

COVER POOLS®

Save-T[®] 3 Automatic Pool Cover Owner's Manual

This pool cover has been installed with the following features:		
	Slip Clutch	
	Auto-shutoff	
	CoverLink™ Control Pad	
	Locked Rope Reels	
	Self Adjusting	
	Hydraulic Power	
	Automatic Chlorinator	
Please read operation instructions for these features.		

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Cover-Pools Incorporated

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PLEASE READ AND FOLLOW ALL INSTRUCTIONS!

WARNING: When installing and using this electrical equipment, basic safety precautions should always be followed, including the following.

- 1. To reduce the risk of injury, do not permit children to operate this product.
- 2. Remove and safely store the key after covering or uncovering your pool.
- 3. Turn off the electrical breaker when the cover will not be used for extended periods of time or as an added layer of protection against unauthorized operation. Always turn off the breaker before servicing the cover.

INSTALLATION SAFETY CHECKLIST

For your benefit, please double check the following items with your installer/representative to aid in your understanding of the use of your cover.

		YES	NU
1.	Has a representative from the company who installed your Save-T 3° cover explained		
	to you the proper operation of the system?		
	a. Roll-up adjustment		
	b. Chemical application as it affects the cover		
	c. Authorized operation		
	d. Latching the cover after it is closed		
	e. Proper maintenance		
	 f. Placing the cover pump in position when the cover is closed 		
2.	Did a representative offer you assistance on how to maintain a safer pool area?		
3.	Did you receive drowning prevention information?		

Please take the time with your Save- T° 3 representative to go over this list to be sure that you understand the importance of the proper use of your pool cover.



AVOID DROWNING RISKS

- REMOVE STANDING WATER CHILDREN CAN DROWN ON TOP OF THE COVER
- REMOVE THE COVER (S) COMPLETELY BEFORE ENTRY OF BATHERS; ENTRAPMENT IS POSSIBLE.
- NON-SECURED OR IMPROPERLY SECURED COVERS ARE A HAZARD.
- DO NOT WALK ON THE COVER EXCEPT IN AN EMERGENCY.
- FAILURE TO FOLLOW ALL INSTRUCTIONS MAY RESULT IN INJURY OR DROWNING.

SAVE-T 3 MEETS ASTM F 1346-91 CLASS PCS WHEN USED AS INSTRUCTED.

PROTECT YOUR INVESTMENT

GENERAL: Your automatic cover is designed to perform reliably throughout many years of daily use. Since the automatic cover is easy to use, some people allow anyone to operate it. Our experience shows that service requirements increase with the number of people who operate the cover without having received instruction. **DO NOT ALLOW ANYONE TO OPERATE THE COVER UNLESS THEY HAVE BEEN PROPERLY INSTRUCTED. NEVER ALLOW CHILDREN TO OPERATE THE COVER.**

WARNING: Do not walk on the cover except in the case of an emergency. Playing or walking on the cover unnecessarily can cause injury and increases the risk of damage to the cover. The standard aluminum lid over the cover housing is not strong enough to walk on; to prevent damage or injury, avoid stepping on the lid. Lids may be slippery when wet. Before operating the cover, remove all objects from the pool and cover, including toys, pool cleaners, cover pumps and hoses. Be sure you have full view of the pool area when operating the cover. Do not leave a pool partially covered.

OPERATING INSTRUCTIONS

COVERING THE POOL: Remove any objects from the pool. Turn the key in the cover direction until the pool is completely covered. For the CoverLink digital control pad, enter the four-digit PIN and push "cover" until the pool is covered.

FOR UNDERTRACK SYSTEMS, release the key or control pad a few inches before the end of the pool, let the cover coast to a stop, then press "close" until the front of the cover taps the end of the pool. This method of a "soft stop" will add to the life of the cover and its components rather than overrunning to the end of the pool under full motor torque and having the cover hit the end.

FOR UNIVERSAL TRACK SYSTEMS, run the cover up to within two to three inches of the end of the track and stop. Do not attempt to close the cover completely against the pulley castings at the end of the tracks. A convenient way to judge this is to place a stop mark on the cover, which will align with a stop mark placed on the tracks at a place where you can see it from the control.

Remove the control key from the key switch, then store it in a secure location to prevent unauthorized operation of the cover. The CoverLink digital control will deactivate after 20 seconds without input.

If your pool has a latch, then immediately latch the leading edge once the pool has been completely covered (described below in "latching procedure").

Put the cover pump on the cover at this time. Keep the pump on the cover whenever the pool is covered.

UNCOVERING THE POOL: If your pool has a latch, then unlatch the leading edge as described below in the latching procedure.

Remove the cover pump and any debris that may damage the cover.

Insert the key and turn it towards "uncover," or if you have a CoverLink control, enter the PIN and press "uncover." Continue to uncover the pool until the cover is within a few inches of the end of the pool. Let the cover coast to a stop, then operate the cover until the pool is completely uncovered. Do not retract the pool cover too closely to the end of the tracks. In most cases the leading edge in undertrack models should rest half way across the pool end wall. On universal track models, the leading edge should stop before the mechanism housing.

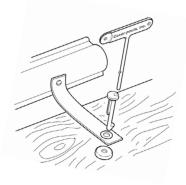
WARNING! THE CONTROL PAD MUST BE MOUNTED PERMANENTLY ON A WALL IN FULL VIEW OF THE COVER. DO NOT REMOVE THE CONTROL PAD AND CARRY IT LIKE A PORTABLE REMOTE. THIS MAY BE A DIRECT VIOLATION OF LOCAL CODES.

NOTE: Your cover should include manual or automatic stops to prevent it from over-traveling in either direction. These stops, in conjunction with the slip clutch or auto-shutoff with amp limiter, will help prevent damage to the cover from overrunning it. By stopping the cover briefly before hitting the pool wall or track ends, you can add life to the cover components.

LATCHING: Some systems require a safety latch on the leading edge. In some circumstances a young child may be able to force their way under the cover by pulling or pushing on the leading edge. Another risk is that when weight is applied to the cover (such as from water, snow load, or another child standing on the cover), it may force the leading edge open enough to allow a child to slip through the opening.

LATCHING PROCEDURE: Close cover to the designated point. Put pin through the grommet in the strap. Press the pin into the housing in the deck until it clicks into place.

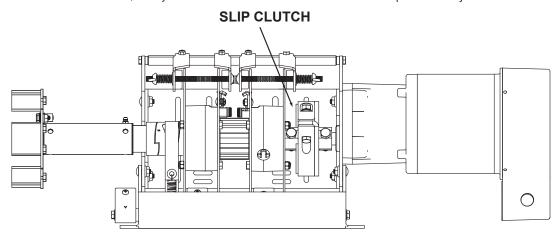
TO REMOVE PIN: Put the key in the top of the pin. Line up the pin slot with the key spur. (The spur should point away from the center of the pin.) Push the key down until it stops and then turn it 90 degrees. Pull up on the key to remove the pin from the housing.



FEATURE INSTRUCTIONS

SLIP CLUTCH: If your cover has been installed with a slip clutch, the clutch is designed to slip if the cover is overrun in either direction to prevent possible damage to the cover components. While operating the cover you may stop and reverse direction at any point between the fully opened or fully closed position.

If your cover stops running during operation there is something creating resistance, such as water on the cover, dirt or contamination in the tracks, or something damaged on the system. Remove any excess water or debris and try reversing the direction. If the cover moves, then proceed with operating the cover. If the cover will not move further in the intended direction, call your service technician or review the slip clutch adjustment section.

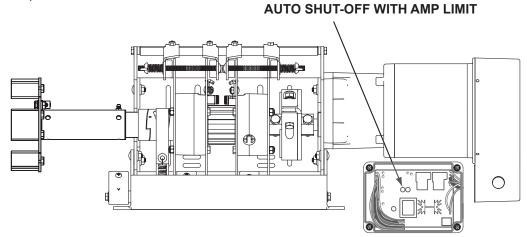


AUTO-SHUTOFF OPERATION: If your cover has been installed with an auto-shutoff control, the opening and closing operation will be the same as described in the operating instructions. The exception is that your cover will shut off automatically when it has reached the fully uncovered or covered position. This feature prevents overrunning the cover in either direction to prevent possible damage. Make sure that your cover opens and closes evenly so that your auto-shutoff will be able to operate properly. While operating the cover you may stop and reverse direction at any point between the fully opened or fully closed position.

Once the cover has shut off automatically in one direction you will only be able to run it in the opposite direction. In addition, your auto-shutoff control has an adjustable amperage stop that will turn off the motor if the pool cover meets significant resistance when it is operating.

If your cover stops running during operation there is something creating resistance, such as water on the cover, dirt or contamination in the tracks, or something damaged on the system. Remove any excess water or debris and try reversing the direction. If the cover moves, then proceed with operating the cover. If the cover will not move further in the intended direction, call your service technician or review the auto-shutoff adjustment section.

NOTE: If there has been a power interruption to your control, the system will not operate until power has been restored. Once power is restored, it is possible to overrun the cover if the control is operated in the wrong direction. Once the cover has been run in the correct direction for just a few feet, the shutoff sequence is restored and it will not be possible to overrun the cover.



WATER ON TOP OF THE COVER

Standing water on top of your cover poses as great a hazard as an open pool. You have been provided with a submersible pump that has an automatic on/off switch, designed to reduce this hazard. The pump should be placed on the cover anytime your pool is covered.

To place the pump on your cover, you can set the pump at the side of the pool, then push it into place with a pool brush. Or, if someone is available to assist you, you can stand at the lid end of the pool and place the pump on the cover as it closes.

Be aware that water accumulation on top of the cover can come from holes or leaks in your cover or from over-spray and misdirected sprinklers while watering, not just from rain or snow. Obviously a cover that is covered by water is a hazard.

Isolated puddles tend to migrate toward a depression. A young child can create a depression great enough to collect a dangerous amount of water.

Caution: Never attempt to run the cover with water on it. Damage can occur to the fabric and mechanism.

After your pump has stopped and most of the water has been removed, the pump itself should create enough of a depression to allow continual consolidation of water. This consolidation can be enhanced by snaking a long discharge hose over as much of your cover as possible to create a natural channel for water to flow back to your pump (see diagram). The water will be removed as it is channelled back to your pump. Due to different shapes and construction styles of pools, the occurrence of isolated puddles of water will be specific to your cover. After you become familiar with where the puddles usually occur, you should be able to position your discharge hose so you can remove nearly all the water on your cover.

If you plan on being away from your pool for a long period of time, you should find a neighbor or friend to check your cover frequently to make sure all standing water has been removed. Your pump can be left on the cover all winter. The pump will freeze into the ice without damage and it will activate itself as the ice melts during the winter. Make sure you keep power on to the pump and that the discharge hose is free of kinks.

PLACING THE PUMP ON THE POOL COVER

NOTE: Cover-Pools supplies a variety of pumps depending on the size of your cover and region you live in. Carefully follow the instructions that have been supplied with your pump.

WARNING! — Your pump is an electric appliance and caution should be used when handling your pump and electric cord around water. Do not use extension cords. If your pump or cord becomes damaged, replace the pump immediately. Plug the pump into a GFCI-protected outlet only. Place the pump on the cover first then plug in the pump second. DO NOT stand on a wet surface while using the pump. Avoid contacting accumulated surface water on your cover when the pump is on the cover. Electric shock is possible. Your pump should *not* be used for any other application other than specified in these instructions. Your pump has been provided with a stabilizer plate so it remains upright. DO NOT allow the pump to tip over: the automatic on/off feature will not work which creates a drowning risk. Keep the pump clean and in a well-maintained condition at all times.

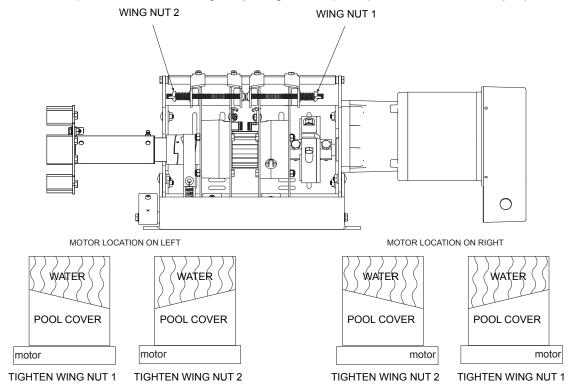
ADJUSTMENTS AND MINOR REPAIR

SERVICE: Some service, such as adjusting the cover alignment and patching holes, is simple enough that you might want to do it yourself. Other service is much more complex than it first appears, and we recommend that an owner leave repairs to their local authorized service technician. We advise you to call Cover-Pools at 800-447-2838 for advice before you undertake any serious service project on your own.

WARNING! Always turn off the power/circuit breaker to the cover before servicing. Never adjust the cover or try to perform any other maintenance while the cover is running. Keep hands, clothing, etc., away from mechanism while operating.

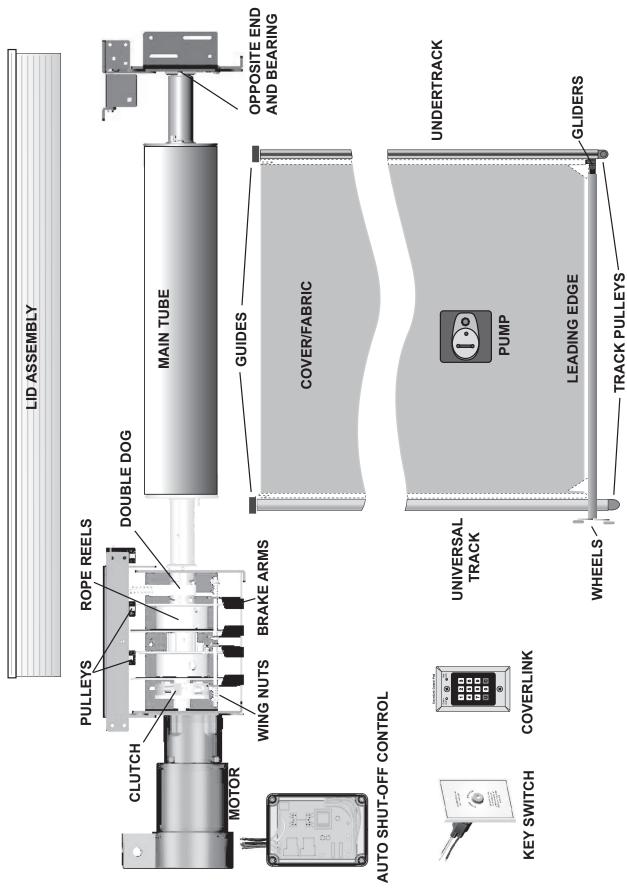
IF THE COVER RETRACTS UNEVENLY: Once your cover is installed it is unlikely that it will require any adjustment. However, it is possible for extreme changes in the cover condition to cause the cover to run unevenly. Our exclusive brake adjustment is simple enough to adjust yourself, thus avoiding a service call. You should always determine which adjustment to make by observing the evenness of the cover as it is coming off the pool. Adjusting the cover is accomplished by tightening or loosening the wing nut on the brake mechanism (see illustration). Make sure the cover is stopped and the key or power is in the "off" position. Adjust the cover by tightening the wing nut (clockwise) on the side that consistently comes back first. Add only a little brake at a time to avoid applying too much tension. When possible, take the brake off the side coming back slowest by loosening the wing nut on that side. Please note that a little brake must be left on both sides at all times to prevent the rope from becoming tangled due to backlash.

LOCKED ROPE REELS: If your cover has locked rope reels you will not be able to perform the adjustment procedures above. If your cover is retracting or opening unevenly call your local service company for assistance.



SELF-ADJUSTMENT FEATURE: Your cover may be installed with a self-adjusting feature that, in most cases, will eliminate the need for additional brake adjustment to your cover. In addition, this feature prevents your cover from retracting past the end of the track. If your cover is opening unevenly, retract the cover until the front leading edge bar is approximately one foot from the pool cover housing. Stop the cover by releasing the key or CoverLink control. Once the cover has stopped, run the cover in the "uncover" position again until the cover straightens. As soon as the cover is straight, release the key or CoverLink control immediately. Auto-shutoff systems turn off automatically before this feature will be able to take effect.

COVER COMPONENTS



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MOTOR: The motor we provide is waterproof and capable of withstanding short-term submersion. However, you should not allow the motor to be submersed for periods longer than a few hours. Your system housing should have adequate means of drainage for below-deck or recessed installations. Make sure all drains remain clear. Your motor has an internal thermal overload switch. If the motor overheats to the point where the switch activates, it will reset automatically when cool.

WATER LEVEL: The ability of your cover to support any weight is completely dependent upon your maintaining the pool water at normal operating level. In many cases, the cover will not even support itself if run over a low or empty pool. **Severe damage to the cover may occur and a great hazard may develop if your water level is not maintained properly** (see winterizing instructions).

TRACK CLEANING: The track may collect dirt and debris over a period of time. A buildup of dirt and debris can affect the operation and adjustment of your cover. If the channels in your cover track are not cleaned when necessary, the edging on your cover and the protective anodized coating on your track can wear out prematurely. To clean the track, you should retract the cover, then squirt water under pressure into the track. The water will flush out debris if squirted the full length of the track at close range. In most situations your track should be cleaned twice a season. For pools that are used year round, or if you are in an area that is sandy or windy, cleaning should be done more often. (If you have a salt or mineral sanitizing system see the "mechanism cleaning" section below.) Never use anything but water to clean the tracks or other extrusions.

MECHANISM CLEANING: Over time, dried chemicals and dirt can build up on your mechanism. If these components are not rinsed off, the buildup can become so excessive that damage can occur. If you have a salt chlorination or mineral type sanitizing system, you will need to check your mechanism several times during the season. We recommend rinsing the components as soon as you see a noticeable residue. (See Salt In Pool Water section). The metal components of your pool cover should be rinsed off with fresh water only. The frequency will vary with the usage of the pool cover. When in doubt, it is better to rinse too frequently, than not frequently enough. When rinsing the mechanism, turn off all electricity to the cover. Make sure you have adequate drainage in your cover housing. The motor will withstand direct spray at low force. NOTE: Improper chemical balance can rapidly affect your system as well as the cover fabric. Check your water regularly to be sure it is balanced properly. Please review the rest of this manual for proper chemical balance recommendations.

REPLACING A PULLEY: At the end of each track is a pulley. A worn pulley can cause cover adjustment problems and eventually lead to a broken rope. Pulleys usually last about three years. If a pulley in the end of the track causes a noticeable clicking or grinding sound, it is worn. You should contact your local dealer for replacement as soon as possible.

LUBRICATION

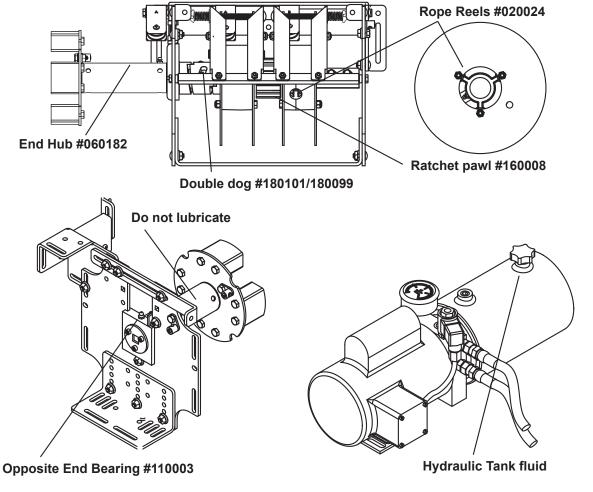
The working life of the mechanism will be enhanced and service problems will be reduced if you follow a regular lubrication schedule. Never over-grease; excessive lubrication will collect dirt and can possibly get on the vinyl cover or webbing. Grease on the vinyl or webbing can cause deterioration. Do not grease or put silicone on the rope, webbing or tracks; this will cause rapid deterioration of the threads, fabric and track. If you have automated chemical treatments as described in this manual, you may need to provide maintenance more frequently. Increase the lubrication cycle to four times per year except for the key switch and hydraulic fluid.

PARTS LUBRICATION REQUIREMENTS:

Part	Lubrication	Frequency
Opposite End Bearing #110003	Lubriplate® #1200-2	Once per season
End castings #020004	Lubriplate® #1200-2	Once per season
Rope Reels #020024	Lubriplate # 1200-2	Once per season
Double dog #180101/180099	Motor oil 30w or similar	Twice per season
Ratchet pawl #160008	Motor oil 30w or similar	Once per season
Hydraulic Tank fluid	Type "F" or "Dextron" Automatic transmission fluid	Check twice per season
Key Switch tumbler	Silicon spray	Twice per year
Motor	does not require lubrication	

HYDRAULIC DRIVE: Hydraulic tank, motor, and lines should be drained, flushed and refilled once per year. CAUTION: Completely clean the old lubricant from parts, different types of lubricants should not be mixed.

PARTS LUBRICATION REQUIREMENTS



WINTERIZING YOUR COVER

There is a limit to how much water, snow, and ice a pool cover can support. Each gallon of water on the cover weighs eight pounds and a few inches of rain can quickly result in a ton of water. Without the support of water underneath the cover, tracks may pull off, the cover may tear, or other damage could occur to the pool that may create a hazardous situation. It is important to maintain the same water level all year.

Make at least monthly inspections of the water level under the pool cover.

FALL MAINTENANCE: It is important to keep all water pumped off your cover as freezing weather approaches so you can go through the winter with as little weight as possible on the cover. Your pump can be left on the cover through freezing weather. Follow instructions as described in the section "WATER ON TOP OF THE COVER."

WINTER MAINTENANCE: Inspect the water level in the pool at least once a month and add water if necessary. (One method is to add water via the skimmer.) Please note that your water level may appear to be normal if there is ice or snow on the cover. The weight on top of the cover displaces an equal volume of water under the cover and the pool water may be much lower than it appears. Adding water will float the ice or snow on the cover upward, thus relieving stress on the cover. As the ice or snow melts the cover pump will turn on to remove it. Your cover will survive the winter if these procedures are followed.

DRAINAGE: Any drain in the housing should be kept free of debris to allow water to drain freely. The lid covering the housing should always be kept in place to avoid the hazard of someone stepping into the housing area and to prevent rain from directly entering the housing.

If it is not possible to keep your pool full during the winter, then the cover should be left off the pool and other safety precautions should be taken.

FACTS ON FABRICS

Our customers sometimes have questions about the extra slack in the pool cover. There are a few reasons we have slack in our pool covers:

- 1. The pool cover may need to handle rain and snow loads. Without extra slack, the pool cover and, in some cases the pool, could sustain substantial damage from excessive weight.
- 2. The pool cover fabric will shrink, sometimes as much as one percent. This may seem negligible; however, this percentage can amount to as much as three to four inches on a 20-foot wide pool cover.
- 3. Indoor pools are commonly heated year-round. They may shrink more than an outdoor pool cover.

The amount of slack is typically determined by the width of the pool, water level drop, and the geographical area.

During our many years of experience we have had many examples of well-maintained cover material that has lasted beyond our expectations. The key to longevity in all cases has been proper pool chemical balance as well as regular care and cleaning of the cover.

Care of the cover begins by removing any sharp objects before opening the cover and removing leaves, dirty water, etc. before they have a chance to leave a residue on the vinyl. When the cover does become soiled from dirt, organic matter, or undissolved solids from chemicals, the cover should be rinsed off with fresh water. Indoor covers may seldom appear dirty; however, harmful chemical deposits can build up on top of the fabric, and if not rinsed off regularly, can cause premature fabric failure.

To remove stubborn stains, use a soft bristle brush and scrub the cover with fresh, clean water. For oils like suntan lotion or leaf stains, or anything that cannot be removed by just scrubbing, try using a small amount of non-detergent cleanser such as Ivory® bar soap (not dish-washing liquid). Use the bar soap on a wet cloth and scrub the soiled area. Then, rinse well with fresh water.

To remove algae stains, especially black algae which may be seen underneath the cover, use a mixture of water and bleach such as Clorox® bleach. Specifically use household bleach, not just the pool's chlorine, at one (1) part bleach to nine (9) parts water. Always add the bleach to the water not water to the bleach to make this solution. Make sure to read the label on the bleach and follow all of the manufacturer's precautions. This solution may be wiped directly on the algae.

CHEMICALS AND YOUR COVER

The primary thing to remember regarding chemicals and your new cover is that the chemical program may be different from that of a pool without a cover. With proper use, the cover will substantially diminish the loss of chemicals. Therefore, any previous chemical programs for pools without covers may need to be adjusted to maintain proper chemical balance in your covered pool.

You must avoid a build-up in the quantity of chemicals in the pool water that can result in serious damage to pool walls and equipment. Such a build-up may also create an improper water balance which may cause deterioration of the vinyl cover. A deterioration so caused is not covered by the warranty. After adding any chemicals to your pool, allow the chemicals to circulate before closing the cover. If you are unsure if it is safe to close the cover, test the water at the surface with your test kit. *IF IT IS SAFE TO SWIM IN, IT IS SAFE TO COVER!

In our testing we have found that high alkalinity or high chlorine levels can begin to break down the cover prematurely. Some pH adjusters may create harmful levels of alkalinity (high pH) if not allowed to mix with the water before the cover is closed. The same is true with chlorine shocks. Some chlorine shocks require as long as 12-24 hours to return to swim-safe range. Since safety is the major reason most people purchased their cover, we recommend the use of a non-chlorine shock. With this type of shock the cover may be closed in 30 minutes or less. Please check with your pool service company for proper usage.

Making sure your water is balanced should be on top of the checklist before covering the pool for extended periods of time (such as winterizing). Recheck the water balance after the chemicals have had a chance to mix completely. This may require checking the pool water a day or two later. When covering the pool for long periods of time, adjust your ozone generators and chemical feeders to an appropriate level for a covered pool. Constant long-term build up of ozone can damage the fabric.

Patch even the smallest holes as soon as they occur with the vinyl patch kit. If water penetrates the vinyl and comes in contact with the scrim (the thread reinforcing), the thread will soak up water and carry chemicals and contaminates to the inside of the material. This may lead to stiffening and or delamination of the vinyl. Patching should be done on both sides of the hole in the cover if possible.

Please make sure your pool service company or anyone in charge of pool maintenance is aware of this information.

WARNING! Never leave an open pool unattended. Instruct anyone you allow to operate your cover about this!

PLEASE HAVE YOUR POOL COMPANY FILL IN THE FOLLOWING

RECOMMENDED ALKALINITY	
RECOMMENDED SANITIZER LEVEL	
RECOMMENDED pH	
SANITIZER TYPE	
RECOMMENDED SALT LEVEL	
SHOCK FREQUENCY (Always leave the cover open until the water is back to a	safe range for swimming.)
OTHER RECOMMENDATIONS	

SALT IN POOL WATER AND GALVANIC CORROSION ON AUTOMATIC SAFETY COVER SYSTEMS

Galvanic corrosion tends to occur when dissimilar conducting materials are connected electrically and exposed to an electrolyte (salt in water). An example of dissimilar conducting materials is stainless-steel screws into aluminum. From 1962 to 1998, galvanic corrosion rarely occurred on aluminum components of automatic covers.

Since 1999 when Underwriters Laboratories (UL) dictated that all metal components of automatic pool covers must be bonded to the pool grid, we have seen an increase of galvanic corrosion on some components. In addition, the popularity of electric chlorinators where salt is added to the pool water has increased.

These two changes in the industry are the reason you may experience galvanic corrosion on some components. In the past it may have taken over 20 years for any noticeable corrosion. Today with bonded systems and excessive salt in the pool water, reaction can occur within two to three years.

The salt in the water acts as an electrolyte which is a non-metallic electric conductor. When removed from the pool, the cover will deposit salt water on the mechanism end casting and main tube. If there are any "stray currents picked up" by the bonded pool grid, galvanic corrosion can occur starting where the stainless steel screws mount to the main tube and into the end casting. This corrosion will appear as a black pitting and/or a powdery white dust. The white dust is not salt: it is aluminum that has been oxidized. Salt deposits may collect on parts such as guides and in the rope weave.

What maintenance can be done to reduce galvanic corrosion?

- 1. Several manufacturers of salt generators have indicated that there will be limited reaction to metals if the salt level is maintained at levels below 3000-3200 ppm. They indicate that salt levels of 4500, 5500 ppm and above can be corrosive even without the generator operating. Test the level and replace pool water if the salt levels are too high. Lower ppm for salt reduces the risk of galvanic corrosion.
- 2. The mechanism should be washed down and brushed once a month if there is salt in the pool water. Spray down the rope reels and end castings with fresh water; with a soft brush to loosen salt particles; then hose down again.
- 3. On installations without a salt system, lubrication is suggested twice per season. With a salt system, lubrication and greasing should be performed every two months. On the motor-side end casting give it 8-12 shots of grease, not 1-2.

Salt in pool water and galvanic corrosion are not new to the industry. Salt generators were introduced over 25 years ago and those that were in the industry at that time recall some of the concerns and problems in conjunction with heaters, pumps, filters and even handrails. Salt generators, like many products, have positive and some negative factors; however, the most important issue is to maintain proper water chemistry and salt levels. Salt generators are convenient for pool owners, although many tend to neglect pH, alkalinity and salt levels. Regardless of the pool cover system, proper water chemistry is important to ensure the maximum life of the pool and pool equipment:

Chlorine levels: 1-5 ppm is a normal acceptable reading

Salt levels: per manufacturer's guidelines

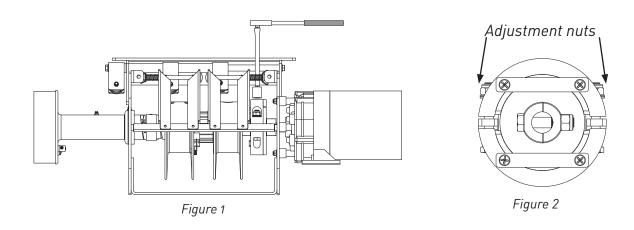
pH levels: 7.2 – 7.8 ppm Alkalinity levels: 80-120 ppm

There is extensive information regarding galvanic corrosion on the internet. One site, <u>www.corrosion-club.com</u>, provides information and links to other sites.

ADVANCED TROUBLESHOOTING AND REPAIR

SLIP CLUTCH ADJUSTMENT: The slip clutch may need to be adjusted if the cover pauses as it travels across the pool or will not complete the open or close cycle. Make sure there is nothing interfering with the cover operation before adjusting the slip clutch. Water on the cover, low pool water level, bad track pulleys, and dirt or debris in the track can all cause the clutch to slip. If the slip clutch is slipping due to the reasons above, fix the problem, don't adjust the slip clutch.

To adjust the slip clutch, use a 1/2" socket, 6" socket extension and a ratchet handle. Tighten both bolts equally by turning nuts clockwise in 1/8 turn increments (Figure 1 & 2). After both nuts have been adjusted, run the cover. If the slip clutch is slipping before the cover is completely opened or closed, additional adjustment is needed. (Figure 2) If for some reason you feel the slip clutch is too tight, loosen the nuts evenly in 1/8 turn increments and run the cover after each adjustment. **DO NOT OVERTIGHTEN THE CLUTCH TO THE POINT THAT IT WON'T SLIP IF OVERRUN.**



WARNING: NEVER ATTEMPT ANY ADJUSTMENT TO ELECTRICAL COMPONENTS WITHOUT FIRST TURNING OFF THE CIRCUIT BREAKER PROVIDING POWER TO THE COVER.

AUTO-SHUTOFF AMP LIMITER ADJUSTMENT: The auto-shutoff amp limit board has LED lights to facilitate installation and diagnostics. The board also has an adjustable amp limit feature. The amp limit feature stops the cover by sensing the amperage draw to the motor. If the cover runs into an obstacle or resistance (i.e. water on the cover, dirt or contamination in the tracks, something damaged on the system) during the cover or uncover cycle, the amp limit feature will sense the additional load and shut off the motor.

If the cover frequently stops during operation, and there is very little or no water on the cover, then call your local cover technician to adjust the amp limiter.

CoverLink™ Wireless Control OPERATION AND PROGRAMMING INSTRUCTIONS

The CoverLink wireless control system controls access to pool cover operation. The CoverLink wireless control uses a personal identification number (PIN) in place of a key. Entering a valid PIN into the control pad allows access to the cover and uncover operation for the pool cover.

COVERLINK WIRELESS CONTROL FEATURES

CoverLink control pad and CoverLink receiver

The CoverLink control system is factory programmed and ready for use.

THE CONTROL PAD MUST BE MOUNTED IN FULL VIEW OF THE POOL COVER.

The control pad features:

- Up to three separate control pads can operate the same pool cover.
- Up to four unique four-digit PINs can control access to the pool cover.
- Control pads can be setup in different locations around the pool.
- A master PIN that is stored in memory location 1 (factory default master PIN: 1583).
- Additional PINs can be stored in memory locations 2, 3 and 4. (For reference, the pool owner should keep a record of the PIN for each memory location.)
- A unique signal that is sent from the control pad and stored by the receiver when linked.
- Each control pad must be linked to the receiver and set to the same channel number and the same network ID number.



NORMAL OPERATION

Normal use: control pad

PIN entry controls access to the cover and uncover operation for the pool cover. After PIN entry, press 'C' or 'U' within 20 seconds or system will time out and PIN re-entry is required.

- 1. Enter four-digit PIN: 1583 (or valid PIN)
 - a. The red LED will flash as each button is pressed.
 - b. The green LED will flash if the PIN is accepted.

Press C (cover) or **U** (uncover) to cover or uncover the pool.

c. The green LED will flash while the cover is in motion.

If the PIN is not accepted, and the red LED is "ON" when C (cover) or U (uncover) is pressed, re-enter the PIN.

PIN SETUP

The factory default master PIN: 1583. The factory default master PIN CAN be changed.

The factory default master PIN is stored in memory location 1 on the control pad and **CAN** be changed to any four-digit PIN.

This master PIN controls access to add, change or delete PINs.

The service master PIN: 2838. The service master PIN CAN NOT be changed.

The service master PIN is intended for service use only and **CAN NOT** be changed.

The service master PIN overrides all PINs and allows service to access all modes.

Change or enter new PIN:

To change or enter new PINs follow this process. Buttons must be pressed within 20 seconds of each other or programming access will time out.

- Enter '1583' (or valid PIN)
 - a. The red LED will flash as each button is pressed.
 - b. The green LED will flash if the PIN is accepted.
- 2. **Press 1** to enter programming mode.
 - a. The red and green LEDs turn on.
- 3. **Press 1** to enter PIN change mode.
 - a. The green LED will flash.
- 4. **Press 1, 2, 3 or 4** to select PIN memory location.

(Remember Factory Default Master PIN is stored in memory location 1 but can be changed).

- a. The red LED will flash.
- 5. **Enter** new 4 digit **PIN**.
 - a. Both LEDs will flash.

(If you wish to abort the PIN setup, press 0)

- 6. **Enter** new **PIN again** to confirm change.
 - a. The red LED will flash.
 - b. The green LED will turn on, indicating success.
 - c. The system is ready after a 20-second delay and the green LED turns off.

Test the new PIN by following NORMAL OPERATION.

DELETE PIN

To delete a PIN (except the master):

To erase one PIN at a time from the receiver follow this process. Buttons must be pressed within 20 seconds of each other or programming access will time out.

- 1. Enter '1583' (or current master PIN)
 - a. The red LED will flash as each button is pressed.
 - b. The green LED will flash if the PIN is accepted.
- 2. **Press 1** to enter programming mode.
 - a. The red and green LEDs turn on.
- 3. **Press 2** to enter PIN delete mode.
 - a. The green LED will flash.
- 4. **Press (2, 3, or 4)** to delete the PIN from that memory location.
 - a. The green LED will flash.

(If you wish to abort PIN Delete, press 0.)

- 5. **Press (2, 3, or 4) again** for confirmation.
 - a. The green LED will turn on after a brief delay indicating success.
 - b. The system will be ready after a 20-second delay and the green LED turns off.

To delete all PINs (except the master):

To erase all PINs except the master from the receiver, follow this process. Buttons must be pressed within 20 seconds of each other or programming access will time out.

- 1. Enter '1583' (or current master PIN)
 - a. The red LED will flash as each button is pressed.
 - b. The green LED will flash if the PIN is accepted.
- 2. **Press 1** to enter programming mode.
 - a. The red and green LEDs will turn on .
- 3. **Press 3** to enter delete mode for all PINs.
 - a. The red and green LEDs will flash.

(If you wish to abort PIN Delete, press 0.)

- 4. **Enter the master PIN** to verify delete.
 - a. The green LED will turn on after a brief delay indicating success.
 - b. The system will be ready after a 20-second delay and the green LED turns off.

CoverLink™ Wireless Control TROUBLESHOOTING GUIDE

PROBLEM	SOLUTION
LEDs on control pad do not light when buttons are pressed.	Remove control pad faceplate. Remove batteries from battery holder. Clean battery contacts. Install new batteries in battery holder. Reinstall control pad faceplate.
Did not fix problem.	Contact local Cover-Pools service technician.
PIN entry does not activate cover mechanism, but the red LED on the control pad is on when buttons are pressed.	Enter valid PIN. If the PIN is valid, the green LED will flash as C (cover) or U (uncover) is pressed. If PIN is NOT valid, red LED is 'ON' as C (cover) or U (uncover) is pressed, re-enter PIN.
Did not fix problem.	Verify that power to the auto-shutoff board is on. Typically the auto-shutoff board and receiver are located in an enclosure by the pool cover electric motor. Power to the auto-shutoff board is on if two green LEDs on auto-shutoff board are flashing.
Did not fix problem. Power on to auto-shutoff board	Turn power off for 10 seconds. Turn power on. Enter valid PIN.
Did not fix problem.	See RECEIVER RESET instructions. See LINK CONTROL PAD AND RECEIVER instructions.
Did not fix problem.	Contact local Cover-Pools service technician.
Qualified service personnel only	Check for secure wiring connections at the circuit breaker, receiver board, auto-shutoff board and motor. Check that antenna wire is secure and not damaged.

INSPECTION PROCEDURE FOR WEAR AND DETERIORATION

You should give the components of your automatic cover a thorough inspection at least two to three times a year.

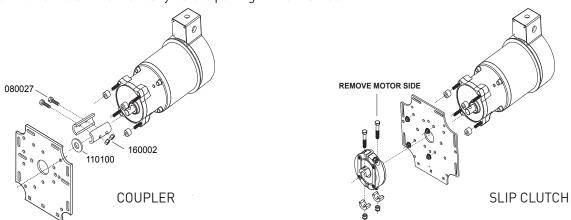
1 - VINYL COVER: The vinyl cover material is constructed with a tough combination of vinyl and a polyester mesh. Over the years, depending on your cover's exposure to chemicals, heat, and sun, the vinyl will become brittle and eventually begin to crack. When this occurs the polyester mesh will be exposed and begin to change the capability of your cover to hold weight. Inspection for this kind of deterioration should begin with an examination for leaks. If you have leaks, patch the hole immediately. Check the area around the hole to see if it has become brittle or stiffer than the rest of the cover. Any change in the feel of the vinyl where it begins to seem brittle or stiff can indicate a problem. If the normal square pattern you see in your cover from the polyester mesh changes so that the mesh pattern appears to be more pronounced than the other parts of the cover, it could be an indication of the vinyl becoming weak. In areas where your cover is pulled over your deck or coping it is possible to gradually wear the vinyl away from the reinforcing mesh. Once the mesh is exposed it can begin to deteriorate or break. Have the cover repaired immediately if you notice this problem.

Last, you should inspect the sewing where the vinyl is attached to the webbing (edging) along the side of your cover by your tracks. If any threads are broken or if the webbing has begun to tear or fray, the strength of your cover will be compromised.

2 - COVER TRACK: Since your track is the main means of anchoring your cover to your pool, inspection of the fasteners used to hold your track to the pool sides is as important as inspecting the cover. Make sure that all screws are tight and replaced if missing. Some track is contained in a channel with shims. Be sure to replace missing shims. The channel or opening that your webbing slides in can wear over the years. If you feel there is marked difference in any of the items we have asked you to inspect, please contact your pool cover service technician immediately for a detailed inspection.

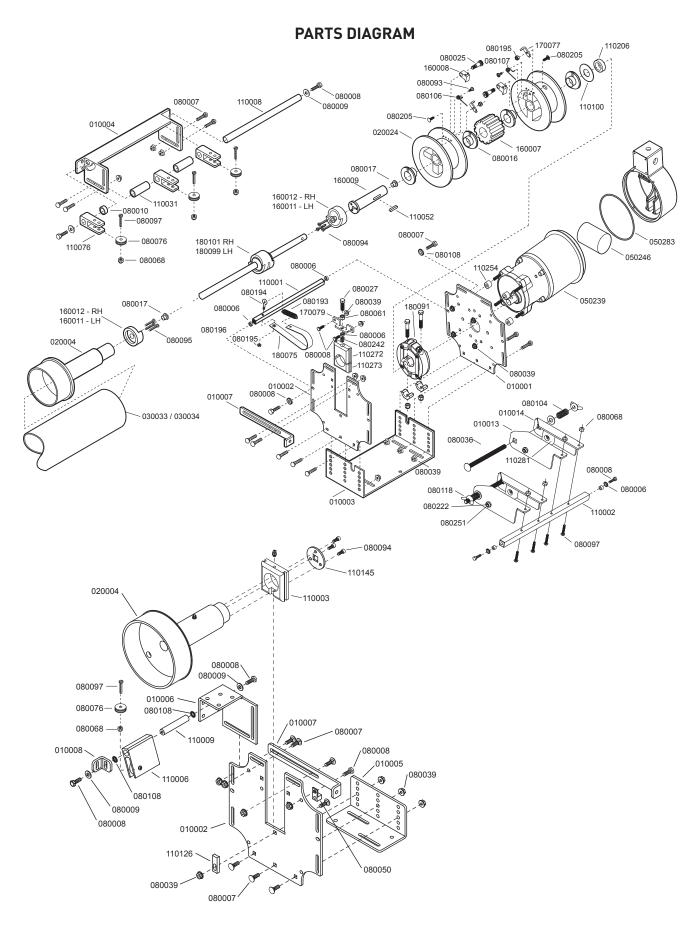
EMERGENCY PROCEDURES

TO COVER THE POOL MANUALLY FOR ANY REASON: This requires two people. Remove the bolt from the coupler (#080027) or the motor side of the slip clutch, whichever you have. Pull a few feet of rope from the rope reels. Pull ropes equally on either side until the cover is in place. It may be necessary to remove the lid to accomplish this and to unroll the fabric a little manually before pulling it into the track.



TO UNCOVER THE POOL MANUALLY: This also requires two people and the recessed lid must be removed first. Remove the bolt from the coupler (#080027). Slide the cover through the track toward the roller for a few feet on both sides. Then roll it up by turning the roller by hand. Repeat this procedure until the cover is totally retracted keeping the roll as compact as possible. To reduce any possible drag, loosen both brakes completely. On the opposite end of the mechanism is a square hole washer (#110145); the washer is sized to accept a standard ½" drive ratchet socket wrench. Follow the procedure above to remove coupler or clutch bolt and loosen the brakes. Insert the wrench into the washer and use the wrench to reverse the main tube. This will uncover the pool.

WARNING! It is physically easier to remove the cover using the ratchet wrench than it will be to close the cover. Closing the cover manually requires two strong people. If you are using your cover as a safety barrier, make sure you will be able to close the cover if needed, before you open the cover.



POOL SAFETY

Thank you very much for your purchase of a Save-T[®] cover. We make every effort to provide you with the safest product available and want to stress the following safety precautions.

Cover Pools recommends "layers" of protection. Your Save-T[®] cover is a reliable layer; however, you should not rely on any one layer to be fail proof.

A swimming pool can provide your family with hours of entertainment and the opportunity for healthy recreation. As a pool owner, be aware that you must ensure your child's safety. There is a risk of a child drowning when around any body of water.

There is no substitute for constant adult supervision. Most drowning occurs during a five-minute-or-less lapse in supervision. By providing barriers between your child and the pool, you can avoid a tragic accident should your child momentarily slip out of sight.

Don't rely on one system—layering safety precautions provides the strongest safeguard.

Never leave a child alone—even for a second.

Maintain constant eye contact with your children when they are around the pool.

Do not consider young children water-safe because they have had swimming lessons. Swimming instructions for children under three years of age are not recommended.

Instruct baby-sitters about potential hazards to young children in and around swimming pools and the need for constant supervision.

Train all caretakers in life-saving, cardiopulmonary resuscitation and first aid. No exceptions.

Install a telephone pool side with emergency numbers posted.

Keep toys away from the pool when the pool is not in use. They can lure a child into the pool.

Use inflatable toys only under adult supervision. They may deflate or your child may slip off.

Post and enforce rules such as No Running, No Pushing, No Dunking, and Never Swim Alone.

Make sure you have rescue devices accessible pool side

Keep all doors and windows leading from the house to the pool area secure. Install self-closing mechanisms on doors.

Enclose the pool with a barrier. In fact, fencing may be required in certain area. Check your local city or county building code for more information.

Install only child-proof, self-closing, self-latching gates around the pool.

Vertical bars on a pool fence should be no more than three-and-three-fourths inches apart. Avoid fences such as chain link that provide footholds for little climbers' feet.

Place table and chairs well away from the pool fence to prevent children from climbing into the pool area.

Alert your pool maintenance people, utility personnel, and your neighbors to keep covers, gates, doors to pool closed and locked at all times.

Check to ensure that spa and pool covers pass minimum safety requirements set by the American Society of Testing Materials.

Never use a pool with its cover partially in place since children may become trapped under it.

Beware of a free-floating pool cover. A child can slip beneath one unnoticed.

Realize that a child can drown in as little as two inches of water. Drain standing water off of your spa or pool cover

Investigate using a pool alarm and/or a monitoring system that can be worn by a child.

Remove ladders and steps from above ground pools. No objects should be in the pool area for a child to climb on and into the water.

Inspect safety and pool equipment regularly. Preventive devices are only effective if they are in working order.

Sources: Drowning Prevention Society; United States Consumer Product Safety Commission; National Spa and Pool Institute's Operation Water Watch; and the American Academy of Pediatrics.

FEDERAL AGENCY AND NATIONAL COMPLIANCE LISTINGS

Cover-Pools is committed to producing the safest and highest quality pool and spa covers in the world. We are your partners in providing a reliable additional layer of safety for your pool.

UNDERWRITERS LABORATORIES INC. LISTING

The Cover-Pools Underwriters Laboratories listing number is 181T - File # E52841 WBAH Covers for Swimming Pools and Spas Power Safety Cover, Model Save-T® 3, Classified in Accordance with ASTM F1346-91 WDDJ Swimming Pool and Spa Cover Operators Electric Pool cover operator, Model "Save-T

ASTM (American Society for Testing and Materials)

Designation: F 1346-91 (PSC, MSC, OC)

Cover-Pools products Save-T cover and Step-Saver have been manufactured and are in full compliance with ASTM F 1346-91 Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs.

FCC ID: P8G-50306 Save-T Cover Wireless 50305

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Note: This equipment has been tested and found to comply with the limits for a Class 1, Class 2, and Class 3 Radio equipment and systems under Title: ETS EN 300 683: 97 and ETS EN 300 200-1 (RES) (EMC) (SRD) operating on frequencies between 9 kHz and 25 GHz. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, users and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on , the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

If you have any additional questions please contact Cover-Pools at 1-800-447-2838.