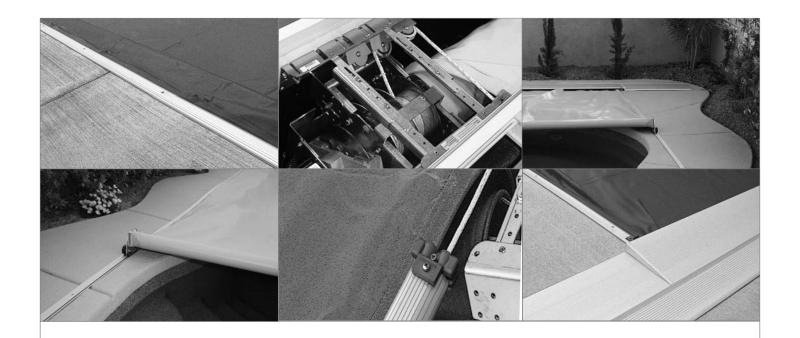


THE ECLIPSE™ AUTOMATIC SAFETY POOL COVER

TOP TRACK SYSTEM with Aluminum Lid

**INSTALLATION GUIDE** 



### **SECTIONS**

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Standard Top Track	
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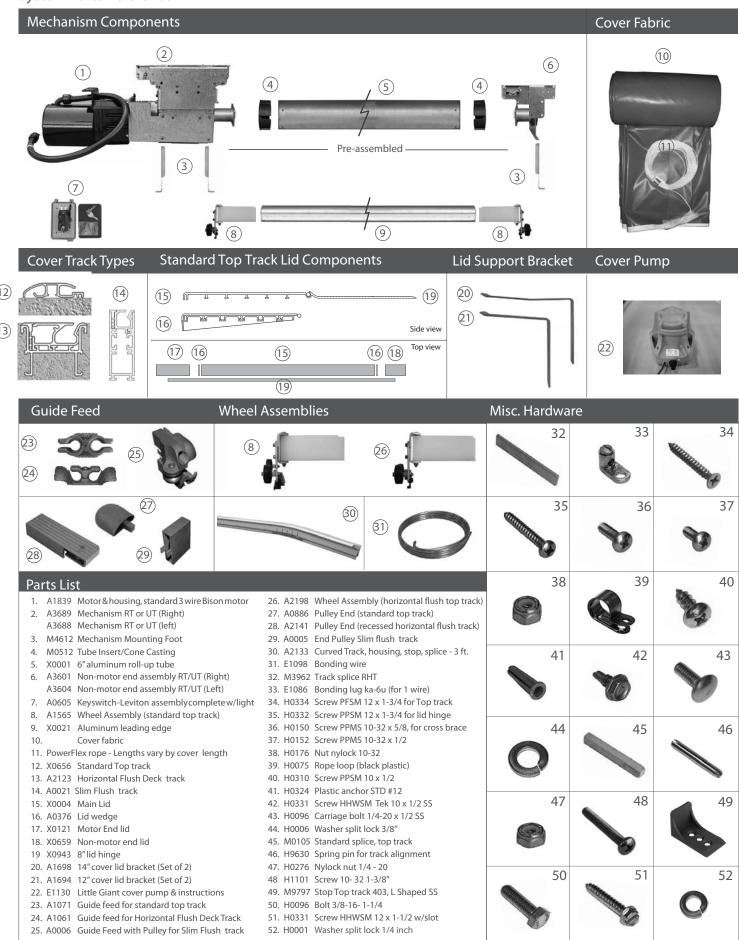
#### **Tools Required**

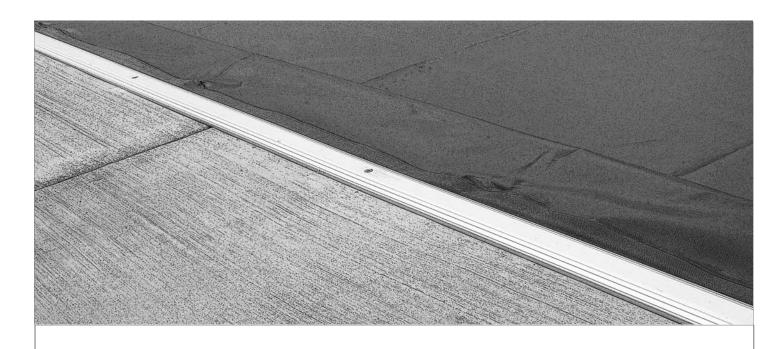
- 1. Hammer drill or rotary hammer
- 2. Masonry drill bit 1/4" x 6" (1/4" x 12" bit)
- 3. Extension cords
- 4. #2 and #3 Phillips & standard screw drivers
- 5. Ratchet with 5/16" 3/4" sockets
- 6. Hacksaw
- 7. String line
- 8. Utility knife
- 9. Broom
- 10. Hammer & rubber mallet
- 11. Pliers standard, needle nose & channel lock
- 12. Files round, triangular & flat
- 13. Lighter
- 14. Carpenter's square
- 15. 5/16 hex head driver bit with 12" extension
- 16. Drill (cordless or corded)
- 17. Set of drill bits (1/4" down to 1/16")

- 18. Crescent wrench
- 19. 100 & 25 foot tape measure
- 20. Chalk line (use white chalk)
- 21. Nut drivers 5/16", 3/8", 7/16", 1/2"
- 22. Chisel (wood & concrete)
- 23. Scissors
- 24. Wire strippers
- 25. Set of box/open end wrenches 5/16" 3/4"
- 26. 6" level
- 27. Set of allen wrenches
- 28. Wire
- 29. Electrical tape
- 30. Small sledge hammer
- 31. Vice grips
- 32. #2 #3 Phillips drill bits
- 33. Pencil or marker
- 34. 6 8 clamps

**Optional Power tools** 

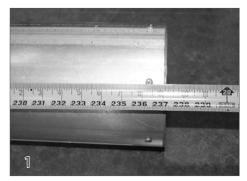
Skill saw with carbide tipped blade Sawzall, Grinder, Angle drill





## STANDARD TOP TRACK

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To determine if the cover system was ordered correctly for the pool, the length of the roll-up tube should be 3 inches shorter than the track space.

For example, for a 20 ft track space, the correct length of roll-up tube is 19 ft 9 in.



Laying out the Cover Tracks

Lay the cover tracks on the deck on both sides of the pool. When positioning the tracks, there needs to be at least 7" of clearance from the top of the finished deck to the bottom side of slides and hand rails for the wheel assemblies and leading edge to pass under without damaging the cover system.



Extend the tracks 18" past the waterline at the shallow end of the pool. Center the pool shape between the pool track where possible. Measure and mark the track length on the deck. Use a chalk line to mark the track location.

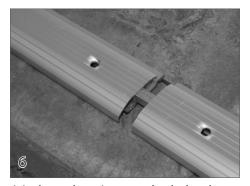


Before splicing the sections of track together, file all track ends thoroughly,

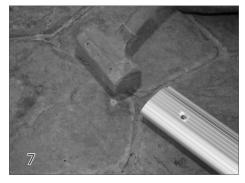
rounding all edges and removing all burrs. This step is extremely important. The cover can be damaged very easily by metal burrs and this damage is not covered by the warranty.



Tap the spring pin (46) into the round splice channel. Slide the center splice (32) into the center channel.



Join the track sections together by hand.



At one end, use a rubber mallet to tap the track sections together.



The two sections of track should be tight together.



Cutting the Tracks to Length
With tracks extended at least 18" past the
waterline at the opposite end of the pool,
cut the tracks so they extend 18" past the
waterline at the mechanism end.



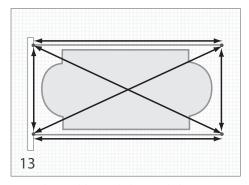
Cut the track at the mechanism end to the proper length using a miter saw. It is important to have square cuts on the track. Note: Always wear safety goggles when using powered equipment.



File the track ends on both sides of the pool making sure to round all edges and remove all burrs. This step is extremely important. The cover can be damaged very easily by metal burrs and this damage is not covered by the warranty.



Checking for Square
Measure the track space, track length
and diagonals to make sure the
tracks form a perfect rectangle.



Lengths, widths and diagonal dimensions must be equal to each other or the system will not operate properly.



Attaching the Tracks to the Deck Place the tracks into position on the deck in the marked positions. Make sure that the tracks run completely straight on both sides of the pool. Drill through the pre-drilled track holes into the deck. Drill at least 3" deep.



Move the tracks to the side to expose the holes in the deck. Clean the dust from each hole and tap plastic anchors (41) into each one.



Place the track back over the holes in the deck. Fasten the track screws (34) <u>halfway</u> through the tracks into the plastic anchors. The screws will be fastened completely later in the installation.

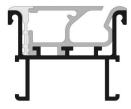


### RECESSED HORIZONTAL TRACK / SLIM FLUSH TRACK

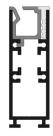
Components & Installation Guidelines Page
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#### System components

- 1. Both Recessed Horizontal and Slim Flush Tracks consist of 3 parts, the track housing, the track, and the locking strip.
- 2. End pulley assembly This can either be installed when the housing is installed or at the time the mechanism is installed.
- 3. Track protector: It is important to protect the track while the concrete deck is being poured. This can be done either by using 10 mill plumbing tape or using an optional track protector that is available for recessed horizontal track (X0865).



Recessed Horizontal track with Track, Housing and Spacer



Slim Flush Track with Track, Housing and Spacer

#### Installation Guidelines

- The installed tracks must start flush with the inside of the cover box, which must be a minimum of 12 inches from the end of the pool and extend 18 inches beyond the other end of the pool. The tracks must form a perfect rectangle. The track lengths, the distance between the tracks and the diagonals each must be equal.
- 2. The tracks must be installed exactly at finished deck grade. It is strongly recommended that the deck be kept level from the pool to the track housings. Start the slope outside of the tracks. Note: the deck around the cover housing boxes should be flat for a minimum of 4" before starting any slope if a standard lid is to be used.
- 3. The housing must have the track, a spacer (standard spacer or optional plastic protector) and top protection in place before pouring deck.
- 4. There are several ways that the tracks can be installed. In each case track supports / mounting feet must be no further than 5' apart.
  - a. Set in place using the mounting feet kit (A3031 for Slim Flush Track. A1531 for Recessed Horizontal Track)
  - b. Mounted on top 2x4 stakes, which are left in the deck permanently. Attach housing to the stakes with self-tapping screws or by drilling holes in the housing and using drywall or deck screws.
  - c. Set into piles of concrete or gunite approximately every 4 feet. If this method is used, care must be taken to make sure that no cement is left higher than the bottom of the side of the channel. Otherwise it will have to be chipped down before the deck is poured.
- 5. Regardless of how the tracks are installed, it is recommended that a string line be left in place until after the pour.
- 6. The standard installation is with straight track; however, optional curved pieces of recessed horizontal track are available if flush deck lid is to be used. In this case, the deck is lowered 2" between the tracks and the box is installed 2" lower.
- 7. It is recommended that a minimum width of 5 to 6 inches of concrete be poured on each side of the housing. Rebar or concrete wire under the housing will help eliminate the concrete cracking and separating from the housing.
- 8. It is recommended that you put a strike joint off the end of your track to control the shrinkage crack.
- 9. To avoid concrete flaking when the protector is removed, go down each side with a 1/8-radius edger. For proper cover operation, concrete must be as close to the top of the housing as is possible
- 10. Some builders find that it is easier to keep the tracks clean if they install Deck-O-Drain channel between the end of the housing and the end of the deck. However, this is optional.



(4.a.) Track staked in place using the optional mounting feet, ready for pour



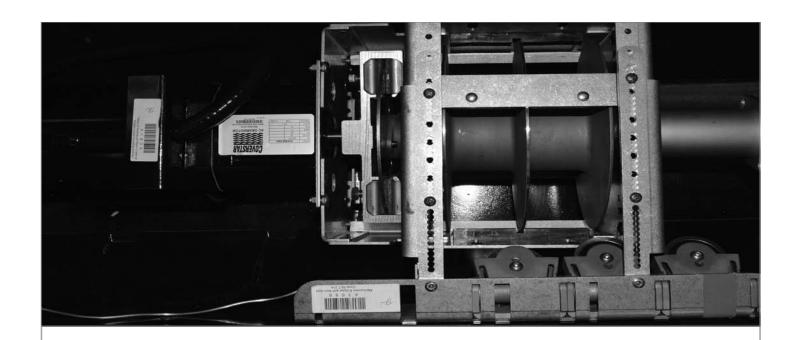
(4.a.) Track staked in place, ready for pour



(4.b.) Housing in place mounted on gunite piles ready for deck pour.



(6) OPTION: Recessed horizontal track sloped into the box. Purchase set of curved tracks for housing end of track. Bend begins 15" in front of housing. Make sure top of track is minimum of 1" lower than bottom of lid.



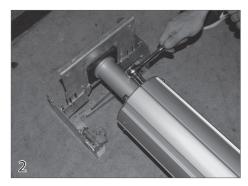
## **MECHANISM**

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#### **Cover Box Preparation**

Use a garden hose to clean out the cover box. During this process, make sure the water is draining from the cover box. It is critical that all cover boxes have adequate drainage. Inadequate drainage may void the mechanism warranty. If there is no drain or inadequate drainage in the cover box, contact your Coverstar Representative.

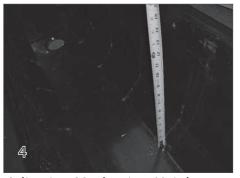


#### Connecting the Roll-up Tube

With the non-motor end turned upside down, attach the cone for the non-motor end to the roll-up tube using the  $3/8" \times 1-1/4"$  bolts (50) and lock washers (44) provided.



With the motor end turned upside down, attach the cone to the motor end of the mechanism using the 3/8" x 1-1/4" bolts (50) and lock washers (44) provided. Tighten these bolts with a 9/16" wrench.



#### Adjusting Mechanism Height

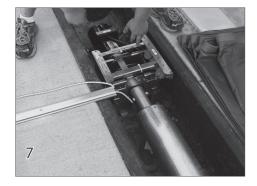
Measure from the bottom of the housing to the top of the track. The top of the mechanism should be installed so it is at the same height as the top of the track. Because the top of the mechanism is adjustable, use the feet to position the roll-up tube as high as possible in the cover box, but allowing clearance so the cover won't rub on the lid brackets.



With the motor end positioned upside down, install the mounting feet using the bolts (43) and lock washers (52) provided.



Install the mounting feet on the non-motor end using the bolts (43) and lock washers (52) provided. The top of the pulley bracket on the non-motor end should be flush with the top of the track.



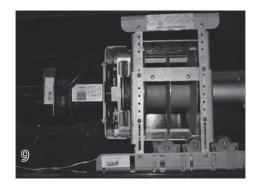
#### Positioning the Mechanism

Lower the assembled mechanism and tube into the housing and place it roughly in the position that it will anchored.

Note: If the cover housing isn't square to the pool, position the mechanism in the housing so it will be square to the cover track.

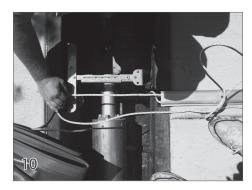


With the mechanism and tube assembled and set in place in the housing, check the roll-up tube for level. This is crucial to proper operation of the cover. Position a level across the housing. Measure from the roll-up tube to the bottom of the level on both the motor end and non-motor end of the mechanism. Adjust height of the non-motor end feet if needed to level the roll-up tube.



Position the mechanism in the housing so that the roll-up tube is centered in the housing and the first pulley is properly aligned with the track.

#### Step By Step Instructions

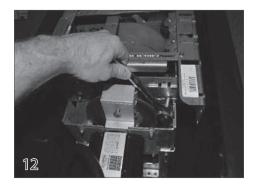


Go to the non-motor end and make sure the rope will come straight back from the rope channel of the track to the pulley. If the ropes do not come straight back, the mechanism should be moved to balance the rope angle on both sides. Only a 1/2" variance from straight is allowed on either side.



Anchoring the Tube/Mechanism

Anchor the mounting feet into the housing using as many anchor points as possible. Use the appropriate screws and/or anchors for the specific cover box being used.



Extending the Pulley Brackets
Loosen the nuts in the four positions on the adjustable brackets of the mechanism. Spread the brackets outward against the walls of the housing.



Raise the pulley brackets up so that the top of the bracket is even with the top of the encapsulation. This insures the ropes will be level.

Tip: before raising the pulley brackets, make sure the feet are set as high as possible without the roll up tube rubbing on the lid.



With the brackets in position, level the mechanism and center it in the housing from front to back. Tighten the four nuts on the adjustable brackets.



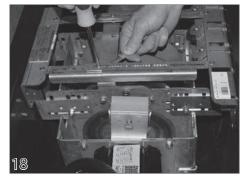
Anchoring the Pulley Brackets
Anchor the motor mechanism brackets into
the housing in as many places as possible.
Use the appropriate screws and /or anchors
for the specific type of cover box being used.



Now loosen the bolts and spread the pulley brackets at the non-motor end making sure they are also level. Anchor the bracket in as many points as possible.



Raise the pulley bracket so it is level with the top of the cover track. Center the non-motor side front to back in the housing.



On the motor and non-motor side, use the half inch screws and nylock nuts provided and bolt the cross braces together.

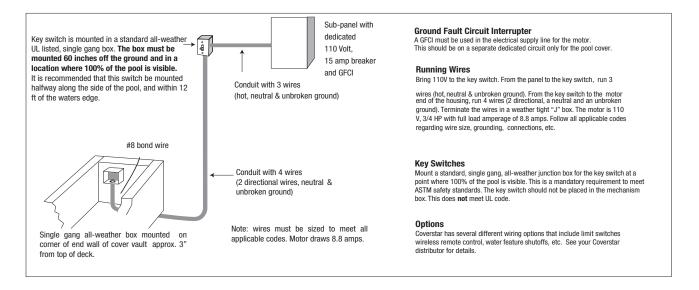
#### **Electrical Wiring and Bonding**

The automatic cover system must be bonded to meet the National Electrical Code. Bond both tracks to the mechanism by attaching a bonding lug to the guide feed screw and running a #8 solid copper bond wire to the mechanism.

Bond the lid to the mechanism by drilling a hole in the lid at either end and attaching a bonding lug. Run bond wire from this lug to the mechanism.

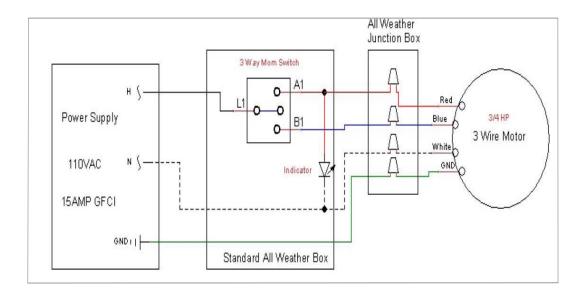
All brackets and any other metal over 4" long should likewise be bonded to the mechanism. There should be a bond wire extended from the equipment pad to the cover box, so it too can be attached to the mechanism.

Note: Builder is responsible to bring proper electrical lines, conduit and bonding to the mechanism. Electrical wiring diagram and details are shown below.



#### Wiring The Electrical Switch

The control switch must be mounted in an all-weather box, in a location where 100% of the pool is visible. Connect the control switch according the diagram below.





## **COVER FABRIC**

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Adjusting the ropes	18/37
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#### Opening the Cover

To open the cover box, cut the bands that hold the two halves of the box together. Never cut the top of the box open. Doing this could easily damage the cover inside. This kind of damage is not covered under the fabric warranty. With the bands cut, lift and remove the top box.



Rolling Out the Cover Standing behind the housing looking over the pool, unroll the cover from left to right.



Unwrap the ropes and run them through the tracks.



# Running Ropes Through The Tracks

The preferred method of running the rope is to pierce the rope with a 1' length of wire and use it as a handle to feed the rope through the track.



Hold the wire with some pliers and pull the rope down the length of the track toward the end of the pool.



Feed the rope through the pulley assembly (27) and place the pulley housing onto the end of the track.



Feed the rope into the back channel then pull the rope down the back side of the track toward the cover housing.

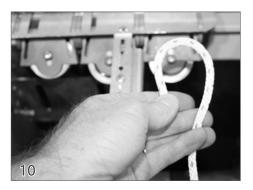


Pull all excess rope through the cover track.

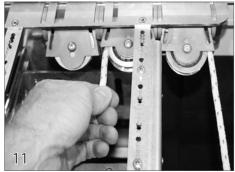


Complete the fastening of all track screws flush to the top of the track and fasten the pulley screw on both sides of the pool. Clean concrete dust from tracks and pulley endcap. Make sure ALL screws are flush with tracks.

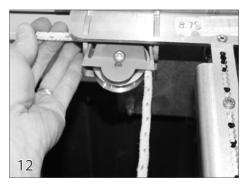
#### Step By Step Instructions



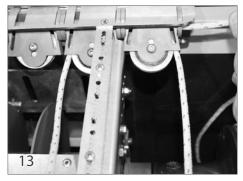
Routing the Ropes
Begin on the motor end. Bend a small curve into the end of the rope.



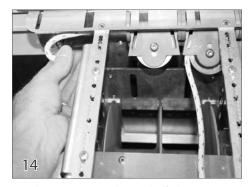
Insert the rope into the side of the first pulley. Push the rope behind that pulley and our along the side of the second pulley.



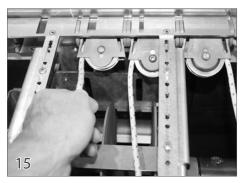
On the non-motor end, run the rope around the pulley and out the back channel of the pulley assembly. Pull this rope along the backside of the cover housing to the motor end pulley assembly.



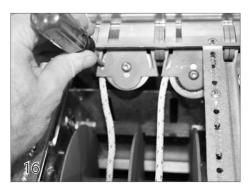
Insert the rope from the non motor end into the channel behind the first pulley on the motor end. Push the rope behind all three pulleys and out of the channel behind the third pulley.



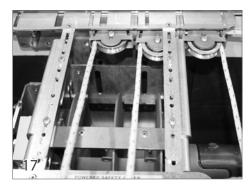
Bend a curve into the end of the rope and pull it back just until it is in the middle of the pulley. Now push the rope back until it comes out the side of the third pulley.



Continue pulling the excess rope through the pulleys.



To help guide the rope aournd the pulleys, inset a small screw driver into the slots in the pulley housings.



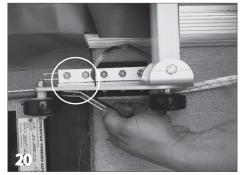
The ropes routed through pulley assembly should now look like this.



Attaching the Cover Leading Edge Lay the front of the cover in front of the housing. Slide the leading edge through the loop on the front of the cover.



Attach the rope tab to the wheel assembly.



Attach bracket on cover to the wheel assembly.



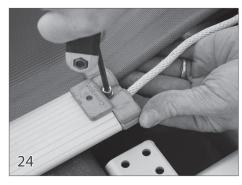
Place the nylon leading edge inserts into the ends of the leading edge tube. Make sure they can slide freely inside the leading edge tube.



Feed the wheel assembly and cover into the track. The slider on the front of the wheel assembly will lock into the track.



Place a guide feed (23) over the end of the track. Use a 3/16" drill bit to drill through the guide feed. Feed the wheel assembly and cover into the track.



Use a 5/32" allen wrench to tighten the screw on the guide feed.



Place a bonding wire lug (33) on top of the guide feed and secure with a 10-32 1-3/8" screw (48) and nylock nut (38).



Install a track stop (49) on the end of the track on each track to keep the cover from retracting too far. Run the key switch in the uncover position to roll the cover up on the roll-up tube. Check the cover to be sure it rolls up evenly. The cover fabric installation is now complete.



Connect the bonding wire that is attached to the front corner of the cover to the leading edge bar using a tek screw (49). Be sure the screw doesn't interfere with the leading edge insert.



Position the fabric on the leading edge so it is in line with the leading edge support bracket. Secure with a tek screw on the back side of the leading edge. Be sure the screw does not interfere with the leading edge insert.



Attaching the Ropes To The Reels

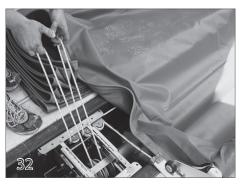
Pull the cover back until the cover is in the tracks equally on both sides. Pull the ropes tight as they come off the pulleys on the mechanism to eliminate the slack in the rope. Note: Cut the ropes only when the cover is open completely.



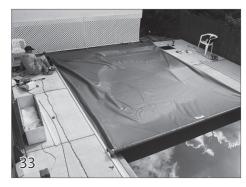
Pull both ropes until the leading edge just moves on each side, cut the longer rope to the same length as the shorter rope while tight. These ropes should be at least 8ft long. Use a lighter or torch to burn the ends of the rope. In most cases you will only need to cut one rope.



Bring the ropes back to the mechanism. Attach the ropes to the rope reel by inserting the ropes through the center of the lugs and tighten the set screws firmly into the ropes. Some prefer to tie a knot at the end of the rope.



While holding the ropes over the mechanism, run the key switch in the cover position. The excess rope will be wrapped around the rope reel.



Running the Cover Over the Pool Run the cover over the pool being careful to prevent it from binding in the guide feeds by lifting the cover and helping it into each track the first time.



Attaching the Cover & Bonding Wire

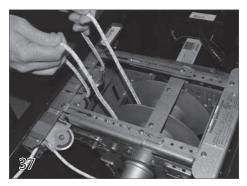
Make sure the webbing continues straight as it travels from the track to the roll-up tube. Attach the cover to the roll-up tube using tek screws (42). The first screw on each end of the tube needs to be 3 inches from the end of the tube. As the cover rolls up on the tube, the webbing should roll up completely off.



Lay the bond wire on top of the cover fabric. Secure it to the roll up tube using a tek screw (42). Distribute the slack of the cover evenly between each screw across the length of the tube. Secure the cover to the roll-up tube using tek screws (42) every 2-3 ft. When attaching the cover to the tube, do not use folds or pleats.



Run the key switch in the uncover position to roll the cover up on the roll-up tube. Check the cover to be sure it rolls up evenly. Run the cover 6-10 times to make sure it opens and closes evenly. The cover fabric installation is now complete.

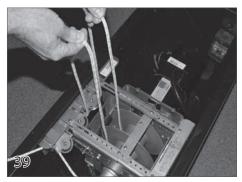


#### Adjusting the Ropes

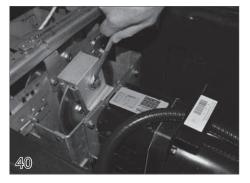
When closing the cover, if both sides of the cover don't close squarely, one of the ropes may need to be adjusted. To adjust the rope, open the cover all the way. Pull the excess rope off the rope reel.



If one of the ropes is longer than the other rope, loosen the set screw that secures the rope to the rope reel lug. Shorten this rope until it is the same length as the other rope. Re-attach the rope to the rope reel.



If both ropes are the same length, and the cover doesn't close squarely, shorten the rope for the side of the cover that doesn't close all the way. The amount that the rope is shortened is equal to the amount distance that the cover needed to travel to close all the way. While holding the rope, run the switch in the cover position.



#### Adjusting the Torque Limiter

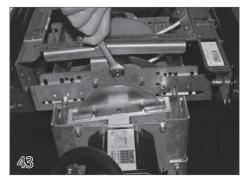
The Eclipse Automatic Cover System is equipped with a torque limiter that helps prevent damage to the mechanism. Only if the motorized mechanism does not extend or retract the cover will you need to adjust the torque limiter.



To adjust the torque limiter, use the provided 9/16" wrench attached to the mechanism to tighten the first brake bolt 1/2 turn. Run the cover.

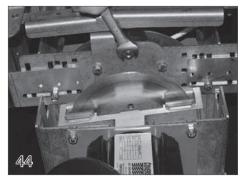


If further adjustment is needed, rotate the torque limiter brake arm to position the second brake bolt and tighten the second brake bolt 1/2 turn.

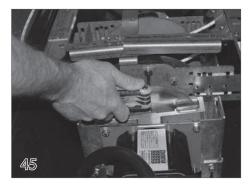


#### Adjusting the Brakes

There is a brake at the motor and non-motor end of the mechanism. The brakes are preset at the factory and should work properly. If they do not, they should be tightened enough to prevent the rope from spooling off the reel as the cover is opening. There should only be enough drag to keep the reel and roll-up tube from free spinning.



If you need to adjust the brakes, first loosen the jamb nut on the side of the rope reel mechanism.

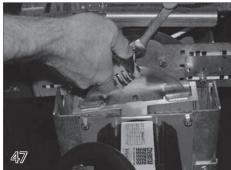


To tighten the brake, use an allen wrench to turn the set screw inside the jam nut in the clockwise direction.

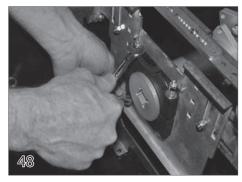
#### Step By Step Instructions



To loosen the brake, use an allen wrench to turn the set screw inside the jam nut in the counter clockwise direction.



After adjusting the set screw, retighten the jamb nut while holding the set screw with an allen wrench. There's a corresponding brake on the opposite side of the rope reel. Adjust both brakes equally.



The non-motor brake should be tight enough to prevent the cover from rolling off the tube faster than it is being pulled into the track. To adjust this brake, use two 7/16" wrenches and tightening or loosening the thru bolts in the brake block.



# **CLASSIC ALUMINUM LID**

Step By Step Instructions	Page/Step
Installing the lid brackets	21/1
Assembling the aluminum lid	21/4
Attaching the lid to the deck	21/7

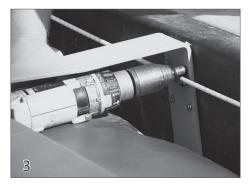


#### Installing the Lid Brackets

Hold the bracket against the back wall of the housing so it is flush with the top of the deck and mark the hole positions. Use a ¼" masonry bit and drill through the holes in the bracket into the back of the housing. Be sure to drill the holes at least 3" deep.



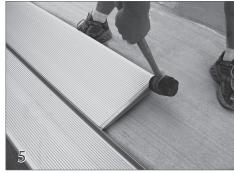
Remove the bracket and insert plastic anchors in each of the holes. Tap the anchors with a hammer so they are in the hole completely.



Secure the brackets to the back wall of the housing using #12 x 1-1/2" hex head sheet metal screws. Mount a rope loop on one top screw of each of the brackets. This will keep the rope running straight along the back of the housing.



Assembling the Aluminum Lid
Assemble the lid by sliding the hinge onto the main section of lid.



Slide the plastic wedges (15) onto the main lid on either side. Tap into place with a rubber mallet.



Slide the motor and non-motor lid ends onto the hinge.



#### Attaching the Lid to the Deck

Position the lid over the top of the housing. The motor end and non-motor ends should extend past the cover housing 1-2". If they extend more and do not lay flat on the deck, it may be necessary to cut the lids. Drill through the lid hinge along the back edge every 2'-3' using a 1/4" drill bit. Then, drill through these holes and into the concrete deck using a 1/4" masonry bit. Clean concrete.



Insert plastic anchors (38) into the holes and tap with a hammer so they are flush with the deck. Fasten the lid to the deck with #12 pan head screws (32). File any sharp edges.



Measure across the hinge to evenly space the screws. Continue drilling and anchoring the hinge in this manner until the entire lid is attached to the deck. If any part of the lid is sticking up, it must be screwed down to the deck. The safety pool cover installation is now complete. Now instruct the home owner using the home owners guide and the checklist on the next page.



### HOME OWNER CHECK LIST

After the cover system is installed, it is critically important to instruct the home owner on how to operate the cover system safely and do routine maintenance. Use the following check list and the ECLIPSE Use & Care Guide as your primary instruction source.

#### Use & Care Guide Page

☐ How to use the cover pump	4
☐ How to uncover and cover the pool	6-7
☐ Warn about standing water on the cover	4
☐ Who is authorized to operate the cover system	6
☐ Pool chemicals and cover life	8
☐ Proper maintenance and care of the cover system.	8-9
☐ Inform the customer on pool safetyBack c	over

### **Installation Check List**

Tracks	Does the track space measurement match how the cover system was ordered? All track ends filed. This is extremely important. Cover goes through the track joints smoothly. All track screws are tight and flush. Pulleys are flush against the end of the track. The guide feeds are snug against the track. Guide feeds bolted in and are tight. Stops installed. Alignment pins and splices used when joining the tracks, even in encapsulation.
Mecha	Mechanism installed level in the box. Roll-up tube level in cover box.
Cover	
Cover	Lid  All sharp edges have been filed.  All areas where the lid is not flat on the deck have been screwed down to eliminate any potential hazards.  There is enough clearance between the lid brackets and the cover to avoid rubbing.
Misc.	Key switch is in full view of the pool.  Cover pump tested by putting it in the water and operate it in front of homeowner.  The cover box is clean and clear of debris so that the drains are not easily clogged.  Pool area cleaned up.  Homeowner has been instructed on the operation of the automatic safety cover system.