



# COVERSTAR

## Coverstar automatic safety pool cover

### Installation Guide

Read this manual before using the equipment

Retain this manual for future use

**Certikin**  
FLUIDRA

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## **Intended purpose**

The purpose of this guide is to provide instructions and information for the safe installation of automatic pool covers.

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# 1 Safety

This section provides an overview of all safety aspects for the protection of people as well as safe installation. Other task-related safety instructions are included in the specific sections.

In addition to these safety instructions, you must also comply with all local and site-specific health and safety regulations, and environmental protection requirements.



## **WARNING**

### **Risk of injury!**

The hydraulic system of the power operates at a high pressure.

Do not operate the system if any leaks are detected, or any of the hydraulic lines are damaged.



## **WARNING**

### **Risk of electrical shock!**

The power pack is powered using high voltages.

Do not operate the equipment if there are any exposed or damaged electrical wires.



## **WARNING**

### **Risk of injury from lifting heavy objects!**

The cover, and related parts, are heavy.

Use at least two people when lifting heavy parts.



## **Caution**

### **Risk of injury!**

Use personal protective equipment (PPE), such as safety shoes and safety glasses, as required.

Do not wear loose clothing when installing equipment or operating power tools.

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## 2 Hardware description

Before installing the Coverstar automatic safety pool cover, you should be familiar with the location and names of all parts of the product.

### 2.1 Overview

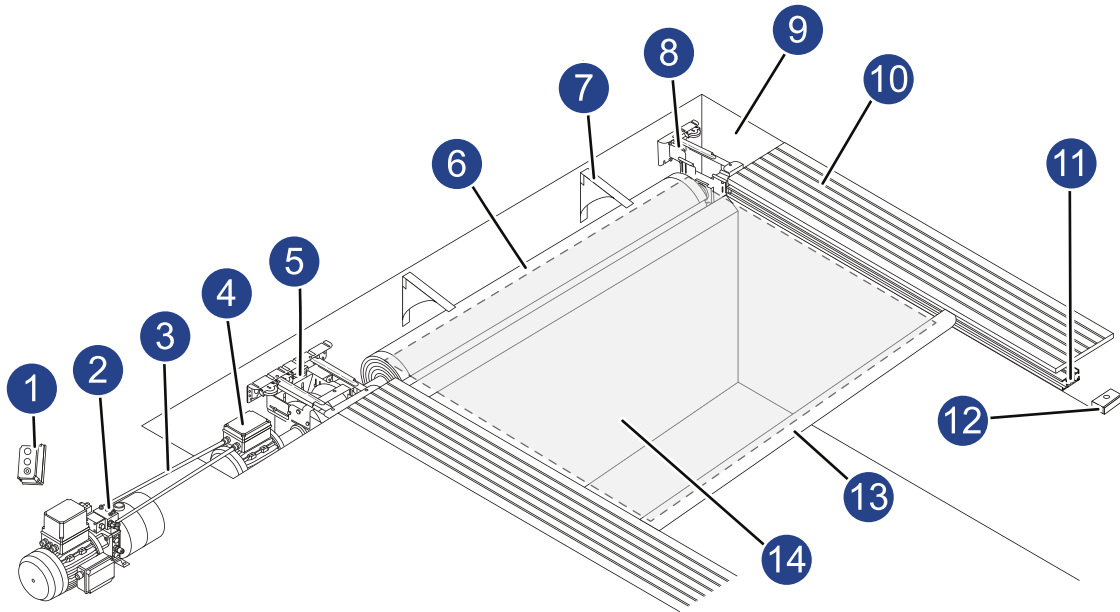
This section provides an overview of the hardware components of the Coverstar automatic safety pool cover for all product variants and installation types.



#### **Notice**

As part of the pre-installation, a recess channel for the flush track must be in place.

### 2.1.1 Overview of encapsulated track installation

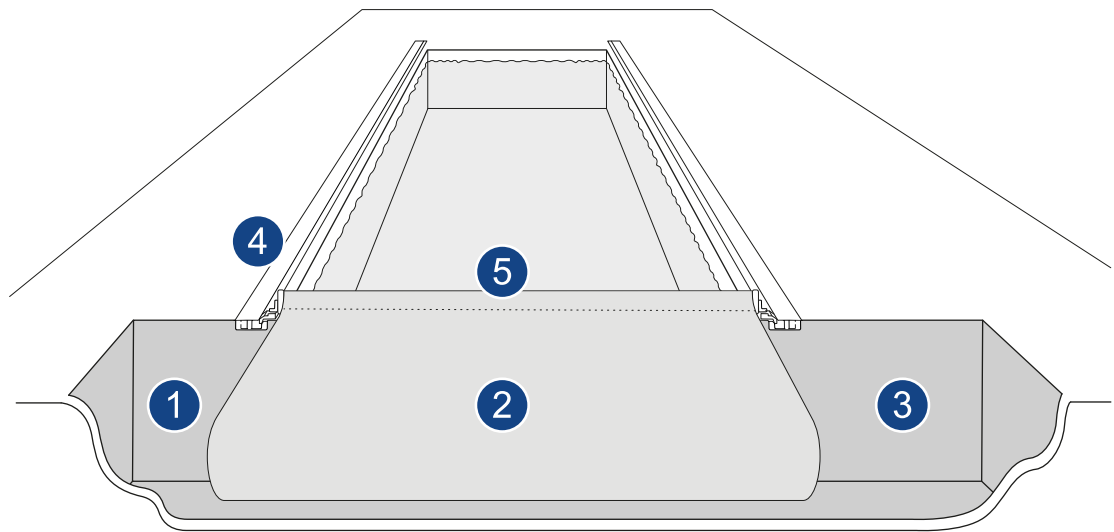


1	Key switch	Used to control opening and closing the cover. This switch can be locked. The key switch must be located where the operator has full view of the pool area while operating the cover.
2	Hydraulic power pack	The power pack must be positioned in a location where it is protected from extreme temperatures, dust, water, condensation, and moisture.
3	Hydraulic hoses	Carries hydraulic fluid from power pack to the hydraulic motor.
4	Hydraulic motor	Part of the mechanism drive-end assembly.
5	Mechanism	Pulley system, gears, and rope wind and unwind reels. Drive-end assembly.
6	Roller	Roller for the cover. Note the direction of cover winding indicated on the roller.
7	Lid support brackets	Brackets used to support the lid covering the roller pit. The amount and installation pitch of the brackets depends on the lid type to be fitted.
8	Mechanism	Pulley system for rope wind and unwind. Non drive-end assembly.
9	Roller pit	Pit that houses the roller and mechanism assemblies. Refer to the pre-installation manual for details
10	Coping	Pool edging. This can be stone or decking type.
11	Encapsulated track	Encapsulated track, inner guide, and spacer are installed as part of the pool construction. Refer to the pre-installation guide for details.
12	Track pulley	Used to return the rope inside the inner guide. Fitted to the end of each inner track.
13	Lead edge bar	Attached to the front of the cover fabric.
14	Cover	Vinyl composite that covers the pool area.

Figure 1 - Overview of pit installation



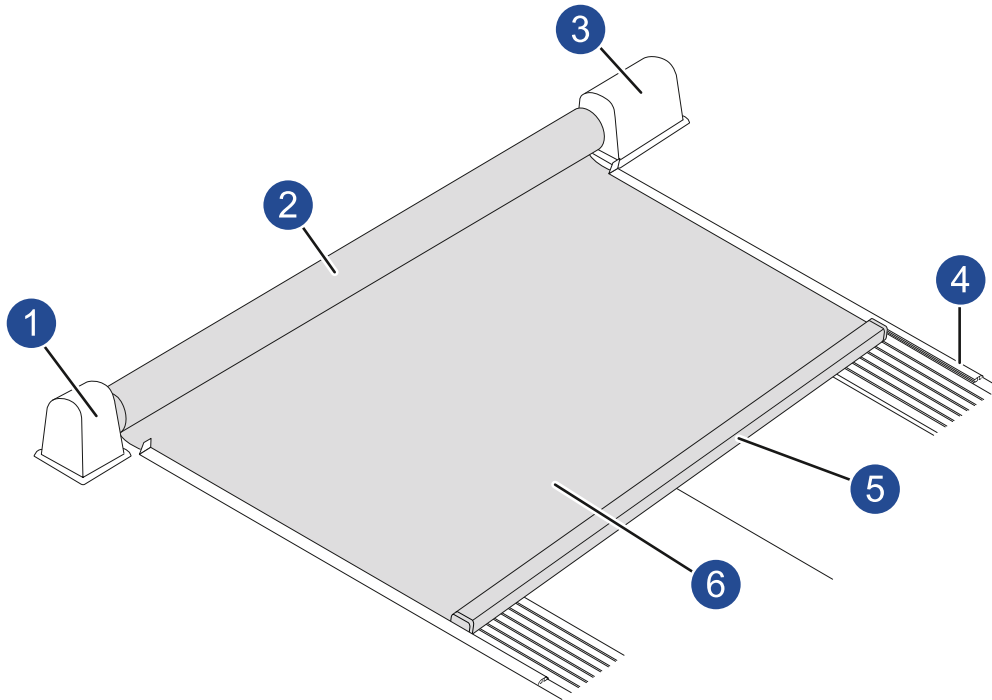
### 2.1.2 Overview of flush track installation



1	Mechanism (non drive-end assembly)	Pulley system for rope wind and unwind.
2	Roller and cover	Roller for the cover.
3	Mechanism (drive-end assembly) and hydraulic motor	Pulley system, gears, and rope wind and unwind reels.
4	Flush track	Flush track C channel is installed as part of the pool construction. Refer to the pre-installation guide for details.
5	Lead edge bar	Attached to the front of the cover fabric. This can be fitted as wrapped or unwrapped.

Figure 2 - Overview of flush track and pit mechanism installation

### 2.1.3 Overview of deck-mounted mechanism installation



1	Mechanism (non drive-end assembly)	Pulley system for rope wind and unwind. Shown with mech housing fitted.
2	Roller	Roller for the cover. Note the direction of cover winding indicated on the roller.
3	Mechanism (drive-end assembly) and hydraulic motor	Pulley system, gears, and rope wind and unwind reels. Shown with mech housing fitted.
4	Top or flush track	Flush track C channel is installed as part of the pool construction. Refer to the pre-installation guide for details.
5	Lead edge bar	Attached to the front of the cover fabric. This can be fitted as wrapped or unwrapped.
6	Cover	Vinyl composite that covers the pool area. Cover unwinds and winds from the base of the roller.

Figure 3 - Overview of deck-mounted installation

## 2.2 Track overview

Depending on the design and shape of the swimming pool, the Coverstar automatic safety pool cover can be used with the following types of tracks:

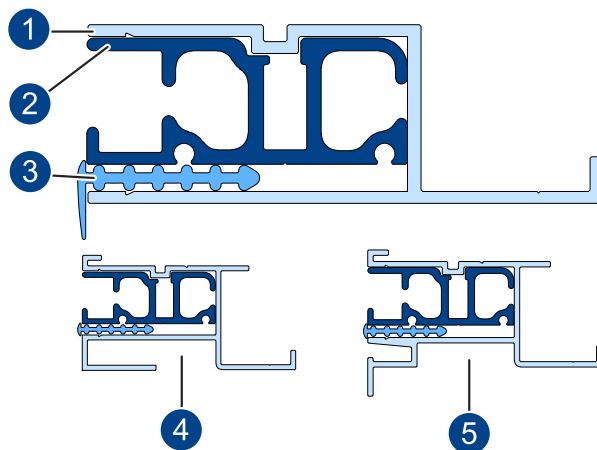
- Encapsulated track — embedded in the pool wall
- Top track — mounted on the surface of the deck
- Flush track — recessed in the deck

Generally, the top and flush type tracks can be fitted after the pool has been constructed.

### 2.2.1 Encapsulated track

The encapsulated track is built directly into the pool wall. There are three variants of the encapsulated track:

- Encapsulated track for concrete tile pools
- Encapsulated track for liner pools
- Encapsulated track for fibre-glass pools



1	Encapsulated track	Built into the pool walls and held in place on three sides.
2	Inner guide	Inserts into the encapsulated track and provides the channel for the ropes and cover sliders.
3	Spacer	Inserts between the encapsulated track and inner guide to hold the inner guide in place.
4	Fibre-glass track	Track profile of encapsulated track for fibre-glass pool types.
5	Liner-lock track	Track profile of encapsulated track for liner pool types.

Figure 4 - Encapsulated track parts cross-section

### 2.2.2 Top track

The top track can be used on both new and existing pools. Top tracks are mounted on the pool surround. This type of track is ideal for irregular shaped pools.

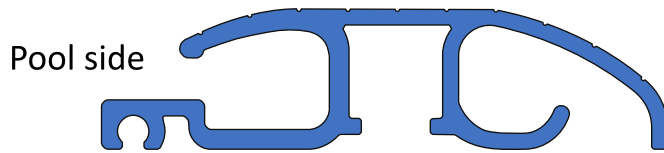


Figure 5 - Top track profile

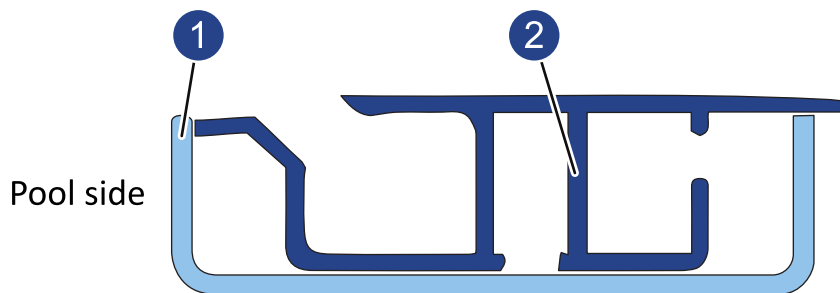
### 2.2.3 Flush track

The flush track can be used on both new or existing pools. Flush tracks are recessed into the pool surround. This type of track is ideal for irregular shaped pools.



#### Notice

As part of the pre-installation, a recess channel for the flush track must be in place.



1 White plastic C channel

2 Recessed track

Figure 6 - Flush track profile

## 2.3 Mechanism overview

The mechanism is a heavy-duty pulley system with gears that wind and unwind the ropes to move the cover on and off the pool. The cover is attached to the leading edge bar and roller.

The key elements of the mechanism are:

- Mechanism (drive-end assembly) — pulley system, gear and motor for rope wind and unwind.
- Roller — roller for the cover fabric.
- Mechanism (non drive-end assembly) — pulley system for rope wind and unwind.
- Hydraulic motor and hydraulic lines — carries hydraulic fluid from power pack to motor.

The mechanism can be mounted either in the pit (typical) or on the deck.

## 2.4 Cover overview

The cover (fabric) is a vinyl composite that covers the whole pool area.

All covers are manufactured with a quantity of slack relevant to the pool size and style of cover system.



### WARNING

#### Risk of serious injury or death!

The cover must lie on the water in order to be safe.

The supporting strength of the cover comes from the support of the water directly under it.

## 2.5 Lid overview

If required, a pit lid can be supplied, which covers the pit neatly and allows easy access to the cover roller and mechanism. The lid is supported by brackets.

There are different types of lids, depending on the track system:

- Top and flush tracks:
  - Aluminium non walk-on lid
- Encapsulated tracks:
  - Decking
  - Heavy-duty trays (to accept coping stones)
  - Aluminium non walk-on lid

## 2.6 Power pack and key switch

The power pack is used to provide high-pressure hydraulic power for the mechanism motor. The power pack is powered using an electrical motor and is controlled using the pool cover key switch.

- ▶ *For more information about installation and configuration of the power pack, refer to the separate Hydraulic Power Pack installation manual.*



### Notice

The key switch must be positioned so that both ends of the pool are visible when operating the Coverstar automatic safety pool cover.



## 3 Getting Started

This section describes the initial steps required to start installing the Coverstar automatic safety pool cover.

### 3.1 What's in the box

For a detailed list of parts, refer to the pick-list supplied from Certikin with the Coverstar automatic safety pool cover.

Confirm you have all the parts you need before starting the installation procedures. If you believe any parts are missing, contact Certikin before starting the installation.

As a guideline, you should have the following parts:

- Hydraulic power pack, with hoses and installation manual
- Hydraulic motor
- Drive-end mechanism with hydraulic motor attached
- Roller
- Non-drive-end mechanism
- Pit lid support brackets — depending on the lid type to be installed
- Pit lid items — depending on the lid type to be installed
- Ropes
- Cover
- Track — depending on the type to be installed
- Feed guides
- Track end-pulleys
- Various fixes — screws, bolts, and so on
- For retro-fit deck-mounted mechanism — end caps included

Make sure you have the required tools for the installation. The Coverstar automatic safety pool cover is manufactured in the United States of America so the dimensions and parts are in imperial sizes (inches and feet).

The following tools are required:

- Powered hammer-drill with masonry bits for drilling concrete and metal.
- Long-handled socket spanners and tools for fixing parts in the cover pit area.

- Powered chop-saw for making accurate square or mitred cuts of the tracking.
- Rubber mallet for tapping in the spacer shim for the encapsulated track.





## 4 Encapsulated track type installation

This section provides step-by-step procedures for installing the Coverstar automatic safety pool cover for encapsulated track types. These procedures apply to the standard concrete encapsulated track and liner-lock track types.

The installation process follows these main stages:

- Section 4.1 "Encapsulated track installation" on page 17
- Section 4.2 "Mechanism installation" on page 17
- Section 4.3 "Cover installation" on page 19

### 4.1 Encapsulated track installation

The installation of the main components of the encapsulated track should be done as part of the pre-installation and site preparation.

Refer to the pre-installation guide for more information.

### 4.2 Mechanism installation



#### Notice

Before installing the mechanism, make sure the pit is clean and has no debris in it. The pit drain should be open and working.

As part of the pre-installation, the conduit for the hydraulic hoses should already be in place. Make sure either the hoses or a draw-cord for the hoses are ready before starting this part of the installation process.

► *For more information, refer to the Pre-installation Guide.*

**To install the mechanism, follow these steps:**

1. Next to the cover pit, assemble the drive mechanism, roller, and end pulleys using the 3/8" x 1 1/4" bolts and washers.
2. Place the mechanism assembly into the cover pit.

**WARNING****Risk of injury from lifting heavy objects!**

The mechanism assembly is heavy. At least two persons should lift and position the mechanism assembly.

**3. Adjust and position the drive mechanism.**

The drive mechanism must align with the track and be centred in the cover pit, from front to back.

Use a length of rope from the return side of the track to the pulley of the drive mechanism to make sure the mechanism is positioned correctly reducing the angle at which the rope travels.

If required, use shims to increase the height of the drive mechanism.

For covers that are 45' (13.7 m) or less, you need to minimise the stress on the drive mechanism.

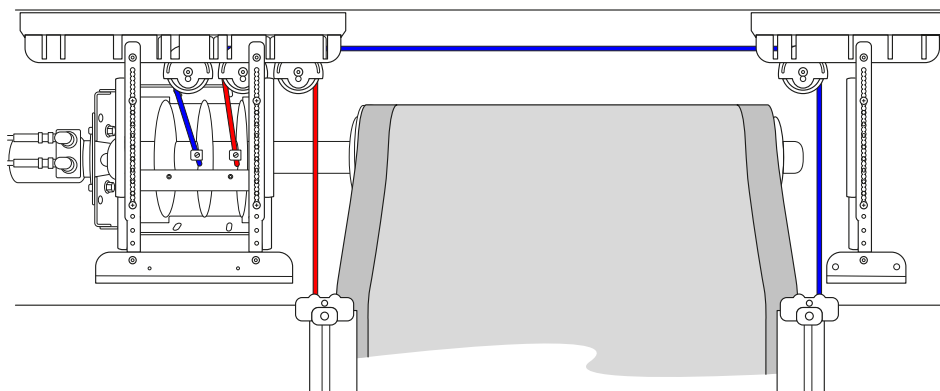


Figure 7 - Mechanism in the cover pit

**4. Adjust and position the non-drive-end pulley bracket.**

Use a length of rope from the return side of the track to the pulley of the non-drive-end pulley bracket to make sure the pulley is positioned correctly. This reduces the angle at which the rope travels.

**5. Secure the drive mechanism and non-drive-end pulley bracket to the cover pit floor using the supplied fixings.****Caution****Risk of damage!**

The mechanism assembly must be secured to a strong base.

If there is any movement of any part of the mechanism, this must be fixed before proceeding with the installation.

6. Loosen the bolts of the adjustable parts of the drive mechanism and non-drive-end pulley bracket.
7. Adjust and secure the adjustable parts to the front and back walls of the cover pit.
8. If not already in place, use the draw-cord to pull through the hydraulic hoses from the power pack located in the plant room.
9. Attach the hoses to the hydraulic motor.
  - ▶ *For more information about the motor installation, refer to the Power Pack Installation Manual.*
10. Connect and test the power pack.

**WARNING****Risk of electrical shock!**

Only an approved electrician can wire and test the power pack.

**Caution****Risk of damage!**

After the hydraulic system has been tested, check for any leaks.

If any leaks are found these must be fixed before proceeding with the installation.

The mechanism has now been installed.

## 4.3 Cover installation

There are two methods for attaching the cover to the leading edge bar.

- **Looped** — a loop at the end of the cover wraps around the leading edge bar.
- **Exposed** — the cover is attached to the leading edge bar leaving the bar exposed.

**To install the cover, follow these steps:**

1. Carefully remove the inner guide and spacer shim from the encapsulated track.
2. Insert the ropes and track-end pulleys on both sides of each inner guide.
3. Assemble the inner guide and spacer shim back into the encapsulated track.

Starting at the cover pit-end of the track, using a rubber mallet, tap in the spacer shim between the encapsulated track and inner guide.

Make sure the spacer shim is flush with the track edge.

4. At the pit-end of the pool, unwrap the cover.
5. Attach the ropes to the track slider on each side of the pool.
6. Attach the track sliders to the lead edge using the white nylon insert.

- Attach the cover to the lead edge.

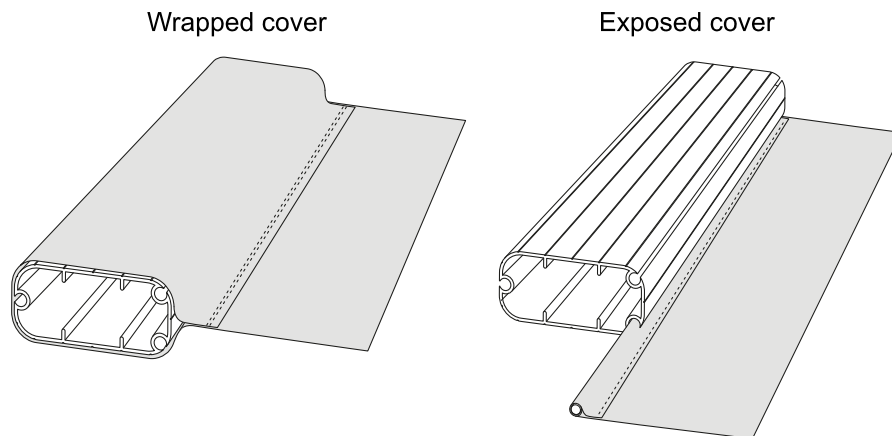


Figure 8 - Exposed or wrapped cover to leading edge.

- Insert the track slider and lead edge assembly into the inner guide.
- Move the track slider at least 6" (150 mm) into the inner guide.
- Fit the feed guides to the pit-end of the tracks and screw in place.
  - For more information, see "Rope path diagram" on page 50
- Pull the ropes tight, and then cut the ropes.
  - Allow at least 6' (1.8 m) extra rope at the reels.
  - Heat the ends of the ropes to prevent fraying.
- Attach the ropes to the reels.
  - Before inserting the rope into the reel holes, make sure to wrap the ends of the rope with PTFE.
- Holding the ropes, close the cover, and evenly feed the rope onto the reels.
  - The leading edge and rope at the non-drive-end assembly may move before the other end of the cover. This difference in movement is expected but it must not be greater than 1" (25 mm).

The cover has now to be attached to the roller.

### 4.3.1 Attaching the cover to the roller

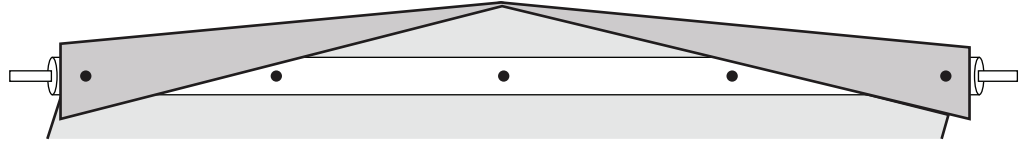
The last part of the cover installation is to attach the cover to the roller. The cover is slightly wider than the pool width to allow it to lay on the pool surface. This extra slack in the cover needs to be allowed for when attaching the cover to the roller.

**To attach the cover to the roller, follow these steps:**

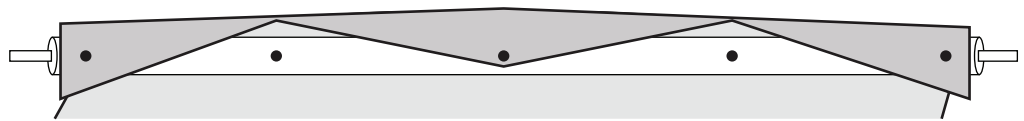
- Mark the approximate location of where the self-tapping screws will be positioned on the roller.



2. Pull the cover evenly onto the roller and allow at least 6" (15 cm) of extra material.
3. At each end of the roller, attach the cover to the roller using the self-tapping screws.

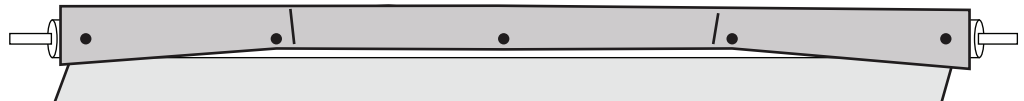


4. To locate the middle of the cover, lift the cover in the middle of the roller to form a "V" shape.
5. Pull the cover about 1" (2.5 cm) past the middle of the roller and attach using the self-tapping screw.



6. To locate the middle of each section of the cover, on each side of the centre of the roller repeat the "V" process .
7. Fit the two remaining self-tapping screws either side of the centre screw.

Allow pleats in the cover to eliminate bunching.



8. Open the cover and check there are no issues.

The cover has now been installed.

### 4.3.2 Testing the cover and ropes

After you have attached the cover and ropes, Certikin recommends that you test the mechanism and to make sure the cover operates correctly.

Make the following checks:

- The cover runs smoothly along its full operating length.
- The ropes can stretch during initial operation. Check for slack ropes and adjust as required.
- The cover does not have any folds and wrinkles.

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## 5 Top track and flush track type installation

This section provides step-by-step procedures for installing the Coverstar automatic safety pool cover for the top and flush track types.

The installation process follows these main stages:

- Section 5.1 "*Top track installation*" on page 23
- Section 5.2 "*Flush track installation*" on page 25
- Section 5.3 "*Deck-mounted mechanism installation*" on page 25
- Section 5.4 "*Pit-mounted mechanism installation*" on page 28

### 5.1 Top track installation

Before proceeding with the track installation, check if the track space is the same as in the order form supplied to your Certikin distributor.



#### Caution

Do not proceed with the installation if the track space varies by more than 2" (50.8 mm). An improper installation may void the warranty.

Contact Certikin if there are pre-installation measurement issues.

**To install the top track, follow these steps:**

1. On the mechanism end of the swimming pool, mark where the inside edge tracks should go:
  - a. Mark where the tracks should end at no more than 12" (304.8 mm) back from the far end of the pool.
  - b. From the marks on the deck, make a pure rectangle.  
Make lines perpendicular to the track starting points.
  - c. Make a small mark on each track line.  
Make sure both lines are the same length from the mechanism end to the far end of the track positions.  
Measure the diagonals from corner to corner. They must also be equal and include allowance for the pulley, end caps, and guide feeds.  
► *For more information, see "Top track" on page 12*

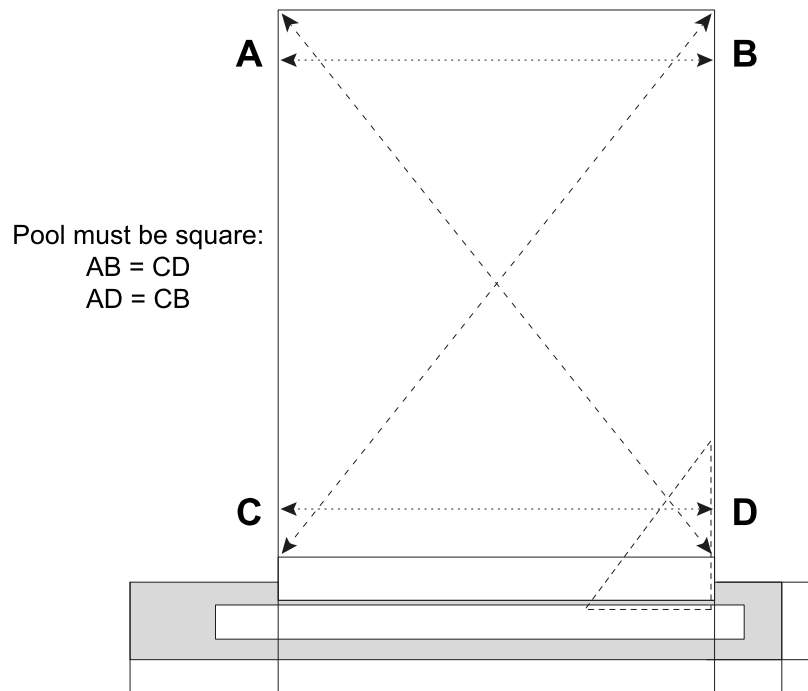


Figure 9 - Pool is square and parallel to mech and pit

2. Lay the tracks along the markings.  
 The grooved side of the track should face the pool.
3. If the tracks are longer than the marked lines, cut the tracks to the correct lengths.
4. To prevent the cover slider from catching, file any sharp edges on the track.
5. Slip the splices into the centre slot of the tracks at each joint so that the splice extends equally into each track.
6. Fix the tracks to the pool surround:
  - a. Using the pre-drilled holes in the tracks, drill down through the pool deck to at least 3" (76 mm) to establish proper anchoring.  
 Stand on the track to hold it in place.
  - b. Using the 1 3/4" x 8" screws and plugs supplied by Certikin, fix the tracks down to the pool surround.



**Notice**

Do not tighten the screws fully to allow running the rope through the track channels.



## 5.2 Flush track installation

When preparing the pool surround for a flush track system, check the following parameters:

- The recess in the pool surround, that the channel and the track are seated in, should be ready to accept the track size.
- The base of the recess should be level.
- The track and end pulleys should be at the same level as the deck surround when fitted.
  - ▶ *For more information, see "Flush track" on page 12*



### Caution

Do not proceed with the installation if the track space varies by more than 1" (25.4 mm).

Contact Certikin if there are measurement issues.

**To install the flush track, follow these steps:**

1. Insert channels into the deck recess and lay the tracks in the channels.
2. If the tracks are longer than the channels, cut the tracks to the correct lengths.
3. To prevent the cover slider from catching, file any sharp edges on the track.
4. Slip the splices into the centre slot of the tracks at each joint so that the splice extends equally into each track.
5. Fix the tracks to the pool surround:
  - a. Using the pre-drilled holes in the tracks, drill down through the pool deck to at least 3" (76 mm) to establish proper anchoring.

Stand on the track to hold it in place.
  - b. Using the 1 3/4" x 8" screws and plugs supplied by Certikin, fix the tracks down to the pool surround.



### Notice

Do not tighten the screws fully to allow running the rope through the track channels.

## 5.3 Deck-mounted mechanism installation

As part of the pre-installation the conduit for the hydraulic hoses should already be in place. Either the hoses or a draw-cord for the hoses should also be ready before start this part of the installation process.

▶ *For more information, refer to the Pre-installation Guide.*

Before assembling and installing the mechanism, place the drive end and the non-drive end of the mechanism near their installation location by the pool.

**Caution**

The grey end-covers must fit correctly. Make sure both ends of the mechanism feet are not positioned too wide.

**To install the deck-mounted mechanism, follow these steps:**

1. Place the non-drive and drive ends upside down.
2. Attach the cones of the non-drive and drive ends to the roller.  
Use the 3/8" x 1/4" bolts and the appropriate lock washers.
3. Tighten the bolts and lock washers using the 9/16" spanner/socket.  
After attaching the cones, place the assembled mechanism closer to the position it must be anchored to.
4. Use a 7/16" spanner/socket to loosen the nyloc nuts on the adjustable brackets of both ends of the mechanism.
5. Attach and tighten the mounting foot to both ends of the mechanism.  
Use the 1/4" x 20" bolts.  
Place the mechanism in the upright position.
6. Extend the pulley brackets to match the elevation set by the mounting foot.  
The height is adjustable but is limited by the length of the cover.

**Caution****Risk of damage!**

Make sure the pulley brackets are spread wide enough to provide good stability.

7. Check if the roller is level with the pool deck.

**Tip**

The distance from the deck to the roller should be the same on both ends of the roller.

8. If the roller is not parallel to the deck, adjust the non-drive end as required to level the roller.  
The roller must be parallel to the deck to ensure proper operation of the cover.
9. Use a 7/16" spanner/socket to tighten the nyloc nuts.
10. To align the mechanism on the non-drive and the drive end, ensure the rope feeds directly into the pulley.

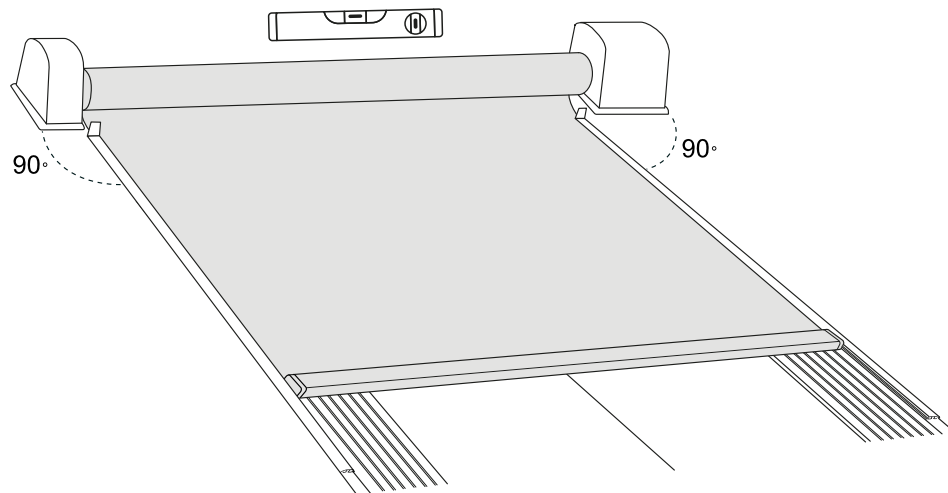


Figure 10 - Roller level and square to the pool



#### Tip

You can use a piece of rope to align the mechanism. You can spread the pulley brackets to two inches wider than the mechanism body. This allows easier access to the pulleys for threading the ropes.

Extend the rope from the outside channel of the track to the pulley to make sure the rope feeds directly into the pulley.

By the non-drive end, make sure the rope comes straight back to the pulley from the rope channel of the track.

If necessary, move the mechanism to balance the rope angle on both sides.



#### Notice

The mechanism must be aligned. Misalignment by more than  $\frac{1}{2}$ " (15 mm) is not allowed.

11. Before anchoring the mechanism to the deck, measure the distance from the cover track to the pulley on both ends of the mechanism.

The mechanism must be square to the cover track.

12. Drill through the mounting holes to the deck of the pool to prepare for anchoring the mechanism.

Use a hammer drill with a quarter inch bit.

13. Secure the non-drive and the drive ends to the deck.

Use the  $1\frac{1}{2}$ " hex head screws and anchors.

**Caution****Risk of damage!**

Make sure the mechanism is securely anchored to the deck. Do not proceed with the installation if there is any adverse movement.

14. Use the draw cord to pull the hydraulic hoses and fix them to the fittings on the mechanism.

At this point, an approved electrician should wire the hydraulic drive into the mains using the wiring diagram that is supplied by Certikin.

## 5.4 Pit-mounted mechanism installation

The mechanism installation for top and flush type tracks uses the same procedure that is used for the mechanism installation when installing encapsulated track types.

► *For more information, see "Mechanism installation" on page 17*

## 5.5 Cover for top and flush installation

There are two methods for attaching the cover to the leading edge bar.

- **Looped** — a loop in the end of the cover wraps around the leading edge bar
- **Exposed** — the cover is attached to the leading edge bar leaving the bar exposed.

**To install the cover, follow these steps:**

1. Insert the ropes and track-end pulleys on both sides of each track.
2. At the pit-end of the pool, unwrap the cover.
3. Attach the ropes to the track slider on each side of the pool.
4. Attach the track sliders to the lead edge using the white nylon insert.
5. Attach the cover to the lead edge.
6. Insert the track slider and lead edge assembly into the track.

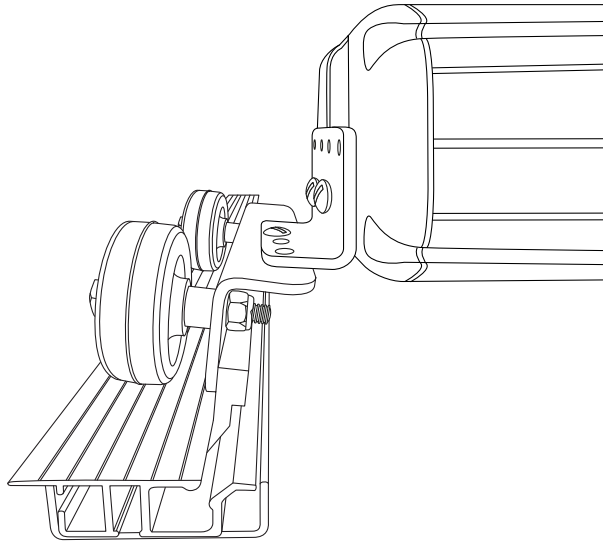


Figure 11 - Recessed track, slider, and leading edge bar

7. Move the track slider at least 6" (150 mm) into the track.
8. Fit the feed guides to the pit-end of the tracks and screw in place.
  - ▶ For more information, see "Rope path diagram" on page 50
9. Pull the ropes tight, and then cut the ropes.
  - Allow at least 6' (1.8 m) extra rope at the reels.
  - Heat the ends of the ropes to prevent fraying.
10. Attach the ropes to the reels.
  - Use PTFE wrapped around ends of rope when inserting into reel holes.
11. Holding the ropes, close the cover, and evenly feed the rope onto the reels.
  - The leading edge and rope at the non-drive-end assembly may move before the other end of the cover. This difference in movement is expected but it must not be greater than 1" (25 mm).

The cover can now be attached to the roller and tested.

- ▶ For more information, see "Attaching the cover to the roller" on page 20
- ▶ For more information, see "Testing the cover and ropes" on page 21

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## 6 Pit lid installation

This section provides step-by-step procedures for installing pit brackets to fit aluminium lids, heavy duty lids, or decking.

The installation process follows these main types:

- Section 6.1 "*Pit bracket installation for trays or decking*" on page 31
- Section 6.2 "*Aluminium lid installation*" on page 33

### 6.1 Pit bracket installation for trays or decking

To support various lid options, Certikin provides the following types of pit brackets:

- **CTA2061RL brackets**

For 14" trays, two board wide decking or the (non-walk on) aluminium lid.

Depending on the pit topping to be used, the centres of the brackets can be 600mm (for trays) or 400mm (for decking).

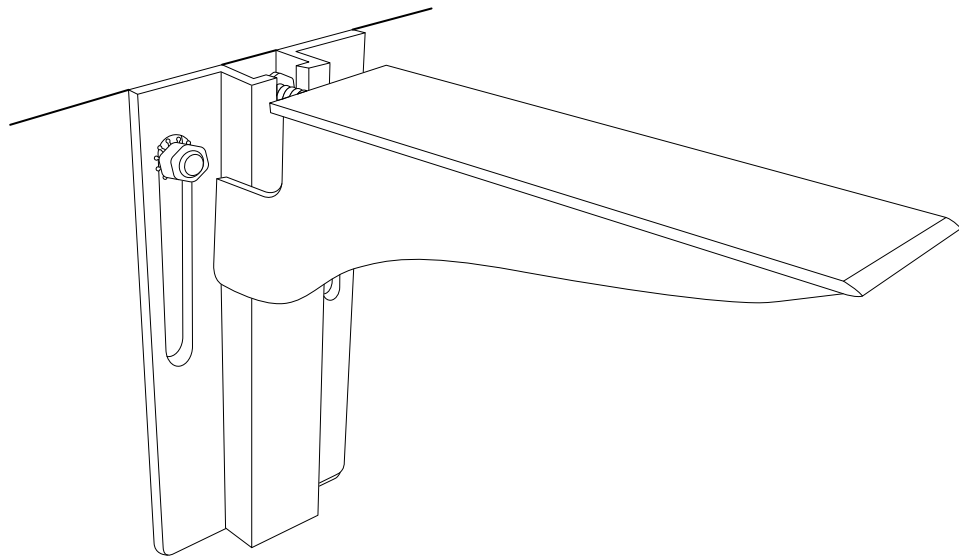


Figure 12 - Standard bracket

- **CTA1932 brackets plus CTA2376 or CTA2365 extensions**

For 24" trays and three board wide decking.

Depending on the pit topping to be used, the width of the centres of the brackets can be 600mm (for trays) or 400mm (for decking).

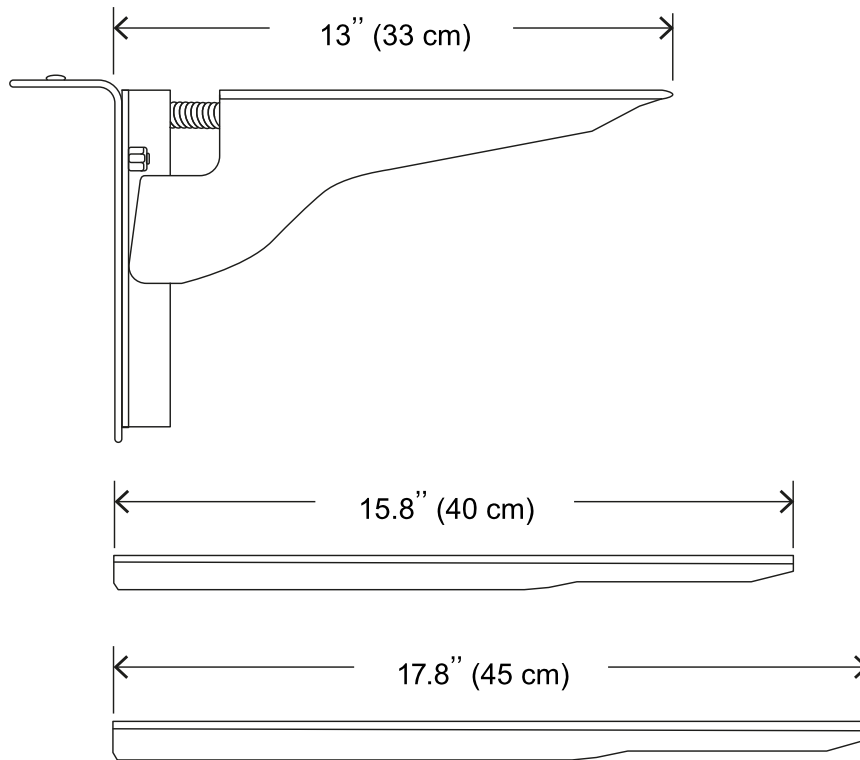


Figure 13 - Lid and extensions

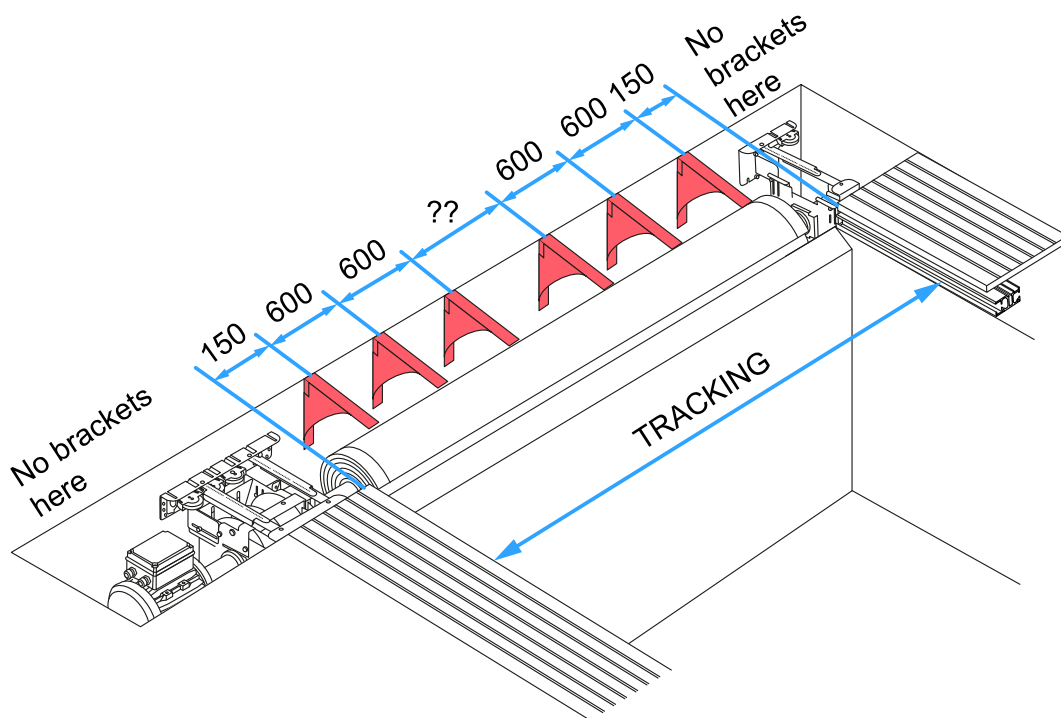


Figure 14 - Example of bracket pitches



**Notice**

After the installation of the lid, check if the lid has sharp edges and, if required, file the edges.

When the lid is in the closed position, make sure that each bracket is in contact with the lid. Adjust the height of the brackets if necessary.

## 6.2 Aluminium lid installation

For installation of the aluminum lid type, refer to the manuals specific to the type of lid installation:

- **Top guide flat lid assembly & install instructions**
- **Under guide flat lid assembly & install instructions**

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## 7 Customer handover

The following sections cover the post-installation instructions and information for the person responsible for the maintenance and running of the pool and the Coverstar cover.

### 7.1 Final adjustments

After installation and before the final customer handover, make the following final adjustments to the Coverstar automatic safety pool cover:

- Check the brake mechanism on the rope reels. The rope reels should have enough friction to prevent them from free-wheeling when running under stress.



#### Notice

The tension on the brackets is pre-set at the factory and usually does not need adjusting.

- Open and close the cover at least six times to ensure smooth operation and to take up the slack from the ropes that may stretch.
- Make sure the installation area is clean and tidy after you complete your work.

### 7.2 Submersible pump operation

Every Coverstar system is supplied with a submersible pump. This pump is used to detect and remove excess water from the cover. You may need to reposition the pump to ensure all excess water is removed from the cover.



#### Caution

Any accumulation of water on the surface of the cover must be removed immediately. Do not operate the cover if the water has accumulated on top.

Remove the water only with the submersible pump that is supplied with the Coverstar system.

For the pump to work effectively, follow these guidelines:

- The pump is placed correctly — upright on its base, in the middle of the cover.
- The pump is plugged into an outdoor waterproof socket in accordance with the IEE regulation, and protected by a residual current device (RCD).
- The pump is used and maintained according to the pump instructions.

- *For more information about the pump installation and use, refer to the documentation supplied with the pump.*

### 7.3 Handover instructions for installer

After completion of the installation, make sure the customer is made aware of the following details:

Instruction	Check
Instruct the customer on how to operate the cover with the key switch.	
Instruct the customer on how to stop the cover in the proper position.	
Instruct the customer on how to use the submersible cover pump and that the pump should always be on the cover in the operating mode.	
Review the owner's instructions with the customer.	
Instruct the customer to always completely cover or uncover the pool and never allow anyone to swim under the cover.	
Instruct the customer to maintain the correct water level and to not operate the cover if the water level is incorrect.	
Instruct the customer to keep the tracks and end pulleys free of dirt and debris, and regularly wash these elements.	
Instruct the customer to clean all rotating surfaces on the mechanism by spraying with a hose nozzle every three months.	
Remind the customer that the Coverstar cover should be serviced annually by a qualified technician.	
Remind the customer that hydraulic hoses and fixings may wear away over time, and to replace them as needed to ensure smooth operation of the power pack.	
Instruct the customer to wash the cover with a mild hand-dishwashing liquid every three to six months to remove the accumulation of chlorine and dirt.	
Instruct the customer on the possibility of using the Coverstar cover in winter, with proper precautions.	



## 8 Troubleshooting

This section provides troubleshooting information for the Coverstar automatic safety pool cover.

### 8.1 Track issues

You can prevent the occurrence of track issues by making the following checks:

- All tracks ends are filed.



#### Caution

This is an important part of the installation. Any rough edges can damage the cover or ropes and prevent the cover from operating.

- The track space measurement matches the ordered cover system.
- The cover smoothly moves through the track joints.
- All track screws are tight and flush.
- Pulleys are flush against the end of the track.
- The feed guides are snug against the track.
- The feed guides are bolted in and tight.
- Alignment pins and insert splices are used when joining the tracks, even in encapsulation.

### 8.2 Mechanism issues

You can prevent the occurrence of mechanism issues by making the following check:

- The mechanism is installed level in the cover pit.
- The roller is level.
- The roller is centred between the tracks.
- The roller is at the correct height.

**Tip**

Install the cover in the pit coming off at as small angle as possible. This reduces the stress on the mechanism and reduces the wear on the cover guides at the end of the track.

- The roller is either centred in the pit or positioned slightly more towards the front of the pit. This way, the cover is unlikely to rub on the lid brackets.
- The mechanism system is mounted at a right-angle to the track.
- The ropes come back straight out of the track.  
An excessive angle causes wear on the cover guides at the end of the track.
- The ropes do not rub on any brackets or the lid.
- The ropes are run correctly.
- The cover pit has adequate drainage.

## 8.3 Cover issues

If you notice that the cover does not run square from the start, make the following checks:

- The track length for the motor and non-motor side are the same.
- The track width at the mechanism end, centre, and shallow end of the pool is the same.
- The distance from the end of the track to the centre of the roller for the motor and non-motor ends is the same.
- The distance from the bottom of the track to the top pulley on both sides is correct.
- The distance from the inside of the track to the edge of the pit is correct.

If the cover does not go out and come back square, after rope adjustment, make the following checks:

- Does the cover start out evenly?
- Does each rope have equal tension as the cover goes out?
- Does the cover have enough clearance on all sides?

**Tip**

Check the cover and cover edges for rubbing and wear signs.

- Are the sliders binding?
- Is the track clear of sand, mud, and other obstacles?
- Are all pulleys operating properly?
- Is the track bent?
- Is the cover rolling up on the take-up roller?


- Is the cover folding under as the cover rolls up?
- When pulling the cover by hand, is one side harder to pull than the other?
- Is the slider tilted at an angle and causing binding?
- Is the cover attached to the roller square?
- Do the lead edge inserts move in and out freely the complete length of the pool?  
Is the leading edge too long and making the inserts bind?

**Notice**

For minor cover damage up to 1" (2.54 cm), use the supplied patch kit for repairs. In case of bigger damage to the cover, contact Certikin for more information.

**Table 1 - Miscellaneous cover issues**

<b>Problem</b>	<b>Possible cause</b>	<b>Solution</b>
The cover does not move forward or reverse.	<ol style="list-style-type: none"> <li>1. Water is on the cover.</li> <li>2. The cover adheres to the deck.</li> </ol>	<ol style="list-style-type: none"> <li>1. Pump water from the cover.</li> <li>2. Lift the cover and billow the air under the cover.</li> </ol>
Water leaks onto the cover.	<ol style="list-style-type: none"> <li>1. The cover is caught on a sharp object.</li> <li>2. Abrasion pinhole.</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove the sharp object and use the patch kit for repairs.</li> <li>2. Use the patch kit for repairs.</li> </ol>
The cover retracts out of square.	<ol style="list-style-type: none"> <li>1. The rope lengths are not the same.</li> <li>2. Uneven drag on the cover as the cover opens.</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-pin the rope on the rope reel to make sure the rope excess around the reels is the same of both sides.</li> <li>2. Tighten the rope reel brakes slightly, without over-tightening.</li> </ol>

Problem	Possible cause	Solution
	 <b>Notice</b> Some unevenness might be unavoidable due to the pool configuration.	
The cover is uneven at the end of the pool.	The rope lengths are not the same.	Re-pin the rope on the rope reel to make sure the rope excess around the reels is the same of both sides.
The cover runs under stress.	<ol style="list-style-type: none"> <li>Excessive friction during operation.</li> <li>The cover adheres to the deck.</li> <li>Debris in the cover pit.</li> <li>The cover is too tight.</li> <li>The brake is too tight.</li> </ol>	<ol style="list-style-type: none"> <li>Clean the guides and all turning parts with a hose.</li> <li>Lift the cover and billow the air under the cover.</li> <li>Clean the cover pit of debris.</li> <li>Raise the water level to mid-tile or replace the cover.</li> <li>Loosen the brake.</li> </ol>

## 8.4 Cover lid and miscellaneous issues

You can prevent the occurrence of cover and other issues by making the following checks:

- All sharp edges have been removed.
- All areas where the lid is not flat on the deck have been screwed down to eliminate any potential trip hazards.
- There is enough clearance between the brackets and the cover to avoid rubbing.

The following checks help you prevent other issues:

- The key switch operator has full view of pool when operating the cover.
- The cover pump is tested while being submerged in water.



### Tip

Ideally this test should be done while the pool owner is available.





- The pool area is clear of all debris.





## 9 Regulatory

The Coverstar automatic safety pool cover complies with the following regulations:

Standard	Symbol
Certificate of Conformity with the safety requirements of <b>NF P 90-308</b> (December 2013) Protective elements for in-ground, barrier-free, private or collective use swimming pools – Safety covers and securing devices.	
The Conformité Européene (CE) mark.	
UK Conformity Assessed.	
Waste Electrical and Electronic Equipment (WEEE).	

If you require a copy of the latest Declaration of Conformity for the Coverstar automatic safety pool cover, contact Certikin International Limited.

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## A Appendix - Drawings and information

The following provide additional information for the installation of the Coverstar automatic safety pool cover.

A.1 UK Declaration of incorporation .....	44
A.2 UK Declaration of conformity .....	45
A.3 Electrical wiring for hydraulic power pack and key switch .....	46
A.4 Encapsulated track pit dimensions .....	47
A.5 Pit or deck-mount mechanism with top or flush track .....	48
A.6 Slider types .....	49
A.7 Rope path diagram .....	50
A.8 Power pack .....	51

## A.1 UK Declaration of incorporation

### Manufacturer

Business name: Certikin International Limited  
Full address: Unit 4, Tungsten Park, Colletts Wy  
Postal code: OX29 0AX  
Place: Witney  
County: England

### Description and identification of the partly completed machinery

Generic denomination: Coverstar automatic swimming pool cover  
Function: Automatic swimming pool covering  
Model: \*All  
Type: \*All

### In compliance

The manufacturer declares that the above mentioned partly completed machinery fulfils all relevant requirements out of the Supply of Machinery (Safety) Regulations 2008 (S.I. 2008:1597), where all relevant Technical Files comply to annex VII, section B.

The manufacturer will give written information to the national authorities if there are any specific questions regarding the safety of the partly completed machinery.

Place: Witney, UK  
Identity: Neil Stephenson  
Position: Managing Director  
Date: 31.12.22

Signature:



## A.2 UK Declaration of conformity

Installers company

name: \_\_\_\_\_

Full address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Country: \_\_\_\_\_

Hereby we declare that the product...

### **Coverstar® Automatic swimming pool cover**

Model: \_\_\_\_\_

CS#: \_\_\_\_\_

HAVING BEEN CORRECTLY INSTALLED AND TESTED FOR OPERATION IN LINE WITH THE  
MANUFACTURERS INSTRUCTION

Complies with the following provisions applying to it:

- Supply of Machinery (Safety) Regulation 2008 S.I. 2008:1597
- The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 S.I. 2012:3032
- Directive 2012/19/EC (WEEE)

Further Information about the conformity to the Supply of Machinery (Safety) Regulation is given in the annex Declaration of Incorporation.

According to the standards:

- BS EN ISO 12100:2010
- EN-ISO 4413:2010

Additional information:

This product is compliant with the norm NFP 90-308 (Dec 2013) at point of issue NFP 90-308 (Dec 2013) Is the only level of compliance in place for swimming pool safety covers.

Installation address: \_\_\_\_\_  
\_\_\_\_\_

Signature of installer: \_\_\_\_\_

Date: \_\_\_\_\_

### A.3 Electrical wiring for hydraulic power pack and key switch

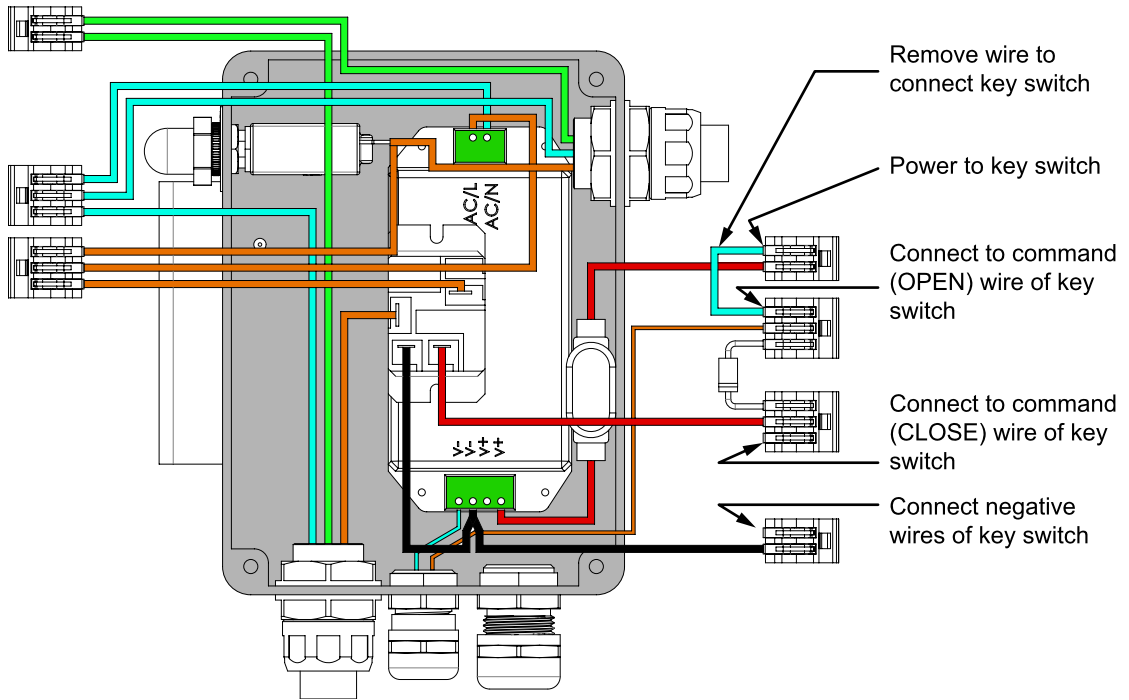


Figure 15 - Wiring for the power pack control box

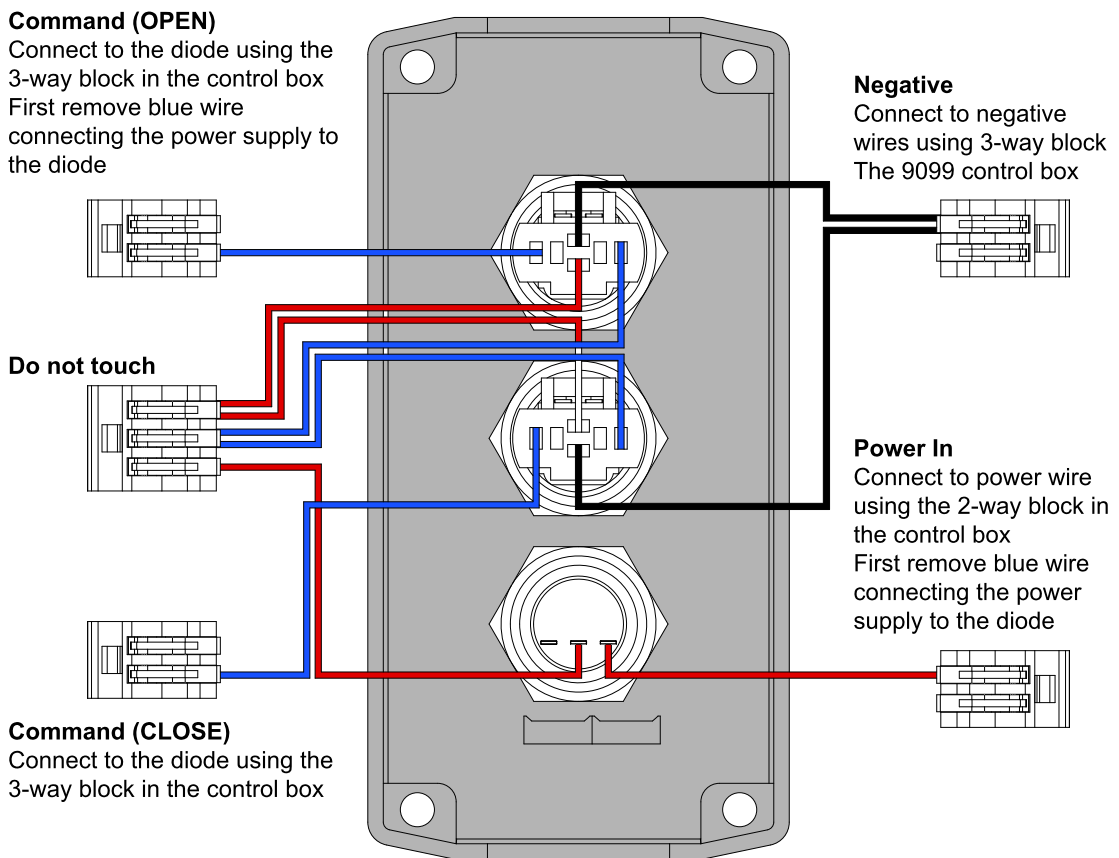
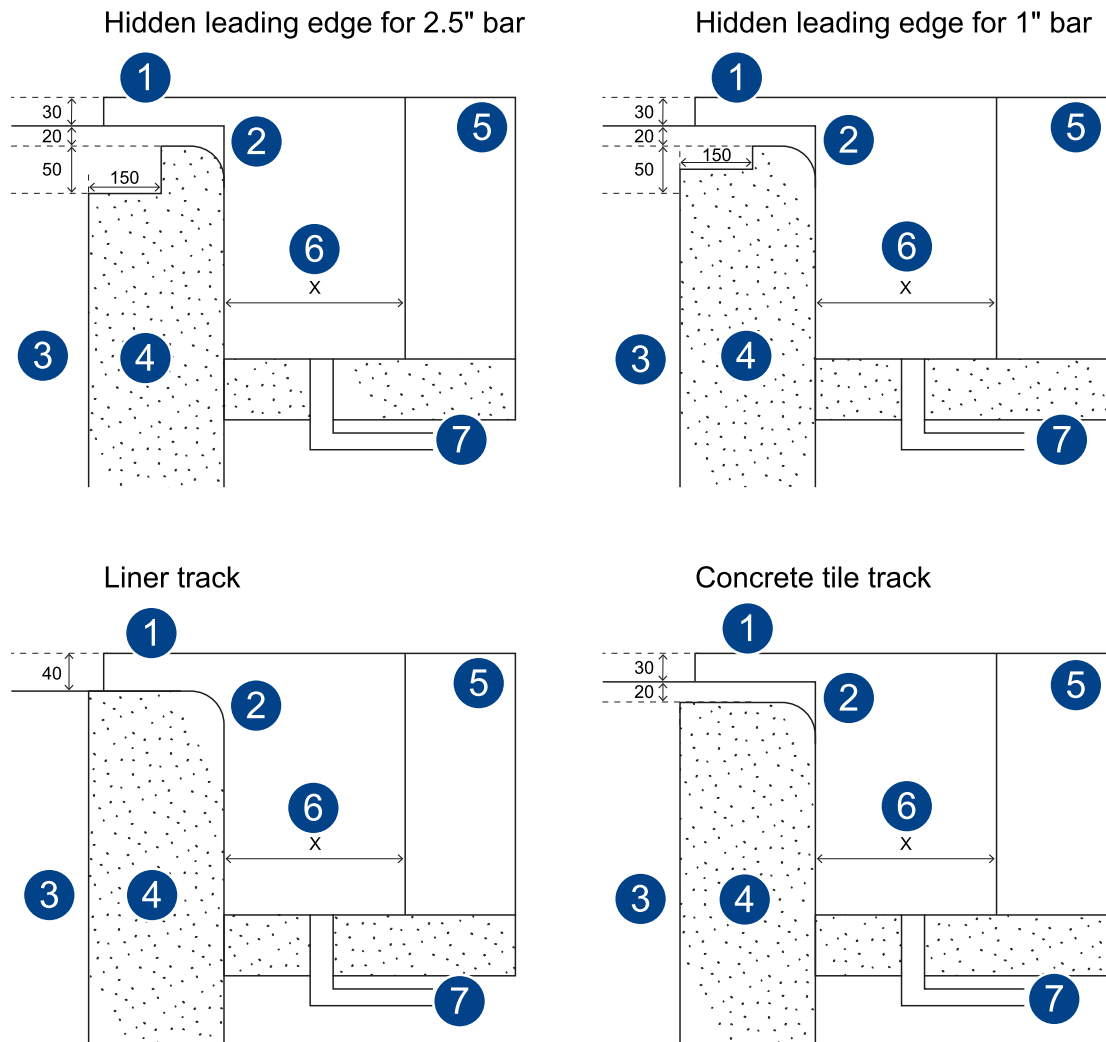


Figure 16 - Wiring for the key switch

## A.4 Encapsulated track pit dimensions



- 1 The pit wall must be flat and level, 30 mm or 40 mm above the pool wall.
- 2 The top of the dividing wall must be flat and level, 20 mm below the pool wall. For hidden lead edge this dimension should be 30 mm.
- 3 Pool side.
- 4 Dividing wall.
- 5 Pit wall.
- 6 The pit dimensions are relative to the pool length:
  - Covers for pools up to 40 feet require an internal pit size of 14" x 14" (355 mm x 355 mm)
  - Covers for pools up to 50 feet require an internal pit size of 15" x 15" (380 mm x 380 mm)
  - Covers for pools up to 60 feet require an internal pit size of 16" x 16" (400 mm x 400 mm)
- 7 Drain.

Figure 17 - Encapsulated track pit dimensions

### A.5 Pit or deck-mount mechanism with top or flush track

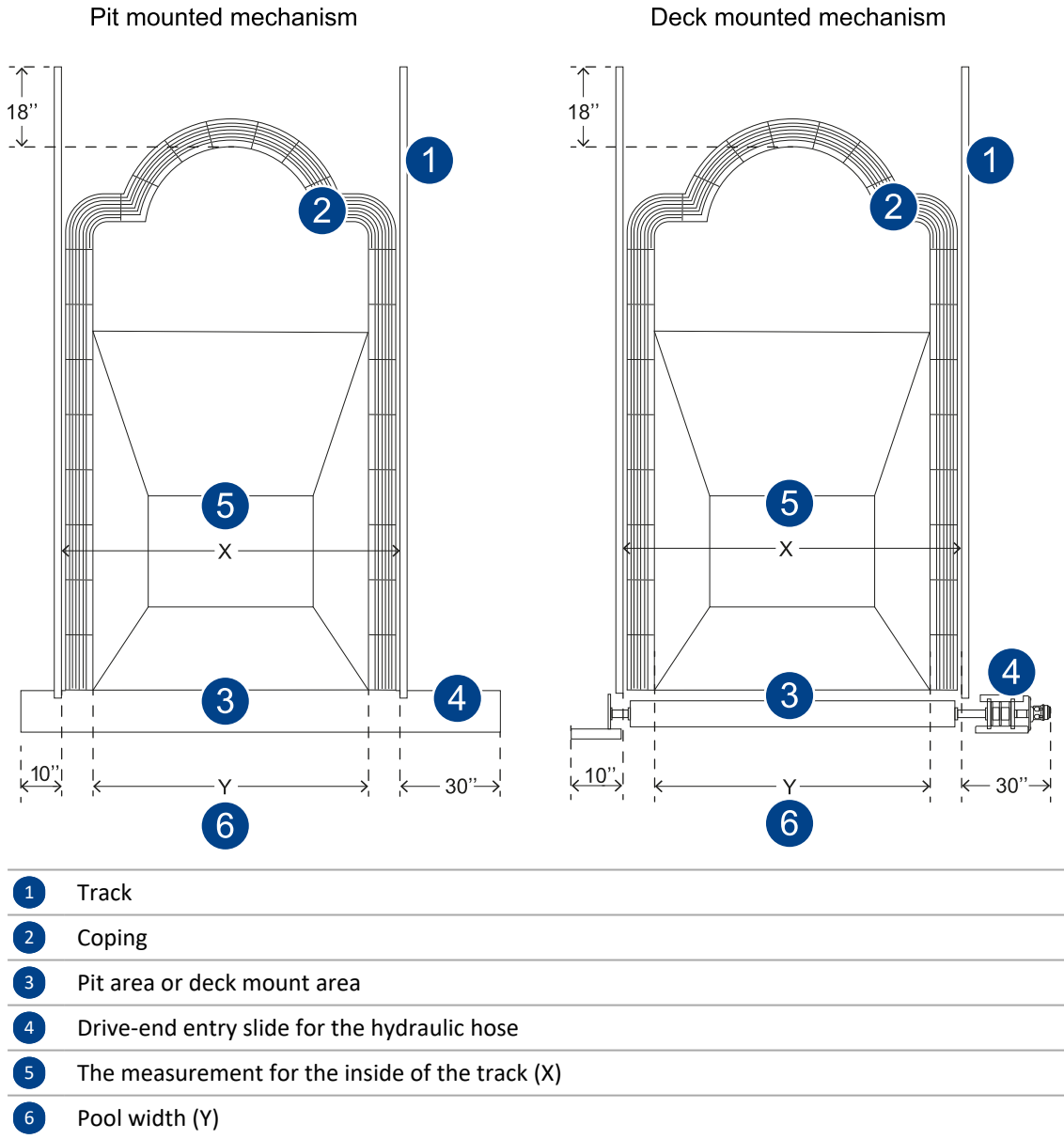
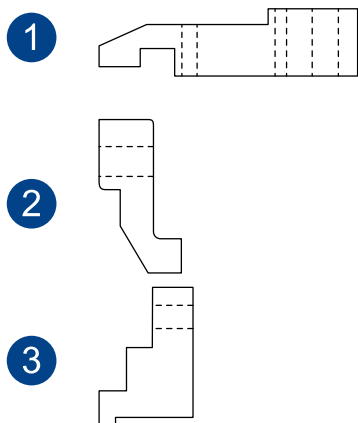


Figure 18 - Top track with pool extension - pit-mounted



## A.6 Slider types



- 
- 1 Encapsulated slider supplied with the cover
  - 2 Horizontal flush slider part of the wheel assembly
  - 3 Top slider part of the wheel assembly
- 

Figure 19 - Slider types

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### A.7 Rope path diagram

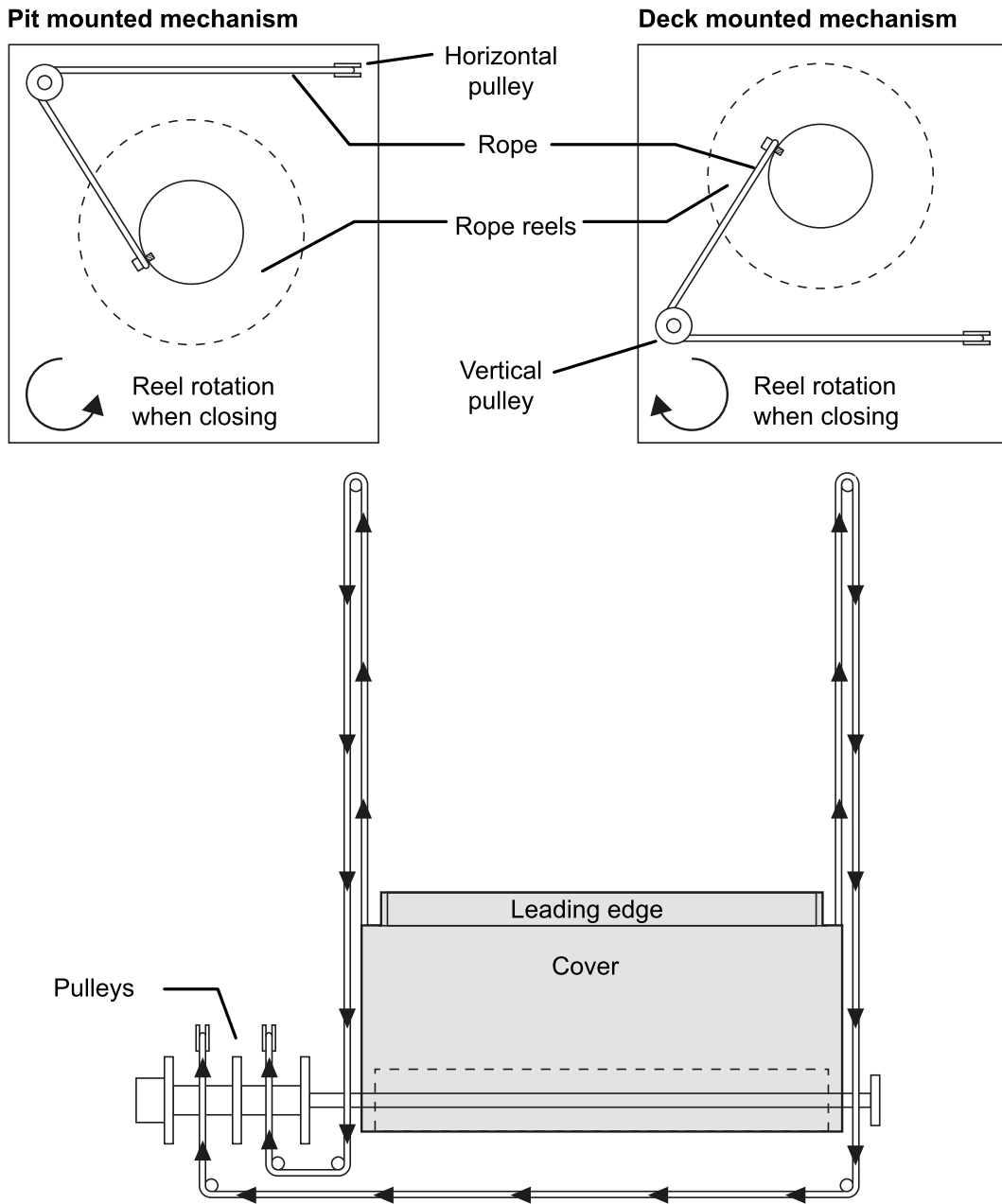
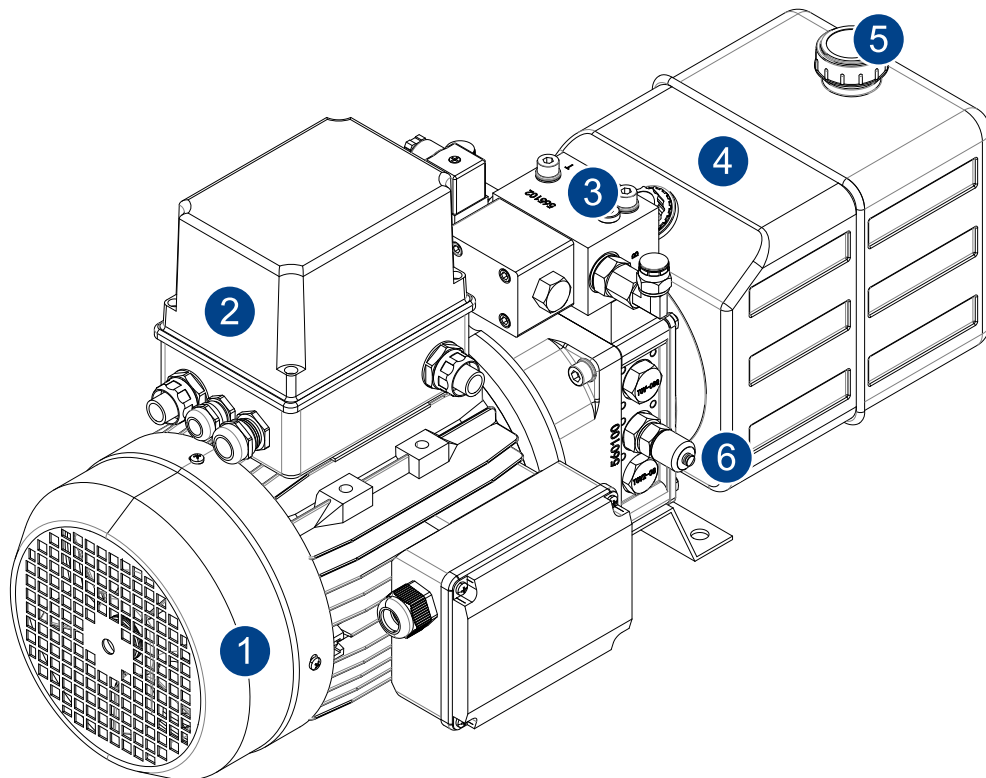


Figure 20 - Rope path diagram

## A.8 Power pack



- |   |                                 |
|---|---------------------------------|
| 1 | Electrical motor                |
| 2 | Control box                     |
| 3 | Hydraulic connections for hoses |
| 4 | Test pressure port              |
| 5 | Breather cap                    |
| 6 | Hydraulic fluid tank            |

Figure 21 - Hydraulic power pack pump

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