Winterizing Procedures for Aboveground Swimming Pools

Protecting your Investment!

Our Service Team has been winterizing swimming pools for over 45 years! Below, you will find our recommendations for homeowners closing their own pools. Our instructions include helpful advice from our experts based on years of experience as well as The Pool Shoppe’s preferred line-up of professional winterizing products and chemicals.

There are six important steps to winterizing your pool:

1. Water Balance & Protection
2. Vacuum, Clean and Lower the Water Level
3. Remove Pool & Deck Accessories
4. Winterize the Equipment
5. Winterize the Underground Plumbing
6. Install the Winter Cover and Leaf Cover

***Please read all instructions thoroughly before starting your Winterizing Procedures as certain conditions or circumstances may affect the order of which you perform your closing procedures. Please note that these instructions are to be used as a guideline. Always refer to manufacturer’s instructions and owner’s manuals for further details.

Please refer to the last page of these instructions for your Winter Supply Checklist

STEP 1: Water Balance & Protection

One Week before Pool Closing

Bring a water sample into The Pool Shoppe at least one week prior to Closing. All chemistry adjustments should be made at this time before adding any of the Winterizing Chemicals. It is particularly important that the pH and Total Alkalinity are tested and any necessary adjustments are made. As well, the Chlorine/Bromine reading must be between 1.0-3.0 ppm at the time of closing. A second water test may be necessary if major chemistry changes are made after the first water test.

As the temperature of the pool water drops, the water becomes more corrosive. Improperly balanced water may result in the liner becoming brittle and the formation of wrinkles in the liner. Further damage could be the corrosion of any metal parts (face plate screws), and the staining of the pool surface.

Three Days before Closing the Pool

i. Add a clarifier such as Clear Blue to the pool to help the sand filter catch all fine debris. Dilute Clear Blue at the rate of 60 mL per 45,000L of pool water and distribute around the pool edges or directly into the Skimmer.

ii. Add the Meta Sol from The Winterizing Kit or equivalent Stain & Scale prevention. It is used to coat metals and minerals in the water to prevent stain and scale formation both on the pool surface and in the filter media. Dilute the full bottle from The Winterizing Kit and distribute around the pool edges.
One Day before Closing the Pool

Add the Oxy-Out from The Winterizing Kit. This is a non-chlorine, non-bleaching, totally soluble Shock Treatment. Broadcast the whole container from the kit evenly over the pool surface.

i. And lastly, add the Concentrated Algaecide from The Winterizing Kit. It is a 50% concentration used to both kill and prevent all strains of algae growth. Dilute the whole bottle of the algaecide from the Kit and distribute around the pool edges.

STEP 2: Vacuum, Clean and Lower the Water Level

The physical cleaning of the pool begins with a thorough vacuum of the pool walls & floor, followed by backwashing the filter when the vacuum is complete. If the pool is very dirty, a preliminary vacuum may be needed to clean the pool before adding the contents of The Winterizing Kit.

Some pool owners will backwash the filter first and then perform their final vacuum on the ‘drain’ or ‘waste’ position, cleaning the pool and lowering the water level simultaneously.*

The final backwash should be completed using Filter Rinse to remove unwanted minerals and organic build-up from the filter sand. During the final backwash, pour Filter Rinse into the Skimmer while backwashing. If you have a Cartridge or Diatomaceous Filter or use Zeobrite media in your sand filter, there are proper cleaning solutions available at The Pool Shoppe to soak these types of media to prepare them for storage. This seasonal soak is mandatory to prolong the efficiency and life of your media. If you use Activate Glass Media in your filter, a Filter Rinse is not necessary but can be done if desired. Please see a Pool Shoppe representative for these specialty products.

When the final vacuum has been completed, the water level must be dropped to Winterizing Level.
- The Winterizing level for Above Ground Pools is 4” below the Skimmer mouth.

*When performing the final vacuum, do note that when the water level drops below the Skimmer, some systems may begin to draw air and you could lose the prime on the pump. To prevent this air draw, run just enough water into the Skimmer with the garden hose, keeping a ‘water seal’.

Completely remove the ‘ring-around-the-pool’ with Vinyl Liner Cleaner and a sponge. This will prevent staining of the liner over the winter as well as premature fading of the liner pattern due to reactions with the "bathtub ring" and the vinyl. Vinyl Liner Cleaner also works great on coping and top rails.

STEP 3: Remove Pool & Deck Accessories

We recommend that your solar blanket be fully cleaned with Cover Cleaner and rinsed to remove chlorine and organic residue. Allow the solar blanket to dry and fold neatly for storage. If you store your solar blanket on the roller for the winter months, protect the blanket by wrapping it with a tarp or a Solar Blanket Cover to protect it from damaging UV rays of the sun. If you plan on storing your solar blanket in a shed, keep in mind that mice and other critters tend to find refuge over the winter by chewing their way into a few layers of the plastic. Consider storing the solar blanket up off of the shed floor.

- Fully clean solar blanket with Cover Cleaner, dry off and fold neatly for storage. Store Cover indoors or in a shed if possible.
- Remove deck ladders and drop-in steps.

STEP 4: Winterizing the Equipment

Along with these basic instructions, always refer to your Equipment Owners Manuals for further details. Power to the pool equipment must be off in order to complete the following equipment winterization procedures.

- Pump and Filter If it is removable, undue unions and unplug pump. Turn it upside down to drain the water out and store the pump indoors. If you cannot remove the pump, you will have to winterize it in place. Remove the drain plugs from the Pump Housing to drain out any remaining water. Store the drain plug in the strainer basket and leave in the pump. Lubricate the lid O-ring with Jack’s Lube and re-install the lid. Do not wrap the motor in plastic as that will retain moisture and rust out the motor bearings. Ideally, shelter the pump and motor with a vented cover or box to protect it from the elements. Also, refer to your Owner's Manual for any further instructions.

There are different styles of filters on the market. Always refer to the Owner's Manual for further details.
• **On Cartridge Filters and Diatomaceous Earth Filters**, bring indoors when possible. Also soak filter elements in a proper cleaning solution, such as *Filter Free*, to prolong their life and efficiency. If the canister cannot be brought indoors, drain all water out of the canister and cover canister to protect it from the elements.

• **Sand Filters** can be left in place because they are too heavy to move. There is a drain cap that must be removed to allow the water that is in the tank to drain out, and the sand to stay in. Leave the drain cap off for the winter and store the cap in the pump strainer basket. We suggest storing or placing all removable drain plugs, caps, pressure gauges, site glasses etc. from the filtration equipment into the pump basket and leaving these items inside the pump for the winter. The valve head itself, has been designed to withstand freezing temperatures and is best left on the filter. The process of removing the valve head could cause damage to the internal standpipe assembly so we recommend caution if the home owner wishes to remove this and store indoors. If the filter tank is outdoors, the valve head can be wrapped in plastic to protect it from the elements.

• **Chlorinator** All Chlorinator canisters must be emptied of all water and chemicals before winterizing. For Off-Line Chlorinators: remove all feeder tubes to storage and replace the lid loosely as not to compress the o-ring during the off-season. For In-Line Chlorinators: undue the unions on the canister for removal from the filter. Due to fumes from the chlorinator, it should be stored outside and covered with plastic to protect it from the elements.

• **Hayward Gas Heaters** *(For all other brands of heater, please refer to your Owner's Manual)*

  It is just as important to properly winterize the Pool Heater as it is to have it properly cleaned out in the Spring. First turn the Manual Service Gas Valve 'OFF'. This valve is located outside of the heater within the pipeline where the gas line connects to the heater. Next, take the front door off of the heater to locate the Manufacturer's Gas Valve inside the heater. On Hayward's Millivolt or Standing Pilot heater, the gas valve has a knob that needs to be turned from 'On' to 'Off'. Push this knob down slightly in order to turn it to the 'Off' position. For the Hayward Electronic Ignition and Forced Draft Heaters, the Manufacturer's Gas Valve inside the heater has a toggle switch that simply needs to be switched from 'On' to 'Off'.

  On Hayward's Millivolt/Standing Pilot and ED2 Electronic Ignition heaters, there is a small tube that leads to the pressure switch that needs to be disconnected for the winter. The best way to access this pressure switch is to remove the upper front panel of the heater. Once that panel is removed, it will be on the right hand side. There are 2 nuts on the pressure switch tube that when unthreaded, will disconnect the tube in question. Using 2 wrenches, place the first wrench on the nut closest the pressure switch and hold the switch firm. Place the second wrench on the second nut and turn that nut further away to disconnect the tube. Do not remove the switch from the heater – let it hang inside the heater by its connecting wires. Replace the front panel doors. Hayward's Forced Draft heaters do not require disconnection of the pressure switch tube. These pressure switches have been mounted vertically allowing them to self drain.

  Under the header on right side, there is either a brass plug to be removed completely or a petcock valve to be unscrewed as far as it will go.

  Use a 'Shop Vac' to blow all of the water out of the heater by putting the 'Shop Vac' Hose into the inlet water pipes.

  Do realize that rodents and spiders look for a winter home and the Pool Heater offers a lot! Each spring, a licensed Gas Technician should be hired to clean out the burner tray and pilot tube to prevent a gas back-up, resulting in an inefficient heater or flame roll-out.

• **Hayward Heat Pro Heat Pump** *(For all other brands of heater, please refer to your Owner's Manual)*

  Disconnect the two water connection unions from the heat pump to drain all water from the lines. Remove the drain plug from the bottom water connection on the heat exchanger to remove any excess water. Insert the 'Shop Vac' hose into the inlet water pipe in order to blow out any remaining water from the unit. Cover the top of the heat pump only or place a piece of plywood onto the top and weigh it down. This will prevent debris from entering the openings on the top of the heat pump in addition to protecting it from the elements.

• **Aqua Trol Salt Chlorine Generator/Pro Logic Automation System**

  The Aqua Trol in-line electrolytic cell and control panel are both designed to withstand all winter weather. However, due to our harsh winters, we recommend removing the cell and bringing it indoors during the winter. If the panel can be easily removed, it can be brought indoors as well, but this is not mandatory. The supply and return lines to and from the cell are to be blown clear of water along with the cell itself, using a 'Shop Vac'. The cell and flow detection switch will be damaged by freezing water just as your pool plumbing would. This is why it is so important to drain all water from plumbing lines.

  The Aqua Trol Cell should be cleaned using *Salt Cell Cleaner* at least once a year to remove calcium and phosphate build-up. This procedure can be done at the time of winterizing to avoid delays or downtime during the summer months. Remove the cell from the piping by unthreading the unions and follow the *Salt Cell Cleaner* instructions, or consult a Pool Shoppe representative. An *Aqua Trol Cleaning Stand* can be purchased to keep the cell upright during the cleaning process.

• **Del Ozone**

  Ozonators and their components are designed to withstand all winter weather and should not be removed. Disconnect the power to the Big Dipper Ozone Generator. Disconnect the green gas tube from the ozone injector and store with other seasonal accessories in the pump basket.
For the Hayward Elite Aboveground Pool Light, the power needs to be turned off by disconnecting the transformer power cord’s three-prong plug from its electrical outlet or shutting off the circuit breaker. Then by using the blade of a flat screwdriver depress the locking tabs on the lens and pull the housing off of the lens. Proceed to remove the transformer, then store the lamp housing, transformer and cord assembly indoors where they will avoid damage.

For a Return Jet Light, begin by draining water level below Skimmer. Then turn off all electrical power supplying the light at the main circuit breaker. Proceed by disconnecting the quick connector on the wire and by unscrewing the light assembly head from the wall flange and store for next season. Finally install a winterizing plug into the existing return fitting.

- For all other brands of lights please refer to the owner’s manual.

**Skimmer Faceplate Lights**

After water is drained to winterizing level and below LED light, turn off all electrical power supplying the light circuit at the main circuit breaker and disconnect the plug. For winter or when not in use for a long period of time, remove the face plate cover and take down the LED light, to store properly for later use.

**STEP 5: Winterize the Aboveground Lines**

**Aboveground Lines**

- Disconnect all hoses and pipes and store out of sunlight.
- Remove the eyeball from the Return Fitting and Install a Winterizing Plug (keep in mind that some Return Eyeball Fittings have a collar that also needs to be removed to allow a threaded winterizing plug to be installed).
- Remove the Skimmer contents and leave the bottom of the Skimmer open.
- Install a Skimmer Faceplate Plug to prevent displaced water from entering skimmer through the pool. Ask a Sales Associate for more details.

***For Aboveground Pools with the Skim-Saver Faceplate***

Install your Skim-Saver winterizing snap-on lid by pressing into place. This special seal will prevent any water from passing into your Skimmer during the winter months preventing possible ice damage. Remove the Skimmer contents and leave the bottom of the Skimmer open.

Pool Closing time is also a good time to check the perimeter of the pool structure for any areas of steel components that are scratched. Often it can be a stone thrown by the lawn mower to scuff a small area of the coating off. If the protective coating from the pool wall or steel uprights is removed, it will expose the steel below which will rust over time. Protect these exposed areas with Tremclad or other protective paint to maintain your pool’s structure. Leaky skimmer and return fittings can also damage protective pool coatings which will eventually lead to corrosion if not supervised.

**STEP 6: Install Winter Cover and Leaf Cover**

Below is a copy of our Winter Cover Owner’s Instructions. These instructions outline Cover Performance, Care and Maintenance and Cover Installation for all types of pools. Following these instructions should give you a trouble-free winter.

- **Aboveground Pools – Skirted Winter Covers**

This cover has an 18” skirt and the centre rests upon and is supported by the pool water. Therefore, prior to the cover installation, it is important to make sure that the pool is not leaking. Please contact our Service Department if you are losing more than ¼” of water in a 24 hour period.

Although your Winter Cover is made of a durable material, it is required that you pad sharp corners, abrasive decking, protrusions, rough edges of the coping, etc. with old towels, foam remnants or corrugated cardboard, etc.

Lay the cover out across one end of the pool, black side down. With two people, carefully walk the cover over the pool surface letting the cover rest on the lowered water surface. Neatly pull the skirt of the cover up and over the top rail all around the pool – straightening any puckering where necessary.

Now, install the cable. Insert one end of the cable through the first loop in the skirt of the cover, and weave through all the loops all around the skirt of the pool cover. When the two ends meet, install the winch. Insert one end of the cable through the hole at the end of the winch and into the spindle. Insert the other end of the cable through the hole at the other end of the winch and into the same spindle. Pull both ends of the cable through as far as possible. Start turning the winch to tighten the cable. Adjust the cover as necessary.

When the cover is installed on the pool it is normal for a small amount of water to seep through stitched seams onto the surface of the Cover.
For pools located in high-wind areas, optional anchors can be installed on the uprights of the pool. The cable can then be inserted into the anchor in between the cover loops. This will secure the cover to prevent wind whipping. Wind whipping can cause pin-holing in the cover and this is not covered under warranty. Pin-holing can be detected by standing beneath the cover and looking through to detect light.

It is very important to watch the pool water level over the winter. As water accumulates on top of the cover, the water below the cover is displaced and forced upwards and out of the Skimmer. Should water have the opportunity to accumulate and freeze inside the Skimmer (this can happen even when left unplugged!), the ice mass inside of the Skimmer can not only cause the Skimmer itself to crack, but the wall to buckle. Use a Submersible Pump or siphon to safely drain water from the cover whenever possible.

- **Aboveground Pools – Polywoven Winter Covers**

This cover rests upon and is supported by the pool water. Therefore, prior to cover installation, it is important to make sure that the pool is not leaking. Please contact our Service Department if you are losing more than ¼" of water in a 24 hour period.

Although your Winter Cover is made of a durable material, it is required that you pad sharp corners, abrasive decking, protrusions, rough edges of the coping, etc. with old towels, foam remnants or corrugated cardboard, etc.

Lay the cover out across one end of the pool, black side down. With two people, carefully walk the cover over the pool surface letting the cover rest on the lowered water surface. Neatly pull the cover edges up and over the top rail all around the pool – straightening any puckering where necessary.

Now, install cable. Insert one end of the cable through the first grommet in the edge of the cover, and weave through all the grommets, all around the edge of the pool cover. When the two ends meet, install the winch. Insert one end of the cable through the hole at the end of the winch and into the spindle. Insert the other end of the cable through the hole at the other end of the winch and into the same spindle. Pull both ends of the cable through as far as possible. Start turning the winch to tighten the cable. Adjust the cover as necessary.

When the cover is installed on the pool it is normal for a small amount of water to seep through stitched seams onto the surface of the Cover.

For pools located in high-wind areas, Wall Bags are suggested to secure the cover to prevent wind whipping. Wind whipping can cause pin-holing in the cover and this is not covered under warranty. Pin-holing can be detected by standing beneath the cover and looking through to detect light. Wall bags provide the extra ballast needed to help prevent this and they are gentle on the cover. These can be attached to the uprights of the pool and gently placed against the pool wall on top of the cover. Other methods of securing the cover would be to employ Cover Clips (for pools with metal top-rails) or Winter Cover Seal which is a UV resistant shrink wrap to completely prevent air from getting below the cover past the cable.

It is very important to watch the pool water level over the winter. As water accumulates on top of the cover, the water below the cover is displaced and forced upwards and out of the Skimmer. Should water have the opportunity to accumulate and freeze inside the Skimmer (this can happen even when left unplugged!), the ice mass inside of the Skimmer can not only cause the Skimmer itself to crack, but the wall to buckle. Use a Submersible Pump or siphon to safely drain water from the cover whenever possible.

- **Aboveground Pools - Streamline Winter Covers**

Streamline winter covers are designed to allow winter water to pass through the cover reducing the amount of standing water and organic matter on top of the cover. Water is filtered as it passes through the patented mesh allowing homeowners to open their pool at circulating level.

*A Skim-Saver Faceplate Plug or Cover must be used in order to block water from entering the Skimmer body and exiting the pool.

*1-2 Air pillows should also be installed below the Streamline cover to support it from the stress of unmelted ice and snow. Fill the air pillows ½ full of air using an air compressor or ‘Shop Vac’ on ‘Blow’ setting. Install the pillows so that when water accumulates onto the cover, it will drain through the mesh. Do not overfill the air pillows as they could pop due to ice expansion.

It is very important to watch water levels in your aboveground pool over the winter! If water is able to accumulate too high, it could expand upwards against the top-rails of the pool forcing them off of the frame. Use a Submersible Pump or siphon to safely drain water to normal winter levels whenever possible.

- **Leaf Covers (Optional)**

Tree leaves and other heavy debris will add extra weight to your Winter Cover which could shorten the expected life span of your cover. A Leaf Mesh Cover may be installed on top of your winter cover before the leaves fall, to collect debris. This Leaf Cover should then be removed before the freezing weather starts, which will lighten the load on top of the cover as well as make spring clean-up a little easier.
STEP 7: Closing Checklist During the Winter Months

Check water level underneath the pool cover to ensure that the pool is not losing water. Maintain the proper Winterizing Level until Spring when you can correct the problem. Water loss will not only compromise the integrity of the pool cover, but also the underground structure of the pool itself. If your pool has a safety cover, do not allow the water to fall more than 18” below the pool deck.

Pump water off the winter cover periodically to maintain a minimum amount. Water that is left to accumulate on the winter cover will displace the water that is under the cover. This displaced water will spill into the Skimmer and could lead to Skimmer damage. Accumulated water will also put undue stress on the winter cover and shorten its life-span.

Clean off leaves and debris in the fall to leave you with less of a mess in the Spring.

If the cover is continually being windblown, use Wall Bags as extra ballast to keep Cover in place. Aboveground pool owners can apply Winter Cover Seal anytime over the winter months to prevent wind from getting up under the cover.

BEFORE YOU GET STARTED . . . .

Confirm your needs for the following items and check your home supply levels

- Pool Shock, pH Up and Buffer (in case chemistry adjustments are required)
- The winterizing Kit – Contains Meta-Sol, 50% Concentrated Algaecide and Oxy-Out
- Clear Blue
- Filter Rinse (or Cartridge Cleaner for Cartridge or D. E. Filters or Filter Cleanse for Zeobrite filters)
- Jack’s Lube
- Aqua Guard Vinyl Liner Cleaner
- Cover Cleaner, Solar Blanket Cleaner
- Solar Blanket Cover
- Salt Cell Cleaner and Cleaning Stand
- Winterizing Plugs
- Skimmer Faceplate Plug
- Teflon Tape
- Water Bags, Wall Bags
- Winter Cover Seal Wrap

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