

# TABLE OF CONTENTS

---

---

P2 - Version française

P33 - Congratulations

P34 - Legal warranty

P35 - Warnings

P38 - Replacement parts

P40 - Tools needed for installation

P41 - Pool location

P42 - The foundation

P46 - Patio slabs installation (optional)

P47 - Wall installation

P49 - Liner installation

P52 - Structure assembly

P52 - Upright installation

P52 - Top plate supports installation

P53 - Top ledge installation

P53 - Top ledge cover installation

P56 - Filling the pool with water

P57 - General maintenance

P58 - Winterizing the pool

P61 - Spring opening

# CONGRATULATIONS

---

---

**Congratulations!** You are now the proud owner of a high-quality aboveground pool. On behalf of the President and the whole team at CARVIN Pool Equipement, we wish you many happy hours with family and friends in your new pool. Our full range of products will live up to your expectations and will give you satisfaction for many years.

This product has been designed in compliance with safety and high manufacturing standards. We rely on the strength of assemblies, of each components and the quality of materials used to maximize the life of your purchase. Our products are tested in extreme conditions to ensure their quality and durability.

We thank you for choosing CARVIN Pool Equipment, a leader in pool equipment around the world. See our Website [www.carvinpool.com](http://www.carvinpool.com) to discover our range of products which will help you to improve and facilitate your experience. Relax in your new pool and do not forget to respect, apply and communicate the recommended safety instructions to enjoy peace of mind.

# LEGAL WARRANTY

## CONSUMER INFORMATION

Authorized CARVIN® retailer or distributor personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your retailer or distributor does not solve to your satisfaction, please discuss it with the retailer's or distributor's management. The Service Manager, General Manager, or Owner can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the retailer's or distributor's management, contact the CARVIN® technical support.

When you write or call, please provide the following information:

- Product model, serial number and date code;
- Name of retailer or distributor who sold the Product to you;
- The original proof of purchase showing the date of purchase;
- Your name, address and telephone number;
- A detailed description of the problem; and
- If sending an email, any relevant photos of the Product and its surroundings.

## WARRANTY

Le Groupe VIF Inc. ("VIF"), owner and manufacturer of the CARVIN® Pool Equipment brand, gives the following written Warranty on each new Product manufactured by or on behalf of VIF and distributed for sale in America.

VIF guarantees that each new Product will be free from any defects, in material or workmanship, for the Warranty period set below, under normal use and maintenance. If any defects should be found in a Product within the period set below and when VIF acknowledges that such defects are attributable to faulty material or workmanship at the time of manufacturing, at its discretion VIF will replace or repair with a new part or the CARVIN® equivalent, at no cost to the consumer for parts and labour.

The Warranty Period coverage starts from the original date of sale or when the unit is first installed as a demonstrator.

Product Model	Non-Commercial Warranty Period	Warranty Coverage	
975231## 975445##	30 Years	First 5 Years	
975272## 975410##		Last 25 Years	100%
975263## 975497##			50%
975464##			

*The actual Product item number may vary from the Product model number which may include a suffix for color, packing options or else.*

This Warranty covers:

- Any Product purchased from a CARVIN® retailer or distributor authorized to sell that product in America.
- Any Product on which required maintenance services have been performed as prescribed in this manual.

This Warranty does not cover:

- Any repairs required as a result of collision, striking any object, frost, acts of God, careless use, misuse, improper installation, improper ground preparation, improper winterization, or lack of maintenance described in this manual;
- Any repairs required as a result of the failure, breakage, careless use, misuse, improper installation, or lack of maintenance of another pool equipment or accessories, such as, but not limited to, the liner, ladder, skimmer, water return, water return light, or winter cover;
- Any repairs required due to rust caused by improper installation, lack of maintenance, or leakage, of the water return, water return light, or skimmer;
- Any Product modified, altered, disassembled, or remodelled;
- Shipping related costs to and from the manufacturer;
- Installation and removal related costs; and
- Normal maintenance services or water chemistry analysis services described in this manual.

This warranty is non-transferable and applies only to the first retail buyer, and only during the period when the first retail buyer occupies the place where the product was originally installed

## REPLACEMENT PARTS AVAILABILITY

Replacement parts are available through your CARVIN® retailer or distributor.

## REPLACEMENT PARTS WARRANTY

New CARVIN® replacement parts sold to a consumer or installed by an authorized CARVIN® retailer which are not covered by this Warranty are guaranteed for a period of 3 months, however, this Replacement Parts Warranty does not apply to any replacement parts modified, used with, or installed on a Product for which the replacement parts were not intended.

## ENTIRE WRITTEN WARRANTY

This Warranty is the only and the entire written Warranty given by VIF for its Product. No retailer or his agent or employee is authorized to extend or enlarge on these warranties on behalf of VIF by any written or verbal statement or advertisement.

## TO OBTAIN WARRANTY SERVICE

You must first contact your authorized CARVIN® retailer or distributor. Please refer to section Customer Information.

Any defect must be reported to an authorized CARVIN® retailer or distributor within 72 hours to avoid potential breakage to other equipment, otherwise the warranty will not be honored.

## TECHNICAL SUPPORT INFORMATION

After following the troubleshooting section of this manual and after contacting your dealer or distributor, if you have any problems with your Product, contact CARVIN® Technical Support.

### AMERICA

Web: [carvinpool.com/support](http://carvinpool.com/support)  
Email: [help@carvinpool.com](mailto:help@carvinpool.com)  
Phone: 1 450 250-4500 option 2  
Fax: 1 450 250-4501  
Toll Free: 1 866 979-4501  
Mail: CARVIN® POOL EQUIPMENT  
Technical Support  
4000 boul. Casavant Ouest,  
Saint-Hyacinthe, Québec, Canada, J2S 9E3

## DISCLAIMERS

This Product is not for sale or for resale where prohibited by law or regulations. The provisions contained in these written warranties are not intended to limit, modify, take away from, disclaim or exclude any warranties set forth in or the operation of The Consumer Products Warranties Act, 1977 (Saskatchewan), The Consumer Product Warranty and Liability Act (New Brunswick), The Consumer Protection Act (Quebec), or any other similar provincial or federal legislation.

VIF shall not be liable for any statement made or published, written or oral, that is misleading or inconsistent with the facts published in the documentation or specifications provided by VIF.



**Le Groupe VIF Inc.**  
4000, boulevard Casavant Ouest, Saint-Hyacinthe  
Québec, Canada, J2S 9E3  
[www.carvinpool.com](http://www.carvinpool.com)

CARVIN® is a registered trademarks of  
Le Groupe VIF Inc. in Canada and United States of America.

vif



# WARNING



Your pool is a fun area for family and friends. It is designed to be safe and to last for many years. On the other hand, neglecting the use and maintenance of your pool can quickly become dangerous. The pool is subject to wear and deterioration. If not maintained properly, certain types of excessive or accelerated deterioration can lead to failure of the pool structure that might release large quantities of water that could cause bodily harm and property damage. Your pool contains enough water and is deep enough to pose a real danger to its users. Therefore, it is important to follow strict safety instructions to allow safe use of this product. Failure to follow the recommendations listed below may result in serious injury, paralysis or even death.

We suggest you to learn or to refresh the basics of CPR, since you never know when an accident can occur. Check local municipal laws for additional mandatory rules. Publications are available that describe the risk of drowning, entrapment, and diving accidents.

## Safety recommendations:

- Make sure everyone using your swimming pool is aware of these recommendations and follow them.
- Never dive or jump. Your aboveground pool is not deep enough to safely allow diving or jumping. This can result in concussions, paralysis, drowning and even death.
- No running near the pool. When surfaces are wet and become slippery, it can result in falls causing serious injuries.
- Never leave a child unattended. Even for a few seconds, drowning is the fourth largest cause of death in Canada. It takes only a few seconds for a child to drown.
- Restrict access to the pool by making sure the ladder is removed, locked or completely lifted. A barrier is necessary to provide protection against potential drowning and near drowning. That barrier is not a substitute for the constant supervision of children. If you have a deck overlooking the pool, you must have a door with an automatic locking system restricting access to water. Do not leave garden furniture around the pool that could allow access to water. Object such as toys, chairs, tables, or similar objects that a young child could climb shall be at least 4 feet (1219mm) from the pool. Your filtration system (pump and filter) should be at least 4 feet from the edge of your pool.
- Life saving equipment should always be accessible near the pool. Either a 16-foot (4.88-m) pole with a grasping handle and a 1/4-inch diameter 50-foot rope attached to a 15-inch diameter buoy. Bad or inexperienced swimmers should always use a life jacket.
- Wait 1 hour before swimming after eating since cramps can occur and lead to risks of drowning.
- No walking or sitting on top ledges since they have not been designed for this purpose and can be slippery resulting in dangerous falls.
- Do not use alcohol or drugs that may bias your judgment and diminish your reflexes.
- Do not use your pool if the bottom is not visible, it shall be visible at all time from the outside perimeter of the pool. At night, it should always be well illuminated with proper lighting.
- Do not use glass bottles or containers around the pool. It can cause injuries or damage the pool.
- Never use the pool during thunderstorms.
- Keep your pool clean and hygienic as it could cause illnesses.
- Never swim alone, if something happens to you no one will be able to help you.
- A list of emergency telephone numbers shall be posted, such as the nearest available police station, fire station, ambulance, and/or rescue unit. These numbers are to be kept near the telephone that is the closest to the pool.





# WARNING



## IMPORTANT : TO OWNERS AND INSTALLERS

Install all warning stickers as indicated in this manual  
Any failure to install these warning stickers will void your warranty!

It is **STRICTLY FORBIDDEN** to remove these stickers!  
If the labels are not visible around your pool you can be sued in case of accident. Follow the information on the next pages to put them at the right place.



**You should not use your swimming pool if the stickers are not in place.**



If your stickers get damaged or fall off you can ask for new ones **FOR FREE.**

### POOL ENTRANCE STICKER



**! DANGER !**

**NO DIVING - NO JUMPING SHALLOW WATER**

DIVING OR JUMPING MAY CAUSE:  
PARALYSIS, PERMANENT INJURY OR DEATH




**NE PAS PLONGER OU SAUTER EAU PEU PROFONDE**

PLONGER - SAUTER - COURIR PEUT ENTRAÎNER PARALYSIE, BLESSURES PERMANENTES OU LA MORT

THIS SIGN MUST NOT BE DEFACED, COVERED OR PANTED  
CET AVIS NE DOIT ÊTRE NI GRIFFÉ, NI RECOUVERT, NI PEINT

L10411

### POOL LINER STICKER



	<p><b>! DANGER !</b></p> <p>NO DIVING - NO JUMPING SHALLOW WATER NE PAS PLONGER OU SAUTER EAU PEU PROFONDE</p>	
	<p><b>! DANGER !</b></p> <p>NO DIVING - NO JUMPING SHALLOW WATER NE PAS PLONGER OU SAUTER EAU PEU PROFONDE</p>	
	<p><b>! DANGER !</b></p> <p>NO DIVING - NO JUMPING SHALLOW WATER NE PAS PLONGER OU SAUTER EAU PEU PROFONDE</p>	
	<p><b>! DANGER !</b></p> <p>NO DIVING - NO JUMPING SHALLOW WATER NE PAS PLONGER OU SAUTER EAU PEU PROFONDE</p>	

L10410

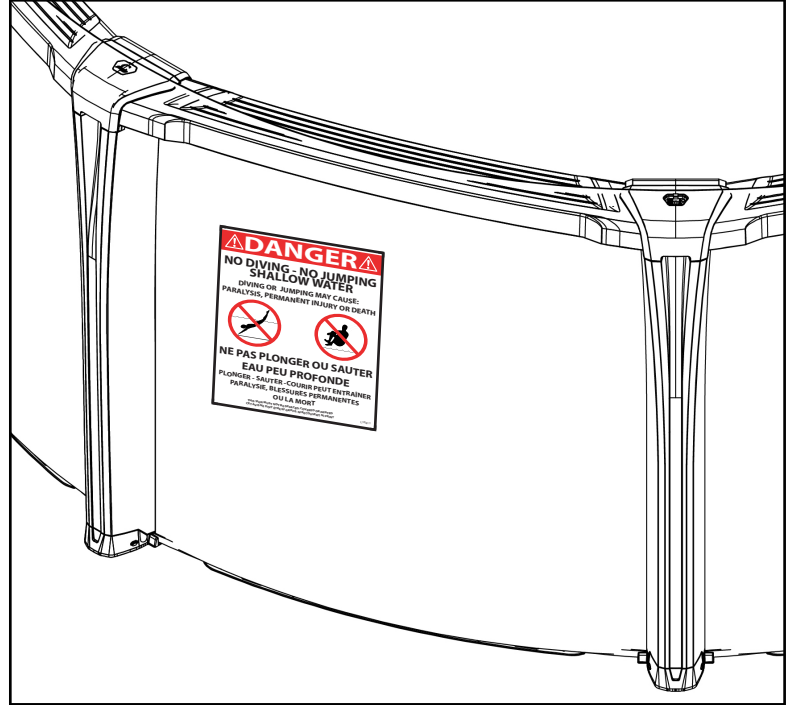
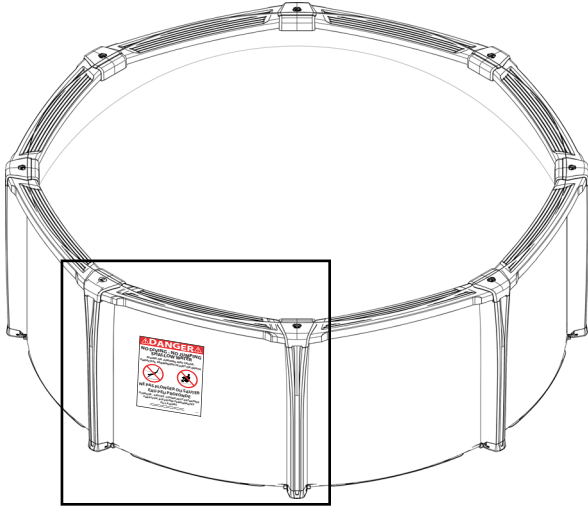


# WARNING



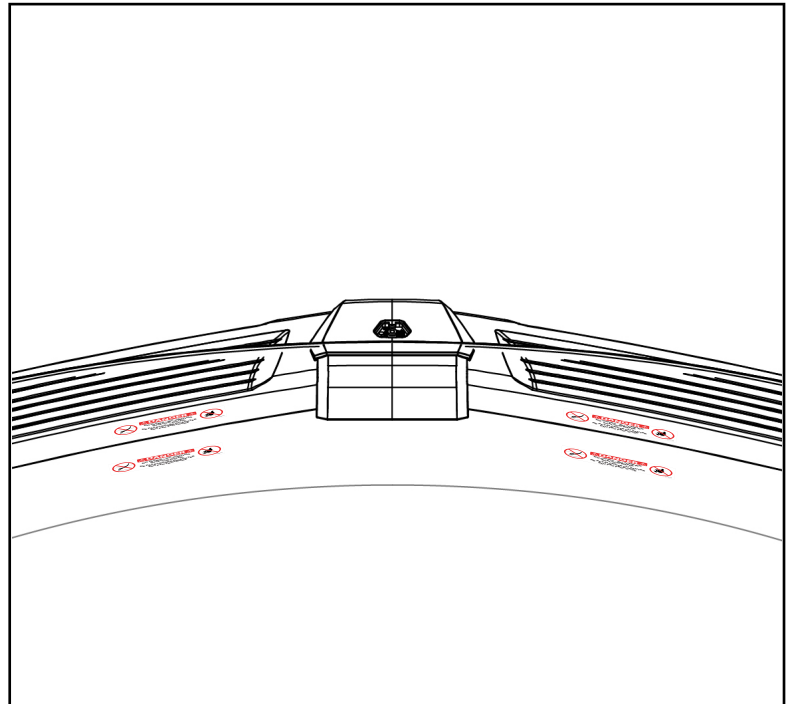
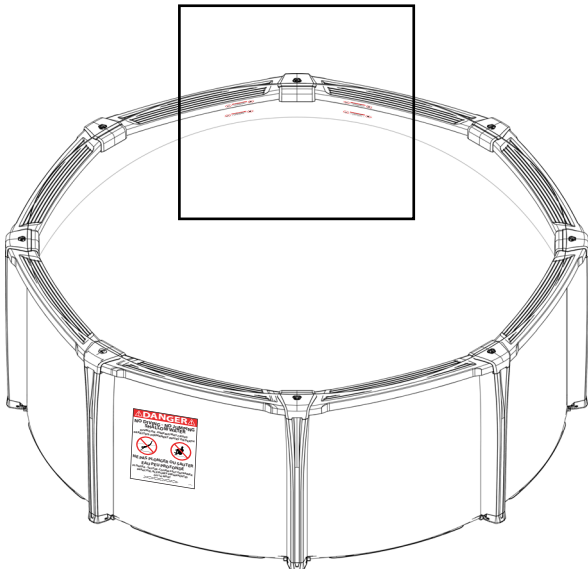
## POOL ENTRANCE STICKER

Install the large warning sticker on the pool wall at the entrance to the pool so that everyone can see and read it before entering the pool.



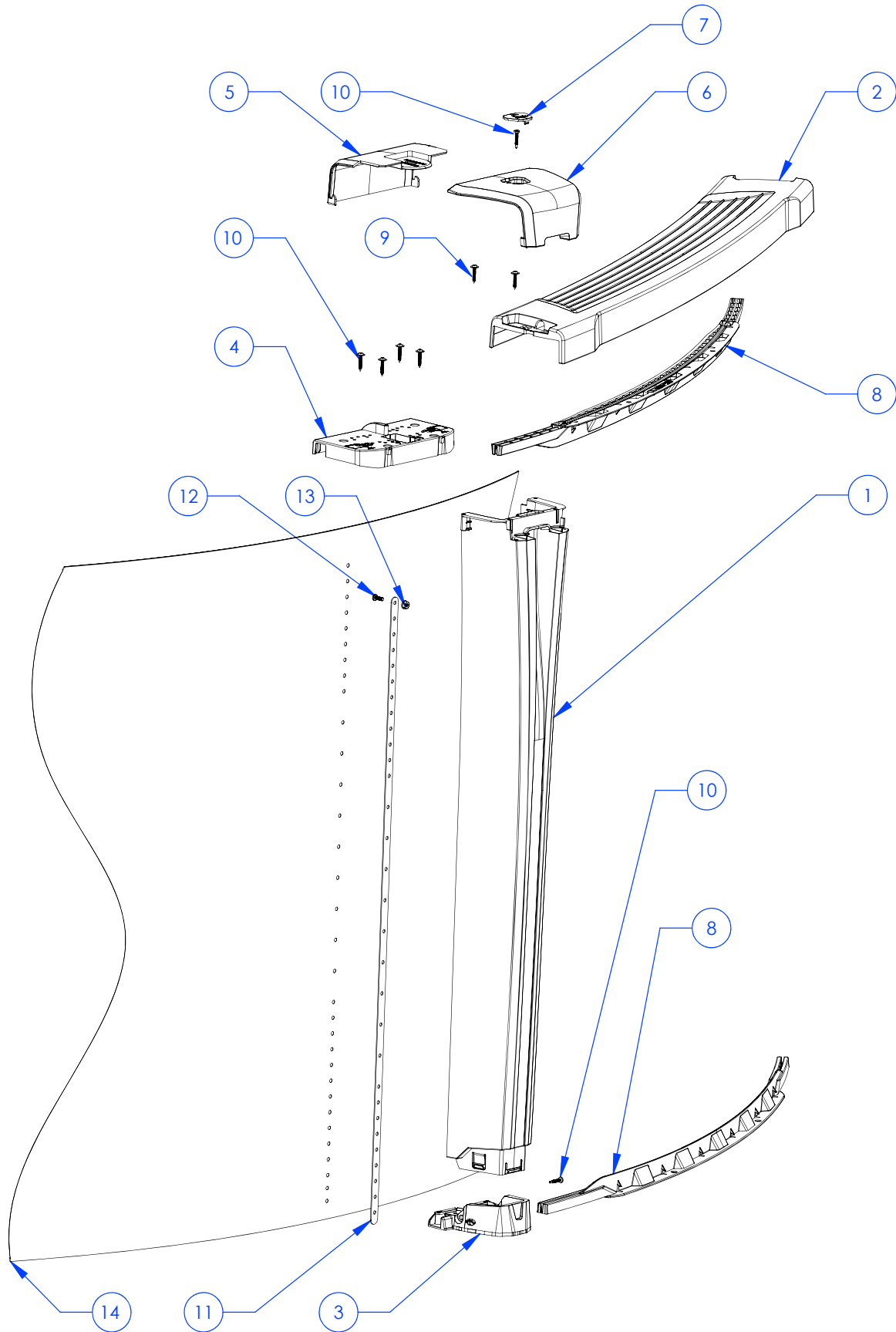
## POOL LINER STICKER

Install the small warning stickers on the liner above the water line and on the top seats on the opposite side of the ladder.



# REPLACEMENT PARTS

Use the original "CARVIN" replacement parts only.



# REEMPLACEMENT PARTS

Use the original "CARVIN" replacement parts only.

ITEM #	HEIGHT / HAUTEUR	PART CODE / NUMÉRO DE PIÈCE			DESCRIPTION	QUANTITY PER SIZE (FEET)/ QUANTITÉ PAR FORMAT (PIEDS)							
		DARK GREY / GRIS FONCÉ 11C	BROWN 476C / BRUN 476C	BLACK 6C / NOIR 6C		12'	15'	18'	21'	24'	27'	30'	33'
1	52	46028352		46028306	UPRIGHT 52" / MONTANT 52"	8	10	12	14	16	18	20	22
	54	46028454		46028406	UPRIGHT 54" / MONTANT 54"	8	10	12	14	16	18	20	22
2		46078261	46078273	46078206	TOP SEAT / MARGELLE	8	10	12	14	16	18	20	22
3		46025833		46025806	BOTTOM PLATE / PIED DE CONNEXION	8	10	12	14	16	18	20	22
4		46077690		46077606	TOP PLATE / PLAQUE DE JOINT DE MARGELLE	8	10	12	14	16	18	20	22
5		46078264		46078212	TOP LEDGE COVER FRONT / JOINT DE MARGELLE AVANT	8	10	12	14	16	18	20	22
6		46078262		46078214	TOP LEDGE COVER BACK / JOINT DE MARGELLE ARRIÈRE	8	10	12	14	16	18	20	22
5+6		46078265R		46078216	TOP LEDGE COVER KIT/ JOINT DE MARGELLE COMPLET	8	10	12	14	16	18	20	22
7		46078267		46078236	TOP LEDGE COVER CAP / CAPUCHON DE JOINT DE MARGELLE	8	10	12	14	16	18	20	22
8		46026335		46026315	RAIL 15'	16	20	24					
		46026341		46026324	RAIL 24'				28	32	36		
		46026347		46026330	RAIL 30'							40	44
9			14455025		SELF-TAPPING SCREW WITH LOCKING WASHER #12- 14X1,25 SS316	32	40	48	56	64	72	80	88
10			14455032		PAN HEAD #3 SCREW #12-14 X 1,25" SS316	56	70	84	98	112	126	140	154
11	52		02581536		WALLBRACKET SS316	2	2	2	2	2	2	2	2
	54		02581541			2	2	2	2	2	2	2	2
12	52		14172209		PAN HEAD 1/4-20X0,75" SS316	30	30	30	30	30	30	30	30
	54			32		32	32	32	32	32	32	32	32
13	52		14072620		FLANGED NUT 1/4-20 5/16 SS316	30	30	30	30	30	30	30	30
	54			32		32	32	32	32	32	32	32	32

## POOL WALL / MUR DE PISCINE

ITEM #	HEIGHT / HAUTEUR	SEQUOIA/ REDWOOD	DOWNTOWN	MYSTIC	POOL SIZE / FORMAT DE PISCINE	12'	15'	18'	21'	24'	27'	30'	33'
14	52	19743112	19747212	19746312	12'	1							
	54	19438931	19451012	19479712		1							
	52	19743115	19747215	19746315	15'		1						
	54	19438933	19451015	19479715			1						
	52	19743118	19747218	19746318	18'			1					
	54	19438934	19451018	19479718				1					
	52	19743121	19747221	19746321	21'				1				
	54	19438935	19451021	19479721					1				
	52	19743124	19747224	19746324	24'					1			
	54	19438942	19451024	19479724						1			
	52	19743127	19747227	19746327	27'						1		
	54	19438945	19451027	19479727							1		
	52	19743130	19747230	19746330	30'							1	
	54	19438946	19451030	19479730								1	
	52	19743133	19747233	19746333	33'								1
	54	19438949	19451033	19479733									1

# TOOLS NEEDED FOR INSTALLATION

Before starting the installation of your pool, make sure you have all the necessary tools listed below. Check the contents of each of the boxes containing the parts of the pool and make sure everything is there before starting your installation. All parts included in the boxes are important and should all be installed. If parts are left out from the installation, this could cause serious failure of the pool structure. Once the installation of a swimming pool is started, it should be completed as soon as possible. If a part is missing or defective, please contact your "CARVIN" retailer where your purchase was made.

## Tools

- Shovel
- Water hose
- Hammer
- Rubber mallet
- Soil Compactor (manual or mechanic)
- Linear level
- Duct tape 2"
- Pliers
- Vacuum cleaner
- Gardening rake
- Measuring tape
- Nails or rods 8" (number of uprights + 1)
- Drill, ratchet or adjustable wrench
- Screwdriver bit #3 Phillips or Robertson
- Hexagonal socket 7/16"
- Wheelbarrow
- Punch 3/16" diameter
- Stepladder
- Vinyl covered hook, rope and tent pegs
- Or
- Wall stabilizing hooks (number of uprights)

## Required material

- Sand or finest rock dust or both  
(see below quantities)
- Stones (3/4" minimum) or river stones
- Patio slab (equal to the # of uprights)(optional)
- Prefabricated cove sections (optional)
- Under liner pool carpet
- Plywood sheet 1/2", (2x) 3'x3'
- Cardboard 16" x 9"
- Wooden plank 2"x4" of length equal to the radius of the pool
- "CARVIN" pool parts

	Informations required for swimming pool installation							
Pool size (FT)	12'	15'	18'	21'	24'	27'	30'	33'
Pool radius	6'	7'6"	9'	10'6"	12'	13'6"	15'	16'6"
Foundation radius	7'	8'6"	10'	11'6"	13'	14'6"	16'	17'6"
Sand required (in tons)*	1,5	2	3	3,5	4,5	5	6	7

\*The material required for the foundation should be the finest rock dust possible and can be mixed with sand.

# 1. POOL LOCATION

---

---

**We highly recommend you hire a certified installer recommended by your retailer to install your pool. If you decide to install your pool yourself, we recommend it be done by at least 3 people.**

\*WARNING! The installation must comply with the codes of the authority having jurisdiction and may require permits for building, plumbing electrical, zoning or else. Check local municipal laws and rules before starting your installation, this could influence the location of your pool. This will prevent unpleasant surprises when the installation is inspected by a municipal inspector.

1.1 One of the most important steps is to choose the ideal location for your pool.

This will determine the life expectancy of your pool.

1.1.1 The ground must have a good drainage and be solid, have a positive slope (Keeping the water away from pool base), should not be on a hollow ground since this will result in a build up of water, this could jeopardize your foundation and damage your pool.

1.1.2 The ground must be free of rocks, pebbles and tree roots.

1.1.3 Never install your pool in a place where chemicals have been spread, this could damage the liner and rust the wall.

1.1.4 Never install your pool on a concrete floor, asphalt, tarpaper, grass, wood, gravel or clay.

1.1.5 Position your pool far from trees, electric lines or cables, buildings (house, garage, ect.). Swimmers could use them for diving and could get seriously injured.

1.1.6 The pool shall be located a minimum distance of 6ft (1.83m) from any electrical receptacle. All 125 volt, 15 and 20 ampere receptacles located within 20 ft (6.0 m) of the pool shall be protected by a ground fault circuit interrupter (GFCI). The 20 ft (6 m) distance is measured via the shortest straight line distance the supply cord would follow without piercing a floor, wall, ceiling, doorway, window, or other permanent barrier.

1.1.7 Do not cover the rail and the bottom of the wall with mulch. The mulch retains moisture and could help rust the metal wall.

1.1.8 The use of any material other than specified for the installation of this pool could void the warranty.

## **IMPORTANT TO CONSIDER BEFORE INSTALLING**

1. Follow the installation steps thoroughly without omitting anything. It can result in serious accidents.

2. Your pool must be level: Your foundation base should have a maximum of ½" of slope. The slope of the floor from the shallow wall towards the deep area shall not exceed 1 ft in 7 ft (1:7, 305 mm: 2134 mm) to the point of the first slope change. The slope of the floor from the point of the first slope change towards the deepest point shall not exceed 1 ft in 3 ft (1:3, [305 mm: 914 mm]). The slope adjacent to the shallow area shall have a maximum slope of 1 ft in 3 ft (1:3, 305 mm:914 mm) and the slope adjacent to the side walls shall have a maximum slope of 1 ft in 1 ft (1:1, 305 mm: 305 mm). The point of the first slope change shall be defined as the point at which the shallow area slope exceeds 1 ft in 7 ft (1:7, 305 mm: 2134 mm) and be at least 6 ft (1829 mm) from the shallow end wall of the pool.

3. When closing the wall, follow the instructions in our manual using the 2 steel bars and all provided hardware. (all holes must contain a screw)

4. The cove should be well compacted. A lack of thoroughness can result in the liner getting jammed under the rails and perforate. the ground could deform, making the pool sink in or even burst.

5. The pool was not designed to be buried (inground). The wieght of the soil will crush the wall inside the pool.

6. No installation should be done on an unstable ground, with drainage problem, ground movement ans instability and at least 10 meters from a tree.

**CARVIN POOL EQUIPMENT WILL HAVE NO RESPONSIBILITY FOR ANY OMISSION OF THE INSTALLATION STEPS CONTAINED IN THIS MANUAL OR A NON-COMPLIANT INSTALLATION.**

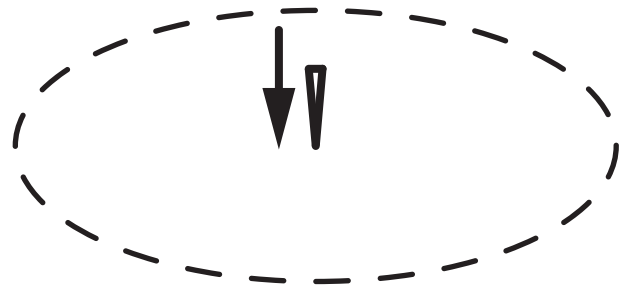
---

---

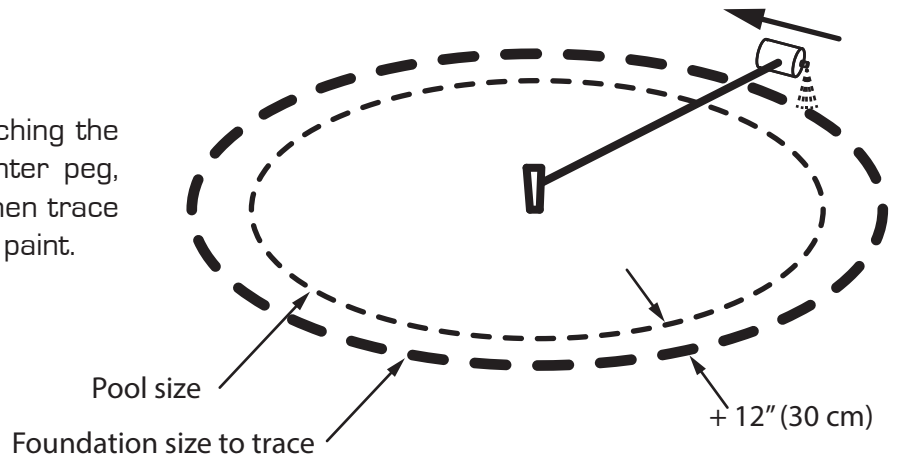
# 2.THE FOUNDATION

The foundation is the most important step of the installation of your pool. It will support the pool for many years. It's important to be thorough and take your time. Flatness and compactness of your foundation will have a decisive effect on the longevity of your swimming pool.

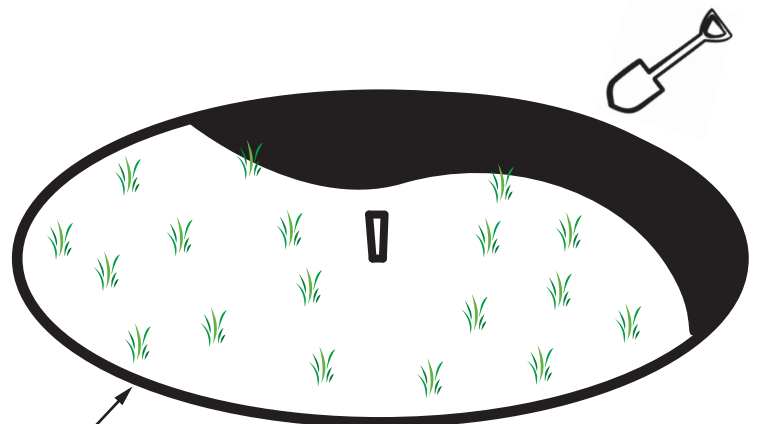
2.1 Determine the center point of the pool and insert a peg at that point (after having considered all municipal laws and your existing installations: deck, patio ect. DO NOT remove the peg until step 7.6



2.2 Define the sod area to be removed by attaching the end of the tape measure (or rope) to the center peg, measure the radius of the pool +12" (30cm), then trace the outside perimeter on the ground using spray paint.



2.3 Remove the sod, branches, rocks, pebbles and weeds by using a mechanical tool or shovel.

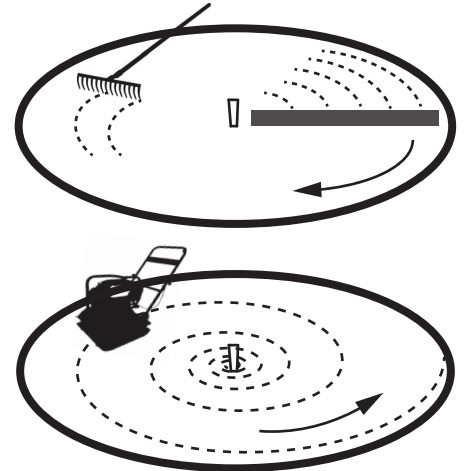


Remove the sod on total foundation radius (Pool radius + 12")

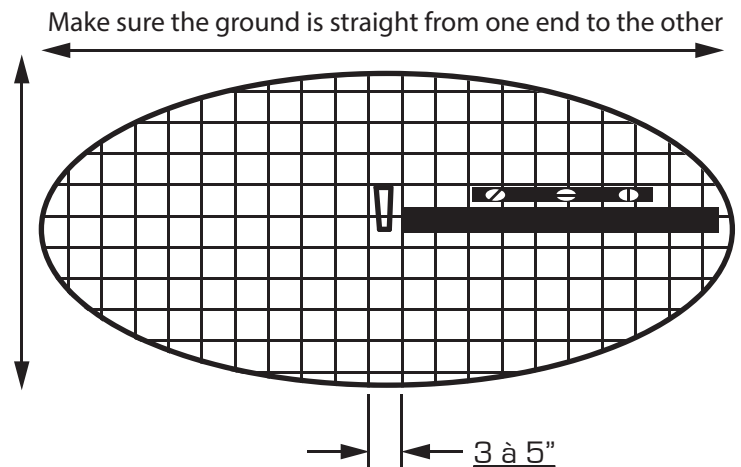


## 2.THE FOUNDATION (continued)

2.4 Level the inside of your circle using the gardening rake and then flattened the surface with the 2" x 4" plank until it is smooth. Do not add soil, use the rake to flatten and even the surface. Compact the area 2 times with a mechanical compactor. Start from center toward the outsides in a circular way.



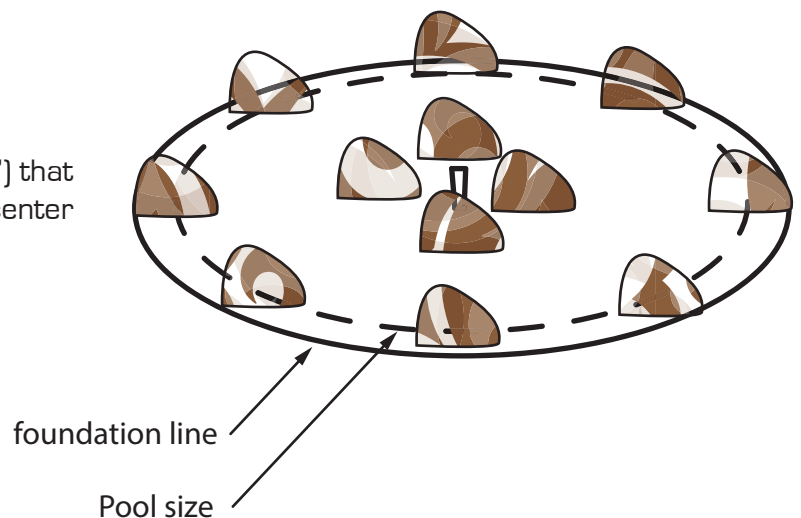
2.5 Setting a 2" x 4" straight plank on the ground, check your ground level by placing a linear level on the plank and make sure the ground forming the rim of the basin is perfectly level. Check every 3 to 5" (using an imaginary grid), the bigger your pool, the more measurements you will have to take. Make sure there are no debris, pebbles, branches, roots on your foundation. You can use a laser level in order to be certain that your ground is straight.



### IMPORTANT

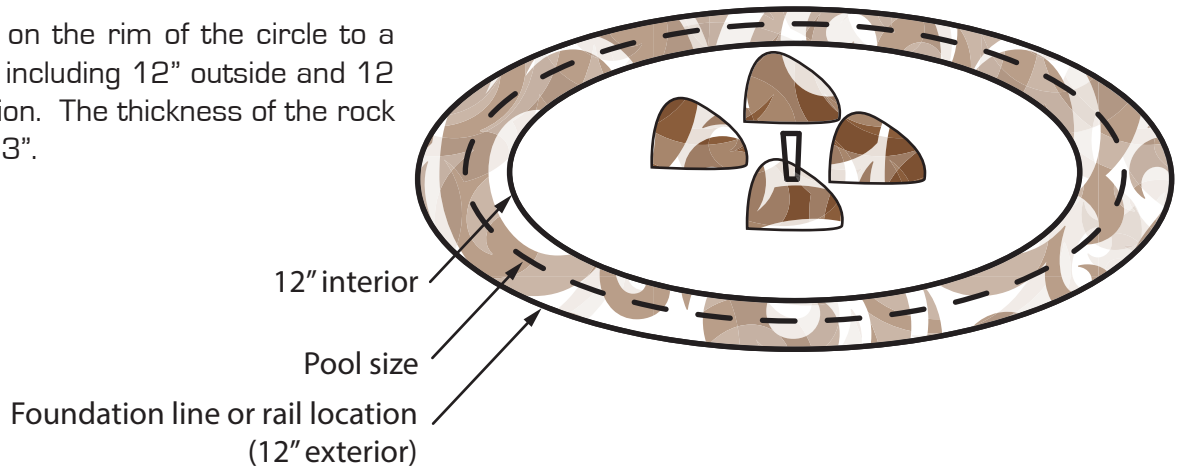
**A NON-COMPLIANT POOL INSTALLATION, NOT FOLLOWING THE FOUNDATION INSTALLATION STEPS AND RECOMMENDATIONS WILL AUTOMATICALLY VOID THE WARRANTY. WE RECOMMEND YOU HIRE A CERTIFIED INSTALLER.**

2.6 Drop piles of rock dust on the perimeter (every 4') that you will then spread out. Also add a few piles in the center of the pool and spread out to cover entirely.

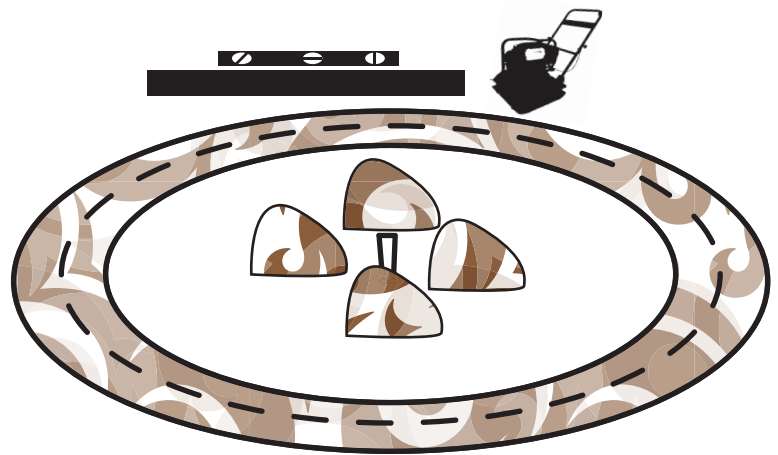


## 2. THE FOUNDATION (continued)

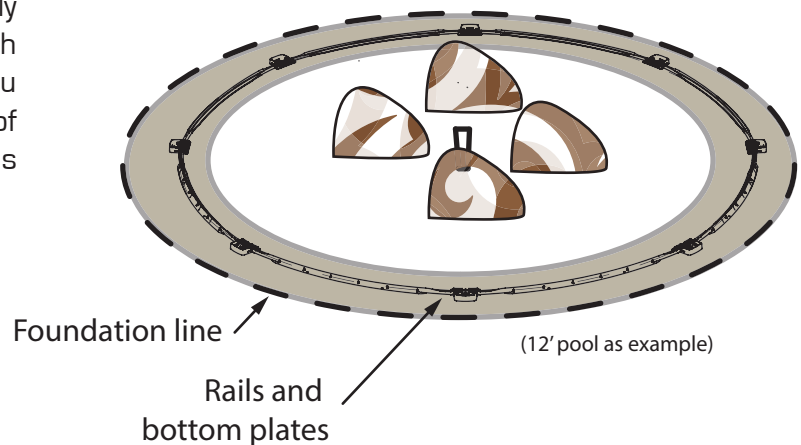
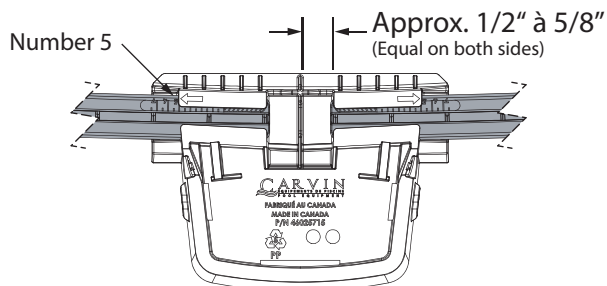
2.7 Spread the rock dust on the rim of the circle to a width of 24" (2') all around including 12" outside and 12 inches inside the rails location. The thickness of the rock dust should be around 2 to 3".



2.8 Damp and pack down the rock dust of the perimeter with your compactor. Once this is done, measure the level and flatness to ensure that the pool will rest on a straight surface without space under bottom plates or/and rails.

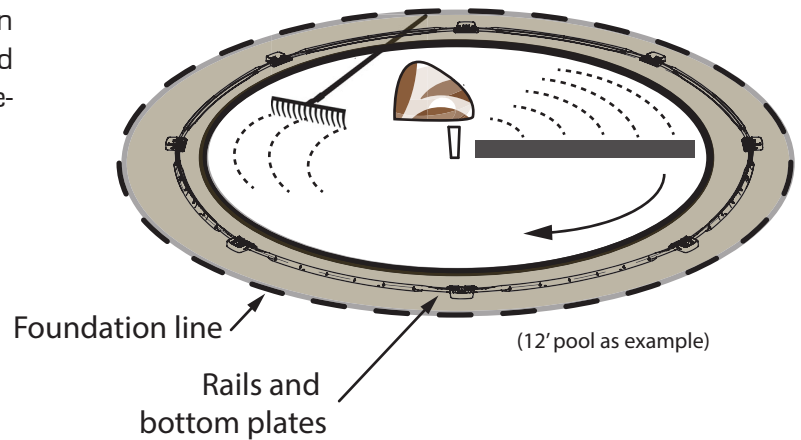


2.9 Place bottom plates and rails around the perimeter and assemble together. Do not push the rails completely in bottom plates. The rail has a graduated scale at each end, begin by placing to the number 5 which will give you approximately  $\frac{1}{2}$ " to  $\frac{5}{8}$ " of space between the center of the plate and the end of the rail. The spacing of both rails into each bottom plate should be equal at all times.

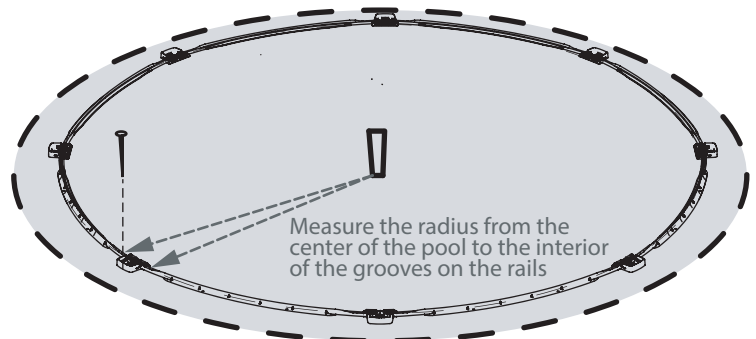
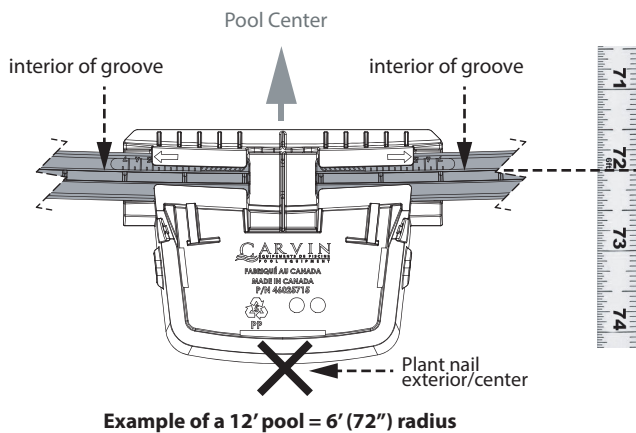


## 2.THE FOUNDATION (continued)

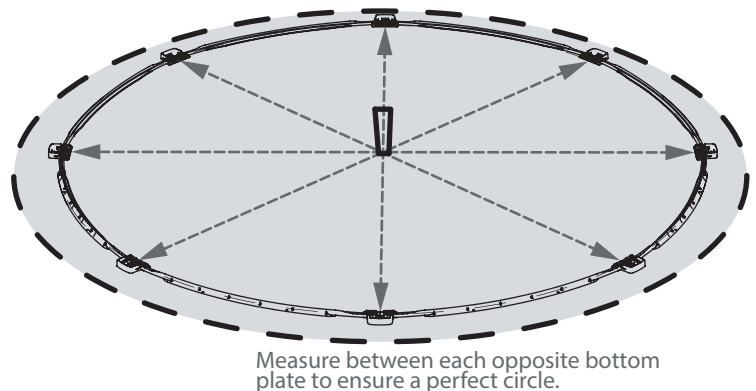
2.10 Spread the rock dust in center of the pool foundation so that level is maintained with the exterior compacted rock dust. Compacting this part will be done in a subsequent step just prior to installing the liner.



2.11 Measure the diameter from the center of the pool to the interior of the grooves on the rail on each side of the bottom plates. The distance should equal the radius of your pool. When the measurement is good, plant a nail or 8" rod on the exterior center of each bottom plate so that they can stay in place.



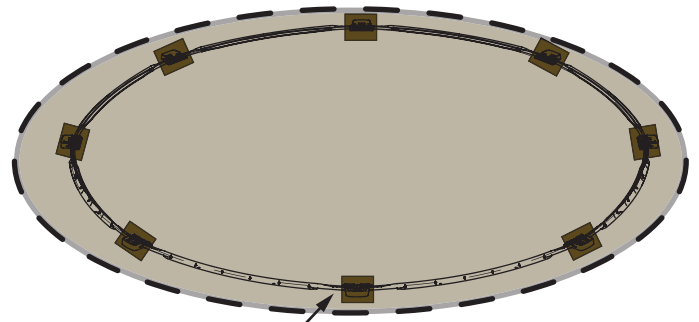
2.12 Measure between each opposite bottom plate to make sure your pool is a perfect circle. You must not miss or skip this step under any circumstances because an oval pool could cause future problems, and pool can even burst in time.



# 2.THE FOUNDATION (continued)

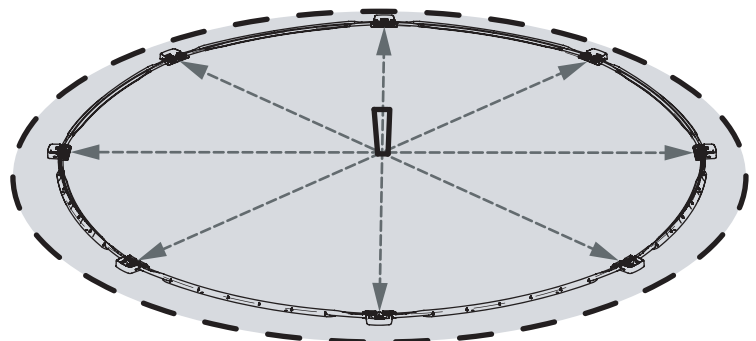
## 2.2 PATIO SLABS INSTALLATION (OPTIONAL)

2.2.1 To have a more solid base under the bottom plates, you can install patio slabs under each plate. To do so, mark the location of each bottom plate and disassemble plates and rails. Patio slabs must be buried at the same level as the previously compacted rock dust. All slabs must be even to ground level firmly supported underneath and level to all others.



Patio slab

2.2.2 Reposition bottom plates and rails following steps 2.11 and 2.12.



Measure the diameter from the center of the pool to the interior of the grooves on the rails

# 3.WALL INSTALLATION



## WARNING



**Do not install the wall on a windy day. Wait for a calm windless day.  
You must be at least 3 people to install the wall.**

3.1 Before starting the installation of the wall, make sure you have the following items in the circle of your pool (inside the rails): two plywood sheets to support the wall, some sand to make a cove or prefabricated cove sections and a stepladder to be able to get out once the wall is up and installed.

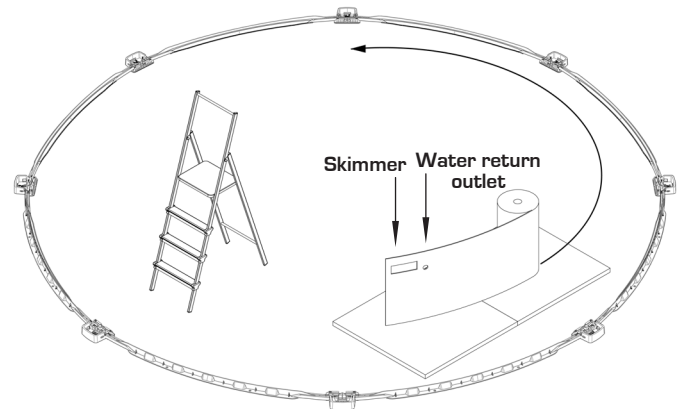
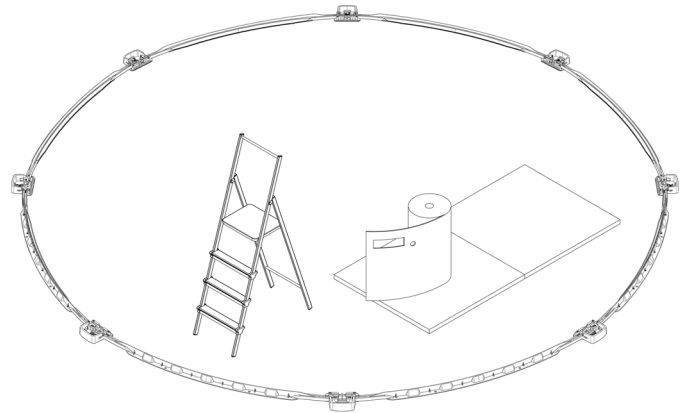
3.2 Note that the skimmer hole and return are located at the starting end of the rolled metal wall, therefore position the roll to begin the unfolding of the wall of your pool where you want to position these items.

3.3 Place the two plywood sheets inside the circle of the pool close to where you intend to put the filter and pump. Take out the wall from the box and place it on a plywood sheet.

3.4 Start unrolling the wall by guiding the bottom of the wall into the lower slot of the rail (already positioned). The first end of the wall must be in the center of a bottom plate to allow the installation of the screws so that they are hidden behind an upright.

**ATTENTION:** Be careful not to push any sand on or inside the rails which would make it difficult to insert the wall into it.

3.5 We suggest you install the top rails gradually as the wall is unrolled to give more stability to the metal sheet. It is also recommended to hold and support the top of the wall until it is fully installed, with the help of several people or by using the vinyl covered hooks, rope and tent peg attached to the top of the wall to make it stand as straight as possible.



# 3.WALL INSTALLATION (continued)

## 3.6 BASIN ASSEMBLY

Once the wall is completely unrolled and inserted into the bottom rails, you could be faced with 3 situations:

- The wall seems too long (it is not)

See Step 3.6.1

- The wall seems too short (it is not)

See Step 3.6.2

- The assembly holes at both ends of the wall are perfectly aligned

Go to Step 3.7

3.6.1 If your wall seems too long, the spaces between the rails in the bottom plates should be enlarged. Gently tap each rail inside of the bottom plate outwards so that the circumference is slightly enlarged.

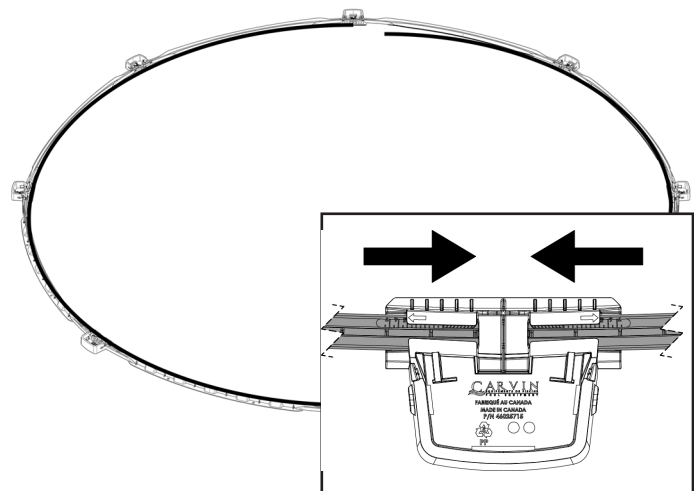
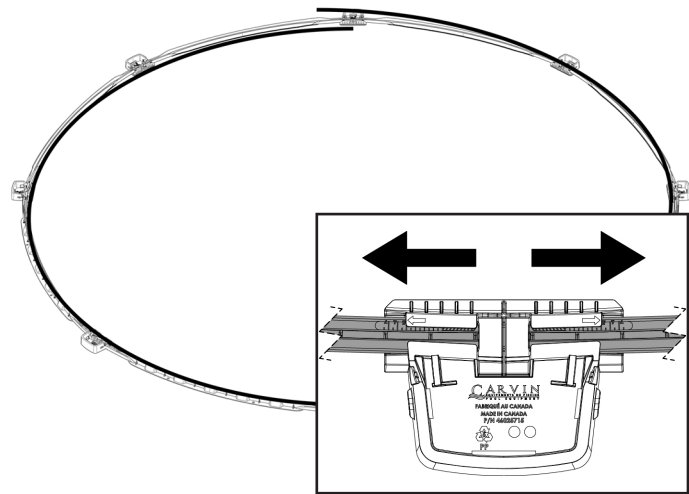
3.6.2 If your wall seems too short, the spaces between the rails in the bottom plates should be reduced. Gently tap each rail inside of the bottom plate towards the inside so that the circumference is slightly reduced.

**If you have done one of the two steps (3.6.1 or 3.6.2) you absolutely have to recheck the spacing between the rails in each bottom plate to make sure that spacing is equal in all plates.**

3.7 When the assembly holes of the wall are aligned, you will be able to join them together. To do this, place both ends of the wall on top of each other then place the two steel bars, one inside, the other outside the wall. To help you align the holes of steel bars to wall, insert two or three punch or screwdrivers into holes to keep joint aligned. Then, insert screws and nuts provided for the wall (screw heads inside the pool and nuts outside); do not tighten them for now.

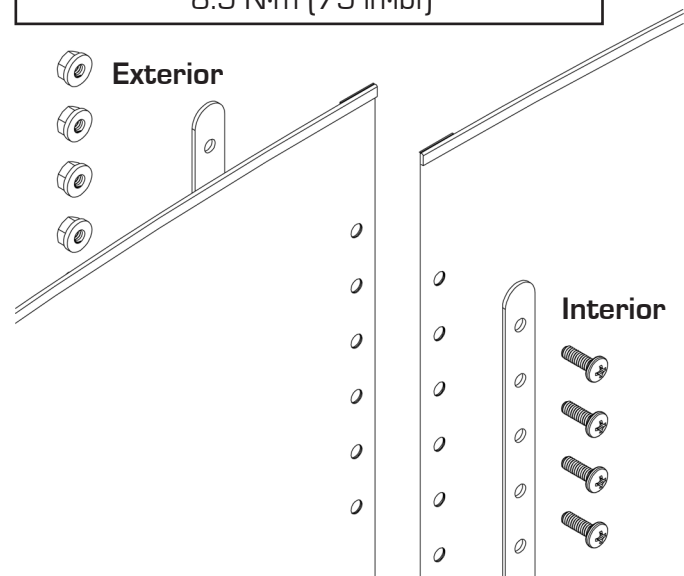
**Make sure all holes have screws and nuts. Once all screws and nuts are in place, tighten them with a torque force of 8.5 N·m (75 in·lbf).**

Tighten all the screws without forgetting any, because this could cause an alignment problem.



**IMPORTANT!** Screw heads must be inside the pool

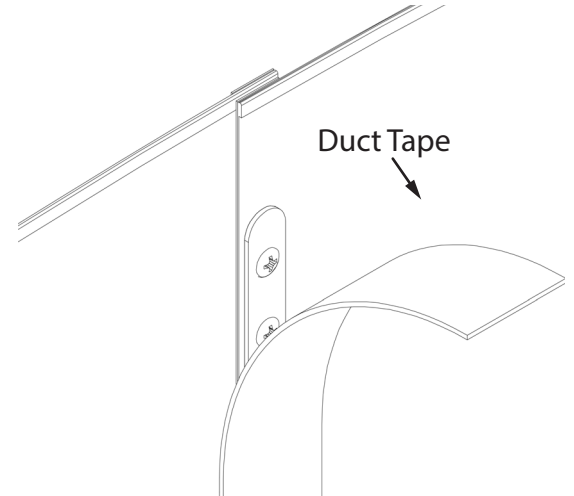
**IMPORTANT!** Use a torque wrench of 8.5 N·m (75 in·lbf)



# 3.WALL INSTALLATION (continued)

3.8 Cover the wall joint by applying two or three layers of 2" (50mm) duct tape. Make sure all screw heads are well covered with tape so that the liner is protected from sharp corners of screws to avoid it to tear or pierce.

3.9 Once the wall is assembled, make a final check to make sure the pool is perfectly round. To do this, check the diameter of the pool at different places so that each dimension is identical. If this is not the case, adjust the bottom plates by pushing them inside or outside accordingly to get a perfectly round pool.



**IMPORTANT !** The pool must be flat on the entire perimeter. A swimming pool that is not entirely leveled can be dangerous and can collapse.

## COVE ASSEMBLY

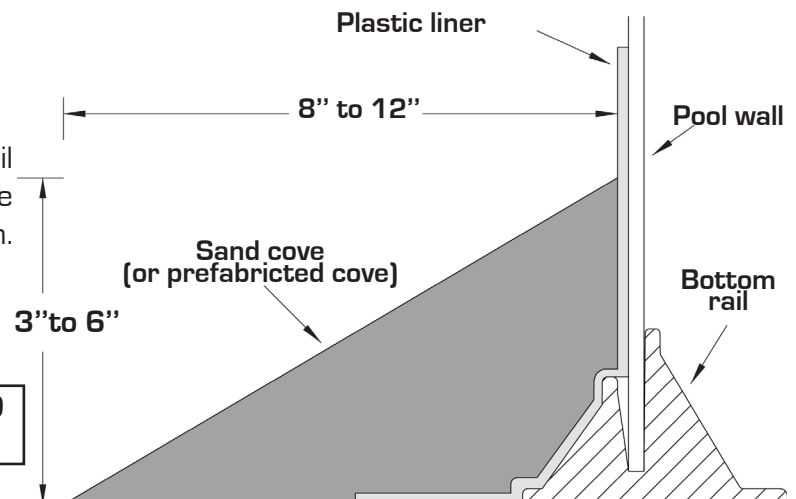
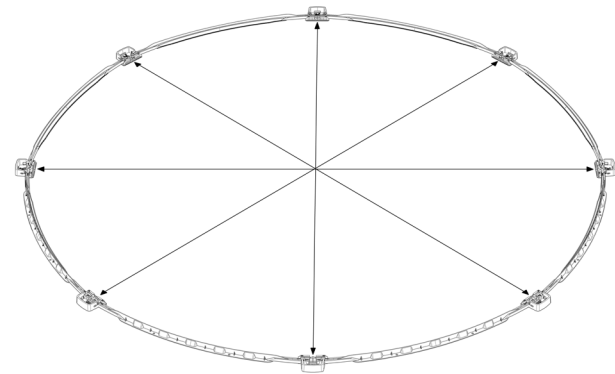
3.10 If you are using a prefabricated cove, follow the instruction manual provided.

3.11 If you are using sand or soil to create the cove, we recommend putting a polyurethane plastic sheet to prevent contaminants that may contain sand and/or soil from affecting the metal wall.

3.12 Once the plastic sheet in place, using sand or soil create a triangular shape ledge along the bottom of the wall of 3 in. to 6 in. (7.5cm to 15cm) high by 8 in. to 12 in. (20cm to 30cm) long.

**THE COVE IS NOT OPTIONAL, IT MUST BE INSTALLED (PREFABRICATED OR HAND MADE)**

3.13 Dampen and compact the sand cove. Make sure the center of the pool ground is flat and smooth because the liner will show the slightest defects of the ground.





# 4. LINER INSTALLATION

The liner dimensions are usually smaller than those of the pool frame. It is recommended to spread the liner in the sun for an hour or two before starting the installation so that the liner can warm up. It will stretch better under these conditions and facilitate the installation.

Select a liner that meets APSP-4 liner performance requirements.

**DO NOT ATTEMPT TO INSTALL THE LINER ON A COLD DAY WITHOUT SUN. AVOID TO FILL THE SWIMMING POOL WITH VERY COLD WATER.**

4.1 Open the liner box.

**IMPORTANT : DO NOT USE SHARP TOOLS TO OPEN THE BOX**

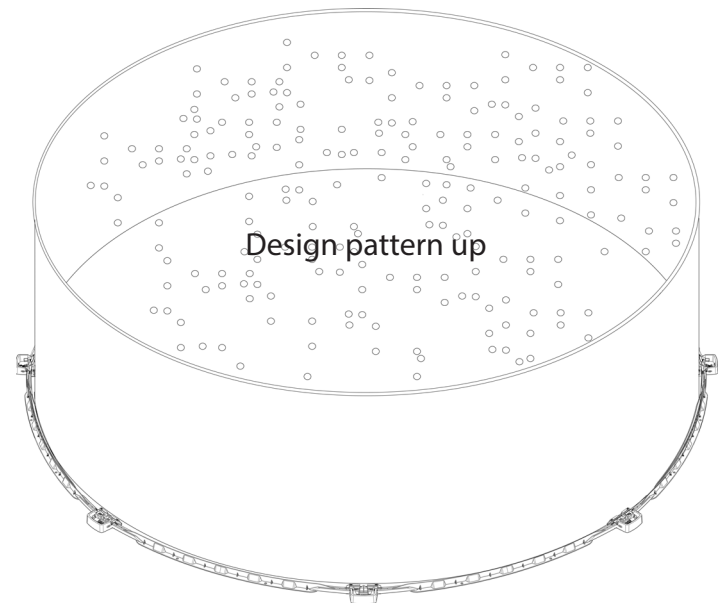
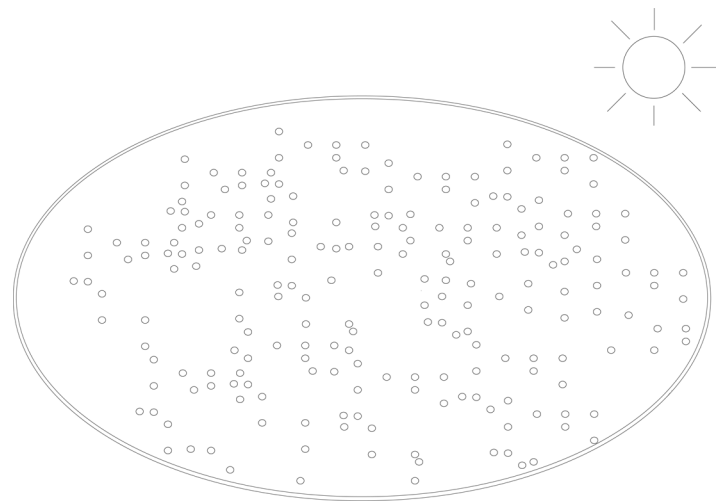
4.2 Take out and unfold the liner from the box and spread out in the sun so it can warm up and stretch.

4.3 Inspect the liner, the seams and the complete surface to make sure there are no holes.

**It is better to remove your shoes to prevent damaging the bottom of the liner.**

4.4 Spread the liner inside the pool with design pattern up. The seam at the bottom of the liner should be placed in the center of the basin. All other seams must form parallel straight lines.

4.5 Make sure liner is free of wrinkles at the bottom of the pool.



# 4. LINER INSTALLATION (continued)

## 4.6 FASTENING THE LINER ON TO THE POOL WALL

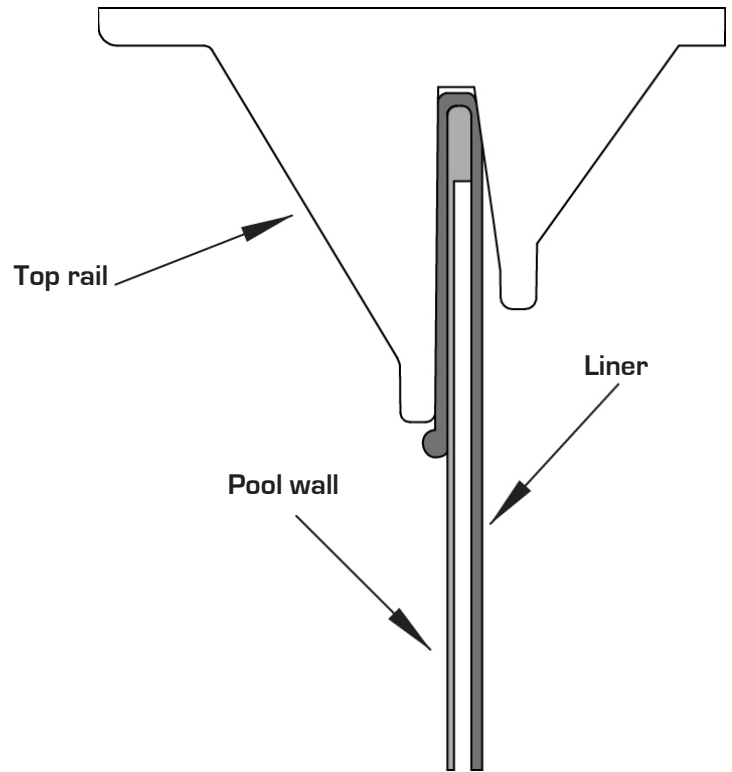
**For assembly with a U/J type pool liner**

4.6.1 The top of the liner has a welded vinyl flange to hang the liner. It is called an overlap. Open it with your fingers and hang on the top of the wall.

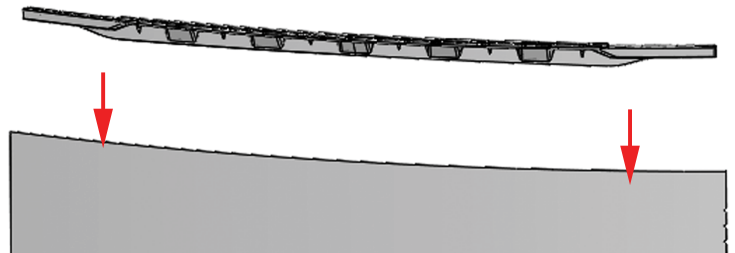
4.6.2 Hang the liner on the wall all around the pool. The liner should be free of any wrinkles or creases on the vertical portion on the walls. If this is the case, adjust the liner by turning the bottom of the liner, or by adjusting the overlap on the wall contour.

4.6.3 As you install and hang the overlap liner, assemble the top rails to solidify the pool. Position these top rails to be aligned with the bottom rails because the uprights will have to be installed in top and bottom plates which are the junction between rails.

You might need a rubber mallet to place the upper rails in position and properly lock the liner in place.



**Do not cut the excess liner on the outside of the wall of the pool. If disassembly or reassembly is necessary, a liner that has been cut will be much more difficult to position. If the excess liner is too long, simply fold it and fasten it with tape.**



# 5. STRUCTURE ASSEMBLY

## 5.1 UPRIGHT INSTALLATION

Before starting the installation of the uprights, check if the bottom plates are centered correctly into the rails of each plate. Adjust if necessary.

5.1.1 Insert uprights into each bottom plates. Push the upright down until you hear a click.

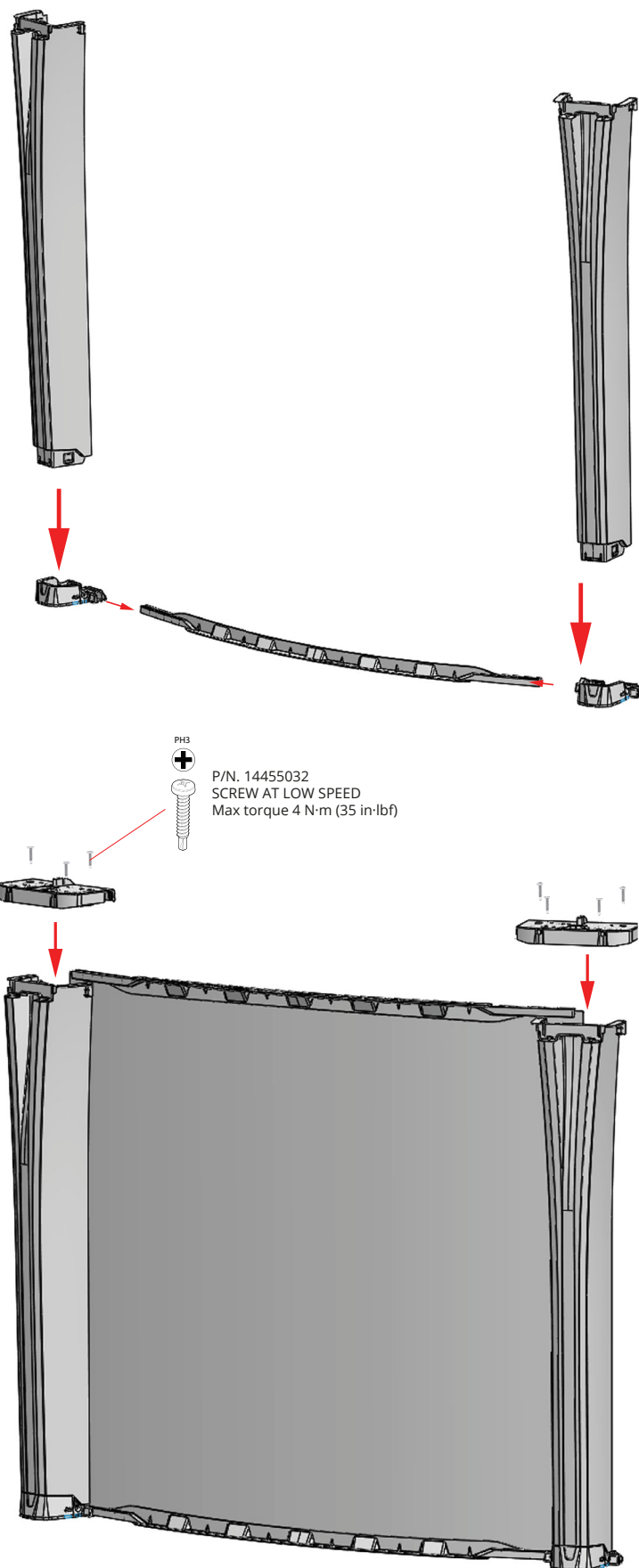
5.1.2 Holes are located on each side of each bottom plate to install screws. The installation of these screws is mandatory to make the assembly even more solid against ground movements due to freeze / thaw.

Do not install these screws for now. Wait until the top seats are positioned in place to install the screws.

## 5.2 TOP PLATE INSTALLATION

5.2.1 Tilt the top plate so that the inside part hooks onto the top rail. Then, lower the top plate to press down against the upright.

5.2.2 Make sure the holes on top plates are aligned with the holes on top of uprights. Install the 4 auto tapping screws (14455032) to assemble the top plates on the uprights.



# 5. STRUCTURE ASSEMBLY (continued)

## 5.3 TOP LEDGE INSTALLATION

5.3.1 Position all top ledges around the pool structure.

5.3.2 Center the top ledges to the top plates and uprights.

**Screwing the top ledges will solidify the verticality of the uprights.**

**Make sure the uprights are straight before screwing top ledges.**

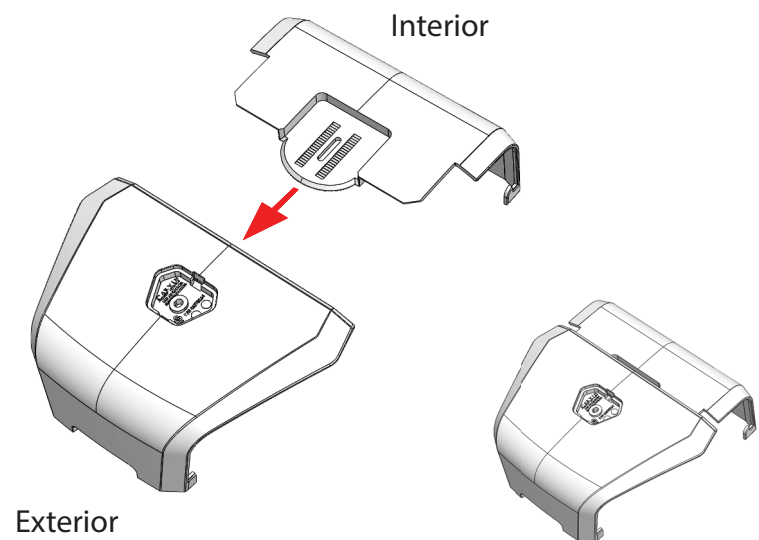
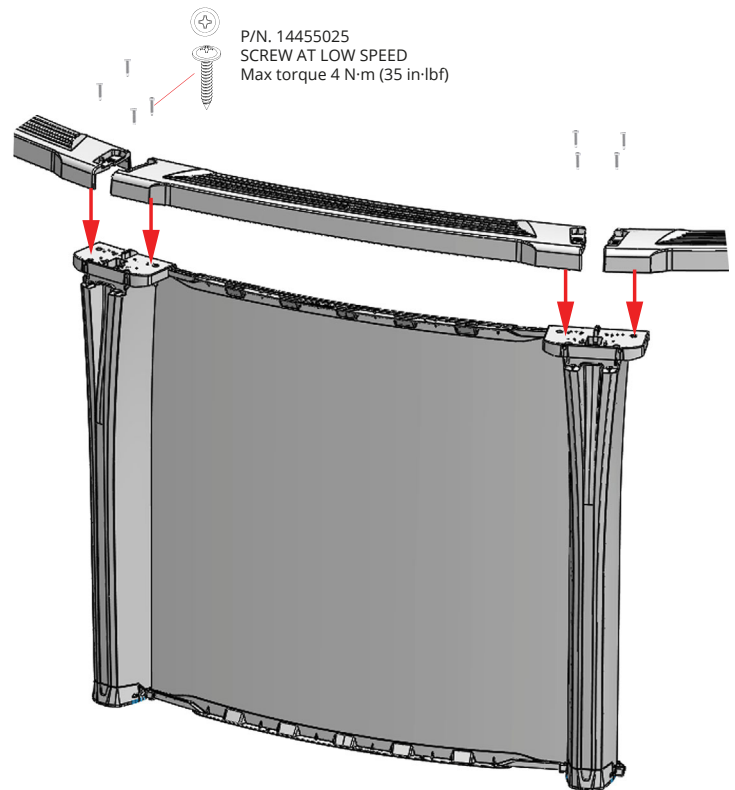
**Use the corrugation (fold lines) of the steel wall to guide you on straightness of the uprights.**

5.3.3 Before screwing top ledges, pull them towards the exterior of the pool so that the corners on the interior of the pool are pressed and flush against top plates. Screw top ledges with 2 screws on each side. Use the outer-most holes to screw on the top ledges.

Many holes are on the top plates for assembly, use the one that seems best located for your installation.

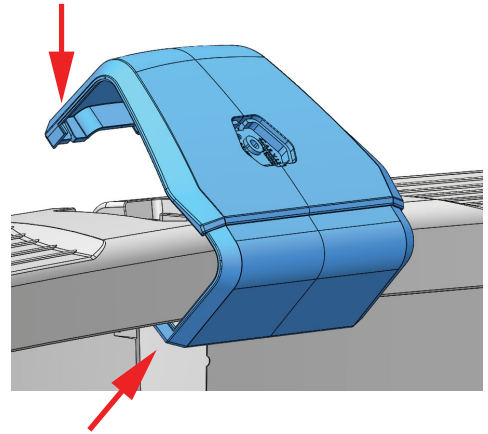
## 5.4 TOP LEDGE COVER INSTALLATION

5.4.1 Pre-assemble front (interior) and back (exterior) top ledge covers until you hear the first click.

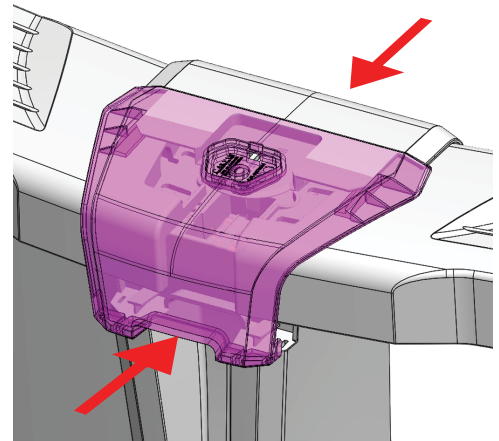


# 5. STRUCTURE ASSEMBLY (continued)

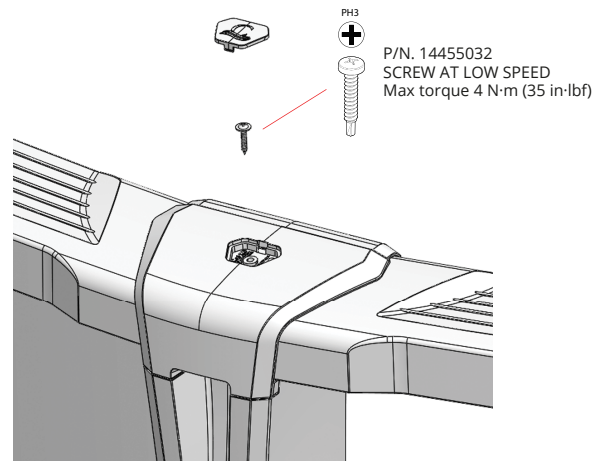
5.4.2 Hold the rear part of the top ledge cover against top ledge (interior of the pool) and push on the front part (exterior of the pool) of the top ledge cover so that the shape of the top ledge cover is pressed and flush with top ledge.



5.4.3 Line up the center slot of top ledge cover with the center hole of top plate. Screw together using screw 14455032.



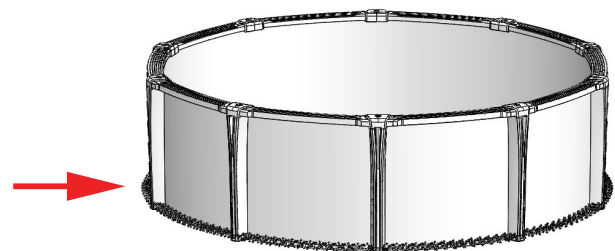
5.4.4 Install the top ledge cover cap by pushing it into place until it clicks.



**Screws on the bottom of the uprights can now be installed to solidify the whole structure and prevent uprights and bottom plates against ground movements due to freezing / thawing.**

## Protection against foundation drainage

5.4.5 In order to properly protect the compacted foundation and prevent it from draining, spread around your pool a strip of 10" wide minimum by 2" to 4" high, of 3/4 rock or river stones. Failure to apply this step or use another product such as garden soil or mulch would void the warranty.

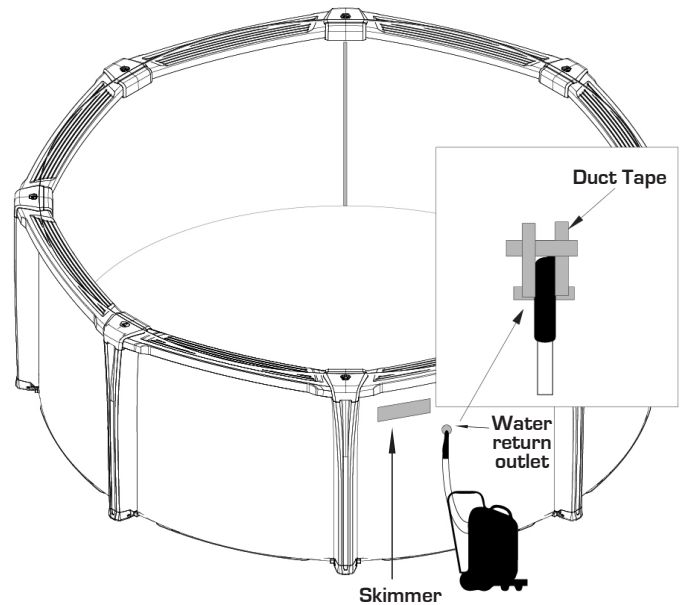


# 6. FILLING THE POOL WITH WATER

6.1 You can use a vacuum cleaner to remove the air between the liner and the pool wall. By removing the air, the liner will stretch a little and start sticking to the pool wall. This will allow you to correct the surface of the liner and remove folds and wrinkles.

## ATTENTION :

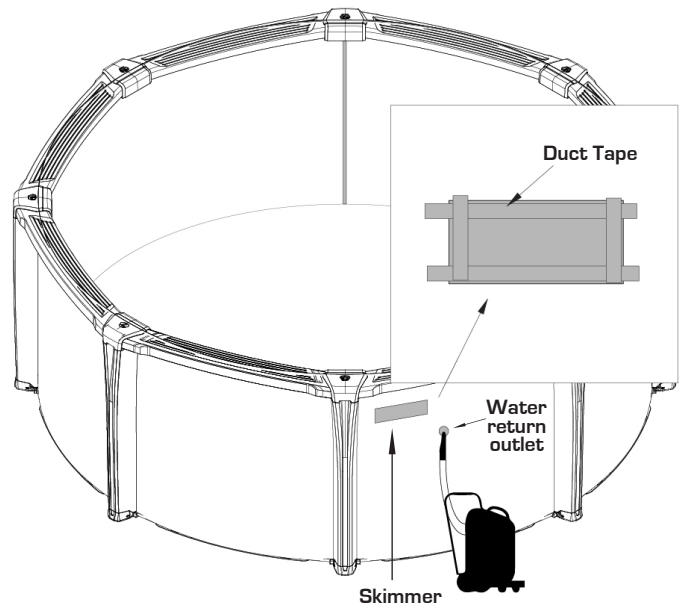
- Do not use an industrial vacuum cleaner that could suck the liner and damage it or pierce it.
- Make sure the vacuum cleaner nozzle does not have sharp corner(s) that could damage the liner. Tape the end of the nozzle to prevent any damage.
- Insert the end of the nozzle into the return of the wall (about 12 in./30cm). Make sure the nozzle is at least 4 in./10cm from the cove of the pool so it is not moved or sucked by the vacuum cleaner.
- Tape the vacuum hose to the side of the pool wall with "Duct tape". Make sure the return hole is blocked properly to keep air out. The vacuum must be outside the pool.



6.2 Close skimmer opening on the outside of the pool wall with cardboard and duct tape to also prevent air from escaping.

6.3 Start the vacuum cleaner. The liner will begin to stick against the wall. If you notice any wrinkles, smooth out the bottom. To avoid damaging the liner do not wear shoes for this step.

6.4 Start filling the pool with water. Keep checking for wrinkles. Smooth out any visible wrinkles before there is too much water in the pool preventing the liner from moving.



## 6. FILLING THE POOL WITH WATER (continued)

6.5 When you reach 4-5" (10-15 cm) of water in the pool, turn off the vacuum and remove the hose.

6.6 Continue filling the pool until the water level is about 2" (5 cm) under the water return hole.

Before cutting the liner hole for the water return or the skimmer opening, wait until there is at least 24" (60 cm) of water in the pool for the liner to have stretched properly.

Fill the pool with at least 12" (30 cm) of water with a gardening water hose to allow the liner to stretch and give you time to put it back in place if you see any wrinkles. Afterwards, you will be able to use a more powerful water supply.

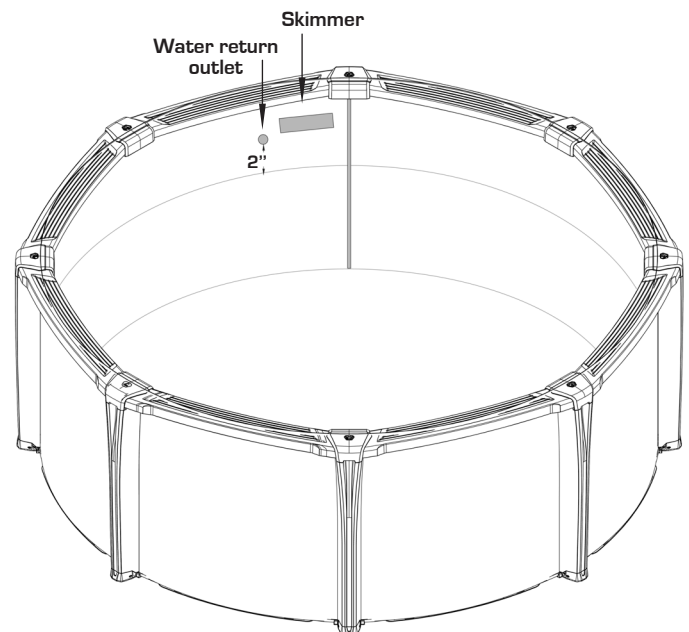
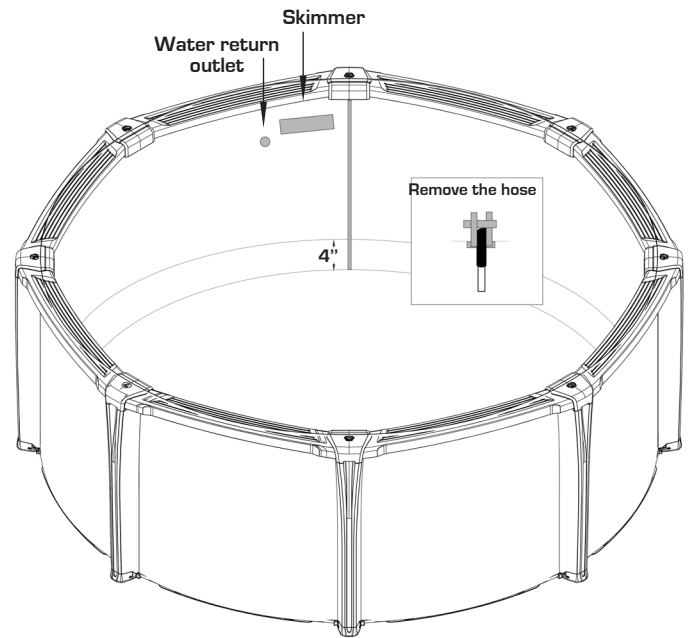
6.7 Stop filling with water and install the water return inlet and skimmer by following the installation instructions for these features.

**A basic circulation and filtration system MUST BE INSTALLED.**

This system includes the following products by installation order:

- A skimmer
- Pool pump
- Filter
- Water return

Install the safety stickers provided with your pool as listed in the "warnings" on page 36 of this manual



### IMPORTANT NOTE

Make sure you follow all local and provincial regulations when you proceed with pool accessories installation. The components allowing entry into the pool must be approved for the safety of users.



# 7. GENERAL MAINTENANCE

The parts most likely to cause a leakage problem are the skimmer and the water return. Regularly inspect the areas of these two components to make sure there is no water leakage on the wall of the pool. Make the necessary repairs to the protection joints of the skimmer and water return (see replacement of these parts) to stop any leakage as it may cause rust and seriously damage the pool wall, the bursting of the pool that could cause significant damage to your property and/or your neighbors.

**NEGLECTING THESE INSPECTIONS AND REPAIRS WILL VOID THE WARRANTY OF THE POOL.**

Your pool liner must be inspected regularly for leaks. Also, inspect your wall for corrosion and scratches. If problems are detected, ACTION MUST BE TAKEN IMMEDIATELY. Small leaks or holes in the liner can be repaired easily using repair kits sold at your dealer. Corrosion and scratches on the pool wall must be repaired by using an anti-rust enameling product. Rub the rusted surface with a wire brush, apply the anti-rust product and repaint the wall to match the repair to the color of the wall.

The pool water contains several corrosive products for the wall of the pool. It is important to check that there are no leaks in the liner. Any leaks will cause corrosion to the pool wall which, if not treated quickly, will reduce the strength of the wall. The wall could collapse and cause significant damage to your property and/or neighbors and could also cause major injuries to people near or in the pool.

Keep the wall and resin structure clean. Always clean chemical deposits that may appear on exterior surfaces of the pool. Cleaning the surfaces of the pool, structure and wall, is recommended at least once a year with a cleaning product without bleach.

TABLE - RECOMMENDED WATER CHEMICAL PARAMETERS

Parameter	Minimum	Target	Maximum
Temperature Range	+50°F (+10°C)	-	+122°F (+50°C)
Salt Concentration	3000 ppm	3300 ppm	4000 ppm
Cyanuric Acid	30 ppm	80 ppm	100 ppm
pH	7.2	-	7.8
Free Chlorine	1.0 ppm	-	3.0 ppm
Combined Chlorine (Chloramine)	-	0 ppm	-
Total Alkalinity	80 ppm	-	120 ppm
Calcium Hardness	200 ppm	-	300 ppm
Total Dissolved Solids (TDS) Including Salt	-	-	6000 ppm
Metals (Copper, Iron, Manganese)	-	None	-
Nitrate	-	None	-
Phosphate			125 ppb
Saturation Index	-0.2	0.0	+0.2

*ppm = part-per-million, ppb = part per billion*

**IMPORTANT NOTE**  
**NEGLECTING MAINTENANCE OF YOUR POOL WILL**  
**VOID THE WARRANTY OF YOUR POOL.**

# 8. WINTERIZING THE POOL

---

---

In regions where freezing temperatures occur, it is common practice to close a pool during the winter months. This is called winterizing.

All our pools were designed to stay outdoors during the winter. However, it is necessary to follow the following directions to winterize your pool.

## **NEGLECTING TO FOLLOW THE WINTERIZING INSTRUCTIONS WILL VOID THE WARRANTY OF YOUR POOL.**

A good winterization should only take a few hours and will make the spring opening of your pool easier.

As winter approaches, the temperature of the water cools, the addition of chemicals becomes less and less necessary. However, it is necessary to periodically check the chemical parameters of the water in order to keep the water clean and without deviations from the recommended values. Failure to respect these values could tarnish the pool liner and reduce its life span. It is recommended to winterize the pool as late as possible (end September/beginning October) when the temperature of the water is under 10 C (50 F). At this temperature, the proliferation of contaminants is very slow.

Do not turn off the filtration system until the pool is completely closed. The early closing of the system could allow the water in the pipes to freeze and break some of the elements of the filtration system.

## **8.1 INSPECTION**

8.1.1 Before the annual closing of the pool, check the chemical parameters of the water (PH, alkalinity, chlorine...) A water with unadjusted parameters will degrade the liner and could cause rust on the wall.

8.1.2 Check for any leaks in the liner. To make sure, sometime early in September, check that the water level does not drop in a week period. If a drop in the water level is observed, there is a leak. Repair the holes in the liner using a repair kit which can be found at your local dealer. Check for any leaks around the skimmer opening and water return. If a leak is found, actions must be taken immediately to repair the problem. Check that the liner is still firmly attached to the top of the wall.

8.1.3 Check the structure of the pool. If corrosion and scratches occur on the pool wall, you must be repair them by using an anti-rust enameling product. Rub the rusted surface with a wire brush, apply the anti-rust product and repaint the wall to match the repair to the color of the wall. Also check that the wall joint (joining the two ends of the pool wall) is solid and that the screws are tight.

# 8. WINTERIZING THE POOL (continued)

---

---

## 8.2 PREPARING THE WATER

8.2.1 Keep average water parameters in the weeks before closing your pool.

When closing, use a pool closure kit sold at your local dealer. This kit contains algaecide and chlorine specially made for winterizing swimming pools. Using these kits will reduce the amount of chemical products when you restart your pool in the spring.

Clean the bottom of the pool of any dirt, leaves or sand before lowering the water level.

8.2.2 Empty your pool so that the water level is between 6 inches and 20 inches (15 cm and 50 cm) under the water return. The water return hole can be blocked or closed once the water level is lowered. **THE HOLE UNDER THE SKIMMER MUST STAY OPENED.**

Keep the skimmer on the pool. Do not let water accumulate in it. Make sure the water that will go through the skimmer will drain as far as possible from the pool to avoid causing ground movements.

For regions where freezing is greater, we recommend lowering the water level between 15 in and 20 in. (40 cm and 50 cm) under the water return. Check with your local dealer to know his recommendations as to the level of water to be kept during winterization.

It is also recommended to check the water level during autumn once the winterization is done before the pool water freezes. If the level rises drastically, it is recommended to empty this water to bring the water back to the acceptable level.

**DO NOT EMPTY THE POOL COMPLETELY.** This could cause your liner to move, it will also put your pool at risk of flying upwind and causing significant damage to your property or your neighbors. It could also cause serious injury.

If you have a main drain, it is recommended to use antifreeze specially designed for swimming pools in order to avoid pipes from freezing. To do so, once the pool is emptied unplug the pipe that connect the main drain to your filtration system. Make sure the pipe is above water level (to prevent the pool water from emptying through the hole). Fill this pipe with antifreeze until you see antifreeze coming out of the main drain of the pool. (You will not be able to fill the pipe since the water pushed by the anti-freeze will go into the pool by the principle of communicating vessels.)

Make sure that the pipe remains higher than the water level all winter by tying it to a top ledge.

# 8. WINTERIZING THE POOL (continued)

---

---

## 8.3 WINTERIZING THE FILTRATION SYSTEM

8.3.1 Disconnect all the hoses from the filtration system. Follow the instructions manuals of the various components of your filtration system to winterize. Store all the equipment; pump, ladder or other in a protected and closed area.

## 8.4 USE OF A WINTER COVER

8.4.1 For the use of a winter cover, we recommend you ask your local dealer for information. Since many types of winter covers are available, your dealer can advise you on the best installation for your pool.

**NEVER LEAVE WATER IN THE FILTRATION SYSTEM. IT MUST BE DRAINED.  
FREEZING OF WATER IN THE SYSTEM COULD DAMAGE THE COMPONENTS.**

**NEVER LET WATER ACCUMULATE IN THE SKIMMER DURING FREEZING PERIODS.  
IT COULD DAMAGE THE SKIMMER AND THE POOL WALL COULD COLLAPSE.**

The pool is designed to support the weight of water in a horizontal way. Make sure to remove any amount of snow over 12" (30 cm) on the structure of the pool (top ledges).

During winter, do not hit a pool filled with frozen water. This could damage the pool. Never climb on a pool (frozen) during winter. This could move the ice and damage the liner and the pool structure.

# 9. SPRING OPENING

---

---

As soon as the exterior temperature reaches 10°C (50°F) and the pool water is completely unfrozen, it is time to restart your filtration system on your pool.

9.1 Clean your winter cover from any water accumulation, leaves or any dirt that would have dropped on top of your cover. Take off your winter cover from your pool.

9.2 Reposition your filtration system in place and reconnect the hoses to the skimmer and water return.

9.3 Fill the pool with water so that the level reaches the middle of the skimmer.

**Check your pool to make sure there is no apparent rust or leaks, specially around the skimmer and water return. If you see a problem, proceed with repairs as soon as possible.**

9.4 Clean the bottom of the pool by vacuuming the leaves and dirt. Set the filter to “DRAIN” to clean without the water having to go through the filter. By setting to “DRAIN” the sand in your filter will stay clean and delay the “CLEAN” operation to later.

**DO NOT EMPTY WATER COMPLETELY FROM THE POOL UNLESS IT IS NECESSARY. IF YOU MUST DO SO, DO NOT LEAVE THE POOL EMPTY FOR A LONG PERIOD. A SUN EXPOSED LINER CAN SHRINK AND DRY. THE STRUCTURE CAN ALSO MOVE IF VERY WINDY CONDITION OCCUR MAKING IT VERY DANGEROUS.**

9.5 Adjust the water parameters of your pool. Contact your local dealer for recommendation on various chemical products to be added in the water for the season opening of your pool.

**MAKE SURE THE SKIMMER AND WATER RETURN DO NOT LEAK. ANY LEAKS COULD RUST THE WALL AND SERIOUSLY DAMAGE THE STRUCTURE OF YOUR POOL.**

**NEVER POUR CHEMICAL PRODUCTS THROUGH THE SKIMMER. THIS COULD CAUSE MAJOR PROBLEMS AND LONG TERM DAMAGE TO YOUR FILTRATION SYSTEM.**



**CARVIN**  
ÉQUIPEMENTS DE PISCINE  
P O O L E Q U I P M E N T

4000 boulevard Casavant Ouest, Saint-Hyacinthe, Québec, Canada, J2S 9E3

T. (450) 250-4500 / (866) 979-4501 F.(450) 250-4501

[www.carvinpool.com](http://www.carvinpool.com)