled. Take your time, have a helper hold the liner flat against the Skimmer. Make sure you don't cut the liner too big or you'll have trouble sealing the hole. Thoroughly clean and rinse the liner inside and out with water, then dry. The surfaces to be sealed must be clean and dry for the sealer to bond properly. If more aggressive cleaning is required, contact your liner manufacturer for the proper cleaning solution. Check again to determine that the liner will sit freely up against the hole you have drilled without wrinkling or pulling.

Through the hole in the liner, apply a continuous 1/4" bead of silicone sealer on the flat surface on the front of the Skimmer around the hole you drilled. (Fig. 2 & Fig. 3). Place the rubber washer on the outside threads of the Bulkhead Fitting first, then apply a continuous 1/4" bead of sealer onto the rubber washer. You want to have sealer right at the edge of the hole on both sides of the liner when you snug down the fitting. Make sure there are no spaces or voids in the beads.

Set the bulkhead fitting in the hole from the inside of the Pond out, with the threads towards the inside of the Skimmer. Thread the left-hand nut on and hand tighten only, making sure the liner doesn't squeeze out of place or wrinkle when you tighten the nut. Wait until the sealer has set before filling.

Once the bulkhead fittings are installed, the plumbing between the pump and the fitting can be modified to adapt to many different models. In addition, return or drain hoses are even easier to attach.

