

Installation Manual EZ cover Top track / Recessed System





The EZ cover system Top track / Recessed System is relatively easy to install, even if you haven't installed one before. With these instructions, you should be able to have it installed in just a few hours. The following is a List of tools needed to complete the job.

Tools Required:

Hammer drill with 1/4" masonry drill bit
11/64" and 1/4" metal bits
Cordless drill
Saws-all or hack saw
#2 & #3 Philips screw drivers and cordless bits
Flat screw driver
Philips screw driver
Allen wrench set
Hammer
Basic wrench and socket set
File
Small torpedo level
Utility knife
Lighter or Pocket torch
Pencil or Chalk

Copy of presite or dimensions given to Aquamatic Cover Systems

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Steps for Installation

Step 1: Inventory

Make sure that you have all of the parts needed, by laying it all out and taking inventory. Be sure that you have the correct side unit. (left or right). This is determined by standing behind the vault looking towards the pool. Which side is the drive unit and rope reel going to mount on. Do you have enough track for the length desired.

Is there a parts bag containing the following:

One bag of 1 3/4" screws

One bag of plastic ribbed anchors

One bag of small drum screws

One bag with 1/2" leading edge bolts w/ washers and nylon lock nuts

Two track splice connectors or enough for all splices

Two end pulley assembly's

You should also have a leading edge bar and two poles.

Last but not least, a bag containing the correct colored cover fabric.

THE BAG DOES NOT INDICATE FABRIC COLOR so look inside.

Step 2: Review Presite or Measurements

You should review the presite sheet or dimensions given to Aquamatic Cover Systems for proper track placement. The two measurements that you are mainly interested in are the track to track dimension and the track length. Also there may be a note indicating where to place the track on the coping or deck. This is important for proper drive unit placement.

The track to track measurement will tell you how far apart the tracks will be set. This measurement is taken from the recessed groove in the track to the other track groove.

The track length is simply the overall length, from vault to end pulley's.

Step 3: Track Alignment

Lay out track end to end on both sides of the pool. Use the "T" shaped track connectors to align the tracks. These insert into the center of the track with the wide part on top, then push both tracks together. Extend the tracks into the vault no less than 1"in. From the water side of the vault, measure and mark the track to the length stated on the presite. Remember: MEASURE TWICE-CUT ONCE

Squarely cut the track using either a saws-all or hack saw at the pulley end of the track. After making the cut, use a utility knife and small file to remove any burs on the edges and inside the track channels. Failure to do so could result in frayed rope or premature wear. Once this has been done to both sides, it is now time to set your track to track measurement.

Starting at the vault end, position the track onto the coping as specified in the presite. Leaving the 1"+ in. hanging into the vault, measure from track groove to track groove, moving the tracks to the measurement stated on the presite. Take another measurement in the middle of the first track, then at the track joint, and finally at the end pulley. You may have to repeat this step several times to ensure proper track alignment and spacing. After determining that the width is correct and is properly placed on the coping, use a pencil or chalk to mark the deck/coping in several places along side the track to help with alignment in case of accidental movement.

The last measurement that is needed is to ensure that the tracks are "squared up". This is done by measuring the opposing corners. Measure from the vault end of the right track to the pulley end of the left track, and vice versa. These measurements need to be the same. You may have to adjust the tracks accordingly. It is important that the tracks are squared up, otherwise you cover will not function as designed.

Step 4: Securing Track to Coping/Deck

After all measurements have been checked and re-checked and the placement on the coping/deck have been made, it is time to secure the tracks.

Starting at the vault end, with the 1"in.+ still into the vault, locate the first hole in the track. Using a hammer drill with the 1/4"in. masonry bit, drill into the coping/deck about 2"in. Lift up the track and insert a plastic ribbed anchor into the hole and lightly tap with a hammer to insure that it is seated into the hole. Replace the track and insert the 1 3/4" screw into the track hole. Using a cordless drill and a #3 Philips bit, tighten the screw down. Do not over tighten otherwise you may strip out the anchor or pull it out of the hole. At this point you can skip several holes and drill out another and secure until you reach the track joint. You should create a gap of about 1/16"in. to allow for track movement due to heat expansion. Drill both holes on either side of the track joint and continue on towards the end. By drilling only a few of the holes and securing the screws, this holds the track in place so that you can go back and drill out the rest of the holes without fear of it moving on you. After all holes have been drilled out, loosen the screws already installed enough to allow you to insert the remaining anchors. Install the screws, but do not tighten them all the way. Leave them loose enough for you to lift the track up about 1/2"in. to allow you to run the ropes through the back track channels.

Step 5: Attaching the End Pulley's

Once both tracks have been drilled and all screws and anchors are in place, it is time to attach the end pulley's. In the parts bag, locate the two end pulley's. On the pulley there is a steel tongue with a Philips screw holding another metal piece. Loosen up the screw with a Philips screw driver separating the two pieces to a gap of about 3/16"in. Go to the end of the track and lift up. Slide the pulley assembly into the center of the track using the two tabs to sandwich down onto the notches in the track and tighten. Repeat for the other side.

Step 6: Drive Unit Installation

After the tracks and pulley's have been installed, it is time to mount the drum drive unit.

The drum mounting brackets attach directly to the track, so the height and placement is predetermined. This is why it was so important for proper track placement.

Grabbing the drum bracket that is missing the square delrin block, (this will be your drive side). Lift it up to the track while pushing against the water side wall. Make a mark on the track where the main body of the guide (not the tongue) meets the track. This is where you will cut the track so that you can attach unit. After squarely cutting your track, be sure to file and de-bur to prevent rope fray. The tongue of the guide will go inside the track after it is cut. Using a 3/8"in. wrench and flat tip screw driver, remove the guide assembly from the bracket. Set the tongue of the guide on top of the track. You should be able to see the center ridge line through the hole, mark through the hole using a pencil. Use a 11/64"in. metal drill bit and drill the track. Slide the guide tongue into the track, the holes should match up. Lift drum bracket up to the track and guide, the bracket guide screws should slide into the guide. Attach nylon lock nuts and screw. The unit is now held in place for drilling. Use the small torpedo level to keep the bracket vertical, drill with hammer drill and install screws and anchors. Repeat this procedure on the non-drive side.

Step 7: Installing the Cover Drum

Now that both drum mounting brackets have been secured, it is time to install the cover drum The drum is held in place by two white delrin blocks. These blocks have two grooves on either side that allow them to slide into the bracket. There is also a retaining plate that slides into a notch in the bracket and held in place with a Philips screw. Remove the block from the non-drive side bracket and slide onto the drum shaft. You may have to use a 7/16"in. wrench to loosen up the bolt on the block to allow it to slide onto the shaft. The drive side block is already attached to the drum. Once you have the block on, you can now set the drum in place by sliding the two blocks onto the bracket with the grooves, and then sliding the retaining plate into the notch and tightening the screw to keep it securely in place.

Now you may have to center the drum evenly between the tracks. To do this, loosen up the two 7/16"in bolts on the white delrin blocks and use an allen wrench to loosen the two piece lock collars that hold the pole sockets into place. Shift the drum (left or right) until it is centered between the tracks. Use a tape measure to find the center between the tracks and mark with a piece of chalk, align center of drum (as indicated by a hole with a circle around it), to the chalk mark. Now slide lock collars and pole sockets over as well and tighten up. Be sure to allow a little movement between pole sockets. Tighten the 7/16"in. bolts to the point where you can rotate the drum with relative ease, but not to the point where it will continue to spin on its own.

When all is repositioned, and tightened, place both poles into the sockets creating a "V" shape. There are tabs on the sockets that should be at the top, not the bottom. If you place the poles into the sockets and they create an "X" the sockets need to be spun around. With the sockets in properly simply alternate poles in a back and forth motion. The drum should rotate away from the pool. If not, you have either placed the drum in incorrectly or the wrong side unit was ordered.

Step 8: Rope Reel Installation

The rope reel, which is used to close the cover, is mounted on the same side as the drum drive side. Leaving about a 2"in. gap between the ends of both shafts, lift the rope reel up so that both shafts are aligned horizontally. This should also allow for the rope coming from the non-drive side to go thru the drive side bracket and match with the rope reel pulley's. It isn't as important for the shafts to align as it is for smooth rope operation. The less friction or resistance, the better the unit will perform. With the rope reel in position, drill the top two holes and install the screws and anchors, then tighten. You will have to remove the rope reel from its support bracket in order to get to the remaining holes. In the same manner as the drum, simply loosen the Philips screw and slide retaining plate out of its notch and lift reel out of its brackets. After drilling the remaining holes and securing all screws and anchors, replace the rope reel into the brackets and secure.

Step 9: Feeding the cover rope into the track

Now that both drive units, and the track are in place, it is time to feed the cover rope into the tracks. First remove the fabric from the bag, checking again for the correct color. Lay the cover down behind the vault on the drive side and partially unroll. The smooth, matte finish should be on top with the rope and sliders being on the water side. If it is not, roll the cover up and take it to the non-drive side of the pool and unroll.

Unravel both ropes and lay behind the fabric to help prevent it from tangling up while pulling. To Install the rope into the track, remove the top piece of the guide assembly's, giving yourself about a 2'ft. tail, position rope at an angle across the track opening. While simultaneously exerting some pressure and applying a sharp tug, the rope should pop into the track groove, leaving the 2'ft. tail to use to pull the remaining rope to the end of the track. To feed the rope through the back channel of the track, you will have to remove the cap of the pulley assembly with a Philips screw driver. Thread the rope around the pulley and feed it through the gap, giving yourself that 2'ft. tail to pull. Using the same method as before, pop the rope into the rear channel. Pull the rope towards the drum, when you reach the track joints you may have to lift the track up to ensure that it remains inside the rear channel. Once both ropes have been fed into the tracks and they can move freely by pulling on both ends, you can replace both pulley assembly caps and secure all track screws using the cordless drill with a #3 bit. Again be sure to not to over tighten the track screws.

Step 10: Running the ropes through the pulley's

Now you will have to feed the ropes through the pulley's on the system. On the non-drive side, feed the rope over the bottom piece of the guide assembly and over the top pulley, down to the bottom pulley. The rope should go around the pulley and through a hole in the bracket, along the front of the drum, through another hole in the drive side bracket, and over to the farthest pulley on the rope reel. The drive side rope goes over the bottom piece of the guide assembly and top pulley. Down to the bottom pulley, around the bottom pulley, through the hole in the bracket, and to the closest pulley on the rope reel. Pull both ropes until all of the extra rope has been fed and the fabric starts to move. Lay the rope down behind the vault side by side. Now is the time to attach the leading edge bar.

Step 11: Attaching the leading edge bar

The leading edge bar lifts and pulls the front of the fabric across the pool. To attach the bar you will need to pull on both ropes to the point where both black delrin sliders meet with the guides. Gently hand feed both sliders into the track. You may have to lift the track away from the guides to create room. Once both sliders are in the track about 2"-3"in. past the guides, re-secure the track and attach the top of the guides with the screws and nylon lock nuts. You can now attach the leading edge bar to the fabric. Grab the front edge of the fabric which contains a piece of rope sewn into it. Slide this bead into the small channel of the leading edge bar. Putting a little water or silicone spray into this channel will help it to slide on easier. Slide the bar until it is completely on. There will be excess material sticking out, but do not worry, we will address that in a moment. You will need to retrieve the leading edge bolts from the parts bag. You will also need a 1/2"in, socket and wrench. Take the bolt and put on one washer. Insert the bolt from the bottom of the slider groove into the center hole of the leading edge bracket. Place the nylon lock nut on top of the bolt and tighten. Once tightened slowly back the nut off to the point where you can move the bar on the slider side to side fairly easily. Repeat for the other side. Now you have to secure the fabric bead in the bar. Retrieve two drum screws from the parts bag and a Philips screw driver. By grasping the fabric close to the bar, pull on it to the point where only 2"in. of fabric is protruding past the bar. Insert the screw into the hole at the end of the bar and tighten. This is also a good time and place to attach the bonding strap if provided. Repeat for the other side.

Step 12: Installing the fabric

Now that you have the leading edge bar attached, you can now install the fabric. By grasping the fabric on both sides, pull back towards the drum until the sliders bump against the guides. Standing behind the rope reel looking towards the pool, grab both ropes and pull evenly until the slack is taken up and the fabric starts to move forward. While keeping tension on the rope, give yourself 3'-5'ft. from the back of the vault's edge and cut the rope evenly. Use the lighter or pocket torch to melt the ends of the rope to prevent them from fraying. Insert the left rope into the hole on the left side of the rope reel. (inside to outside) then tie a knot. Repeat for the right side rope. Now rotate the rope reel to take up slack in the rope. Use the 7/16"in wrench to adjust the tightness in the rope reel, you want it to rotate with relative ease, but not to the point where it will continue to spin. Insert the poles into the sockets creating a "V" and alternate them in a back and forth motion until the fabric is across the pool.

Step 13: Attaching the fabric to the cover drum

With the fabric across the pool (in the closed position) you can now attach the fabric to the cover drum. Remove the rest of the drum screws from the parts bag and get the cordless drill with a #2 bit. Starting at the outside edge, insert the first screw through the fabric, where the bonding strap and webbing are sewn to the fabric. Tighten screw into the first hole on the drum closest to the end. Repeat for the other side. After both ends are done, find the exact center of the fabric by pulling up and creating a crease at the apex of the of the fold. Insert a screw into the crease and into the center hole of the drum (indicated by a hole with a circle). Work your way from the center to the end, inserting a screw with each hole you see in the drum until you reach the last available hole. You will have some extra material which you will need to divide into two equal folds and attach to the drum. Repeat this procedure for the other side. You can now rotate the drum to take up the extra material which is generally 3'ft. To open the cover, insert the poles into the sockets attached to the drum creating a "V", alternate a back and forth motion until the cover is open.

Step 14: Success

CONGRATULATIONS!

You have successfully installed your Top/Recessed Ez-Cover.

You can now fine tune the system with a series of adjustments. Using the 7/16"in. wrench, you can tighten or loosen the drum and rope reel to the desired resistance in both.

After having ran the system several times, and the fabric seems to come back askew (crooked). You can make a small adjustment in the drum to help correct this. Make note of which side the fabric sticks out closest to the water, close the cover across the pool. Use the allen wrench and loosen up the two piece lock collars and slide the drum about 1/2" in the direction the cover was sticking out the farthest. Tighten up the collars. Operate the system several times to see if the problem was corrected. Repeat if more adjustment is needed.