

**INSTALLATION  
PROCEDURES**

# CONTENTS

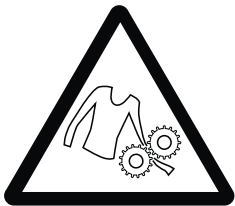
<b>Health And Safety Hazards</b>	<b>3</b>	
<b>Unpacking the Stairlift Carriage</b>	<b>4</b>	
<b>Pre-Installation Procedure</b>	<b>5</b>	
<b>Box Contents</b>	<b>6</b>	
<b>Installation Tools</b>	<b>9</b>	
<b>1.1</b>	Required	9
	Optional	10
<b>Installation</b>	<b>11</b>	
<b>1.2</b>	<b>Installation Procedure</b>	<b>11</b>
	1.2.1 Preparation on Site	11
	1.2.2 Joining the Rail	12
	1.2.3 Installing the Rail	13
	1.2.4 Installing the Stairlift Carriage	15
	1.2.5 Setting Seat Angle	17
	1.2.6 Setting Footrest Angle	19
	1.2.7 Installing the Seat	20
	1.2.8 Setting Top Stopping Point	23
	1.2.9 Fixing Down the Rail	24
	1.2.10 Connecting the Transformer	24
<b>1.3</b>	<b>Safety Checks</b>	<b>26</b>
	1.3.1 Check Controls	26
	1.3.2 Check Remote Controls	26
	1.3.3 Check Safety Sensors	27
	1.3.4 Check Stopping Limits	28
	1.3.5 Check Seat Swivel	28
	1.3.6 Check Battery Isolation Switch	29
	1.3.7 Check Key Switch	29
	1.3.8 Hand Winding	29
	1.3.9 Labelling	29
	1.3.10 Check Correct Fixing of Carriage to Rail	29
<b>1.4</b>	<b>Demonstrate Stairlift to User</b>	<b>30</b>
<b>1.5</b>	<b>Maintenance</b>	<b>30</b>
<b>1.6</b>	<b>Avoiding Unsafe Installations</b>	<b>30</b>

# **IMPORTANT!**

## **READ THESE PROCEDURES THOROUGHLY PRIOR TO STAIRLIFT INSTALLATION**

### **Health And Safety Hazards**

The following health and safety hazards should be considered when installing the stairlift:



**The risk of loose clothing or body parts getting trapped**



**Injury resulting from drilling, inappropriate use of tools etc**



**Direct or indirect electrical contact**



**Falling down the stairs**



**Falling tools**

**Correct manual handling procedure.**



**Use of necessary protection (safety glasses etc)**



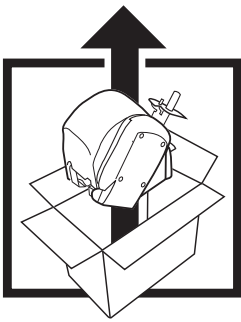
**Never use worn tools**



**Tripping hazards on the stairway**

**Follow the current regulations regarding safe working practices**

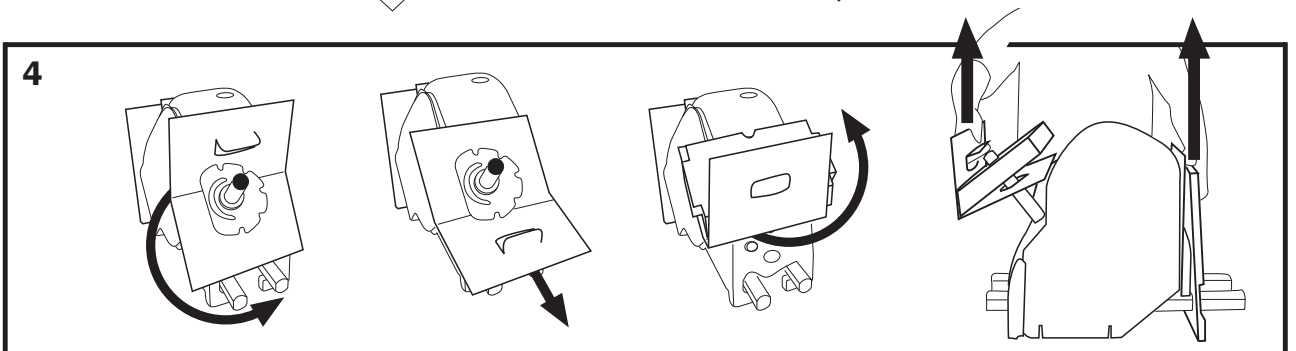
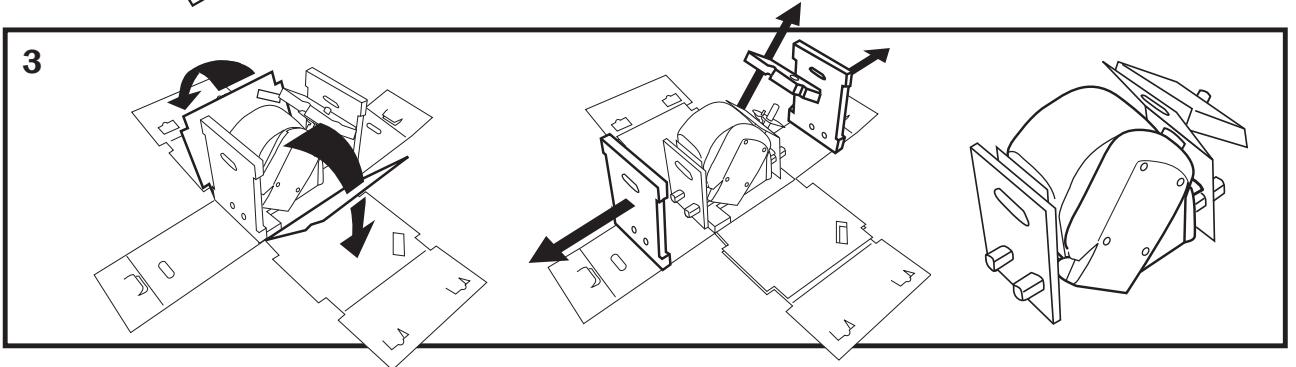
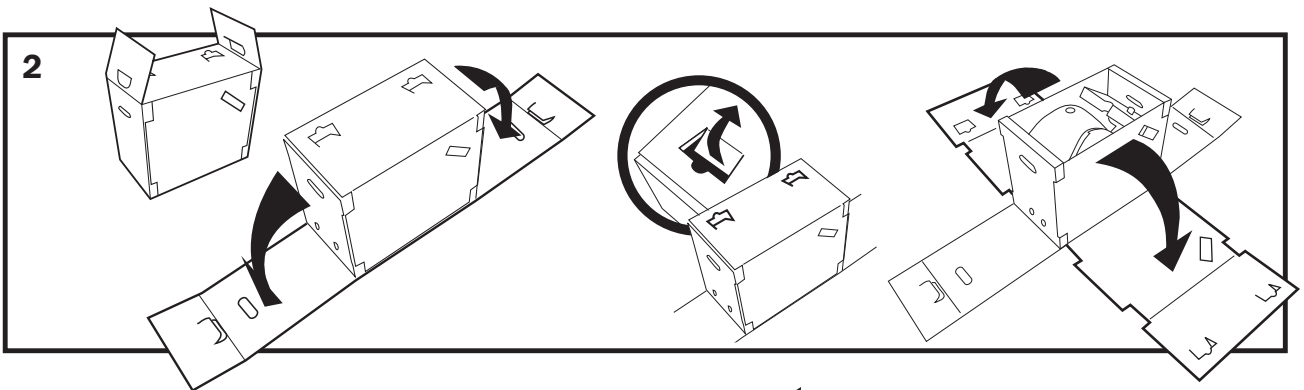
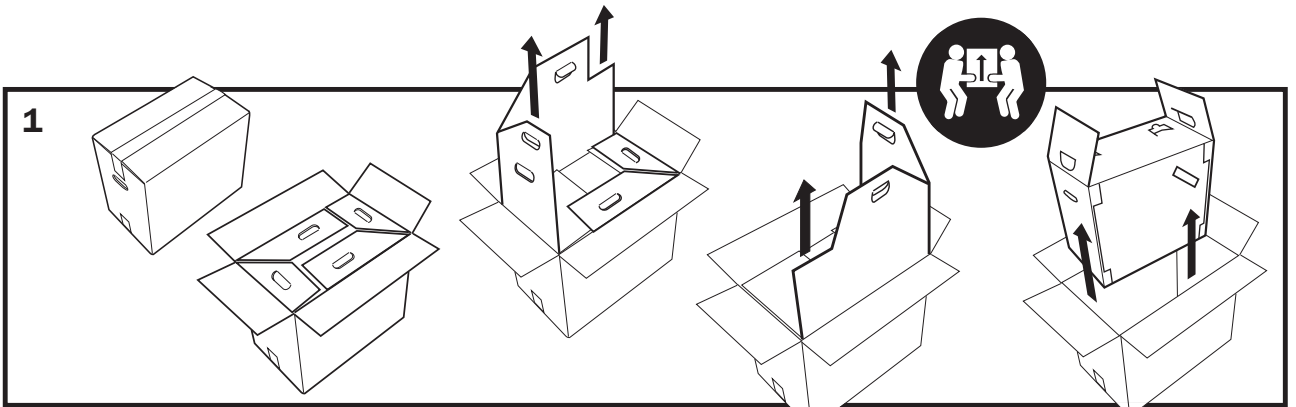
# Unpacking the Stairlift Carriage



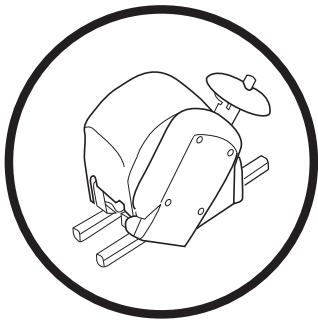
**WARNING!** Take care when handling the carriage assembly, as this is a heavy component.

Before unpacking carriage it is recommended if possible to unpack box at Top of Stairway using Brooks **PACKING/UNPACKING INSTRUCTIONS** provided.

**PLEASE READ PACKAGE INSTRUCTIONS BEFORE REMOVING THE CARRIAGE FROM BOX**




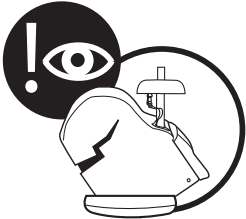
# Pre-Installation Procedure



**When all the packaging has been removed, leaving the carriage on the shipping rails, carry out the following checks.**

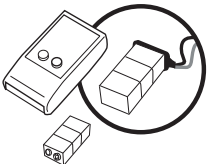
 **Ensure that you have the Installation Manual to hand.**

**1.** Visually inspect the covers and footplate (ie: scratches, cracks, scuffs). Make a note of any issues.

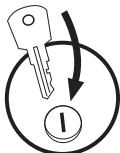



**2.** Open the bag that contains the remotes, batteries and keys.

**3.** Install a battery into a remote.




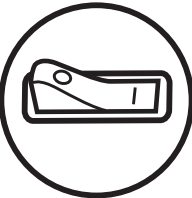
**4.** Insert the key into the key switch.




**5.** Plug the red lead in / switch on the isolation switch.


The lift should continually **BEEP** indicating lift powered up but not receiving a charge.

Diagnostic display will show .

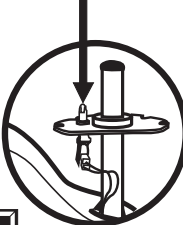



**6.** Turn the key clockwise.




The diagnostics display will show .

**7.** Press the seat / roller switch down and hold.




Diagnostic display will show .


**8.** With the roller switch held down, press the red button on the remote control.



**9.** The lift will **CLICK** (brake release) then emit a low hum (indicating the lift is running).

The display will show .

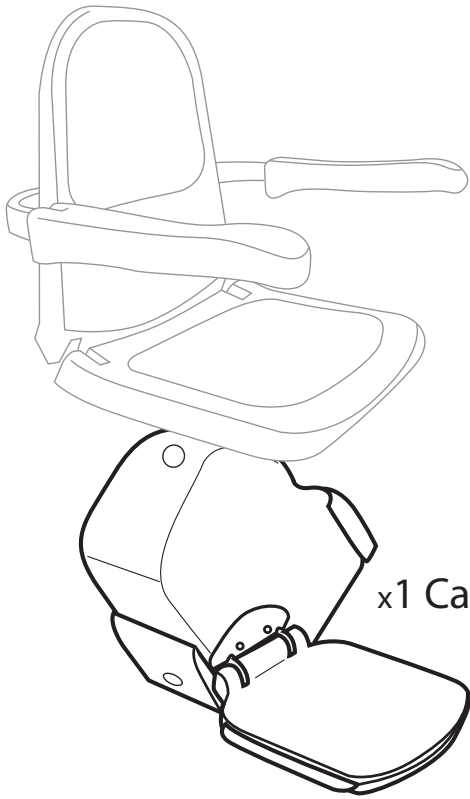
**10.** Repeat the process with the green button pressed down.



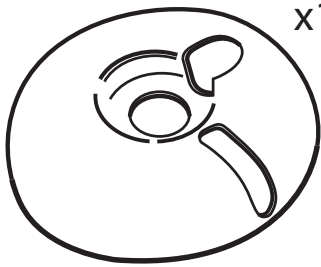
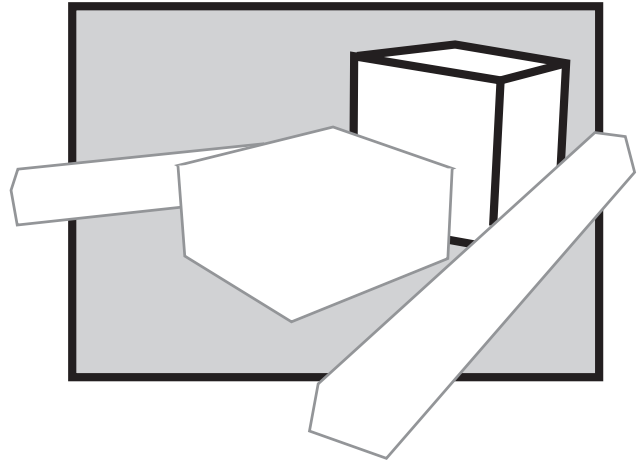

**IN THE EVENT OF FAILURE OF ANY ONE OF THESE PRE-INSTALLATION CHECKS, PLEASE CONTACT YOUR AUTHORIZED DEALER.**

# Box Contents

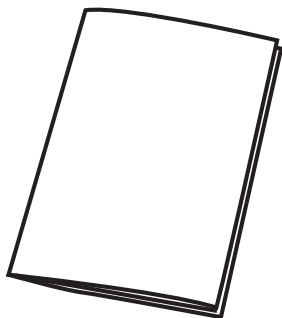
## CARRIAGE BOX



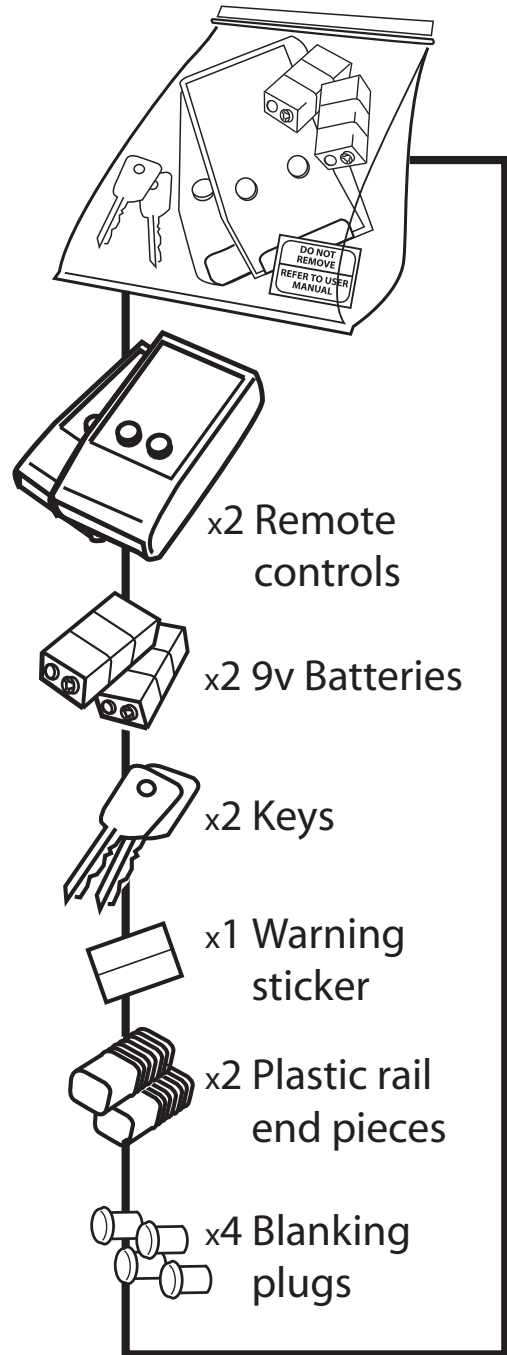
x1 Carriage



x1 Seat index plate cover



x1 Packaging Instructions



x2 Remote controls

x2 9v Batteries

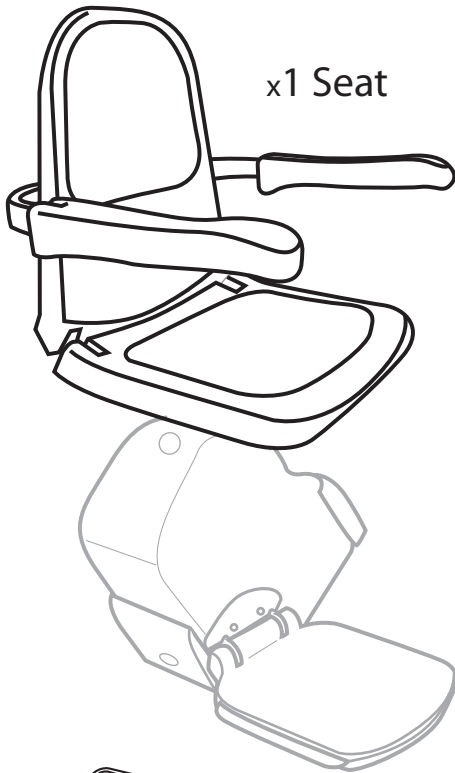
x2 Keys

x1 Warning sticker

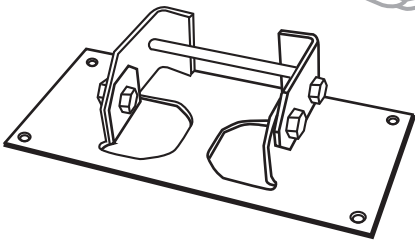
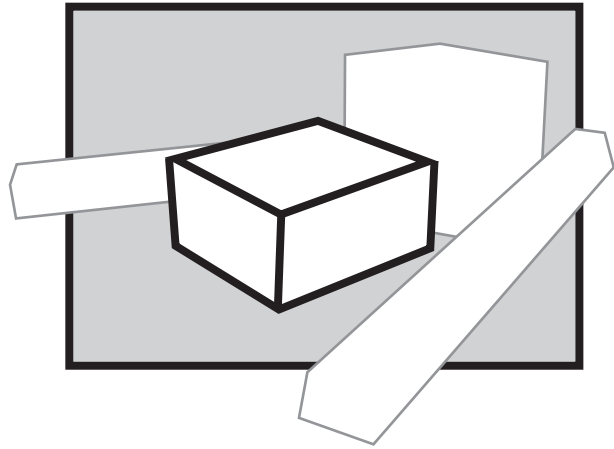
x2 Plastic rail end pieces

x4 Blanking plugs

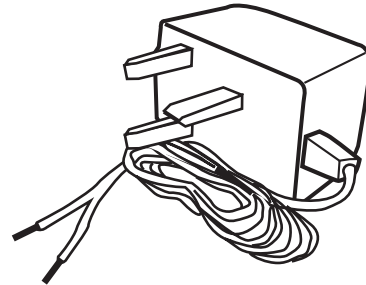
# SEAT BOX



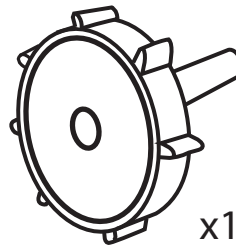
x1 Seat



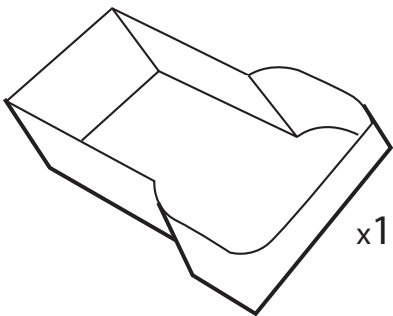
x4 Rail brackets



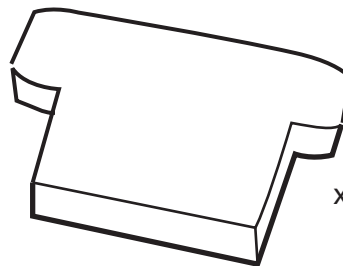
x1 Transformer



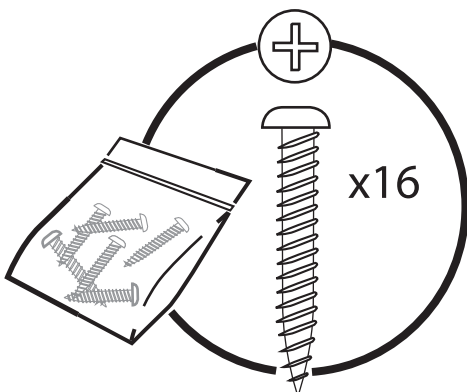
x1 Handwinder



x1 Bottom rail cover

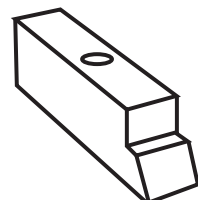
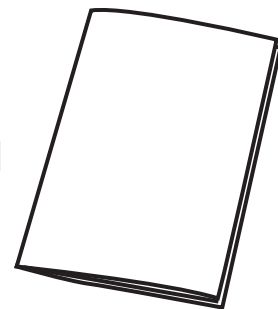


x1 Top rail cover



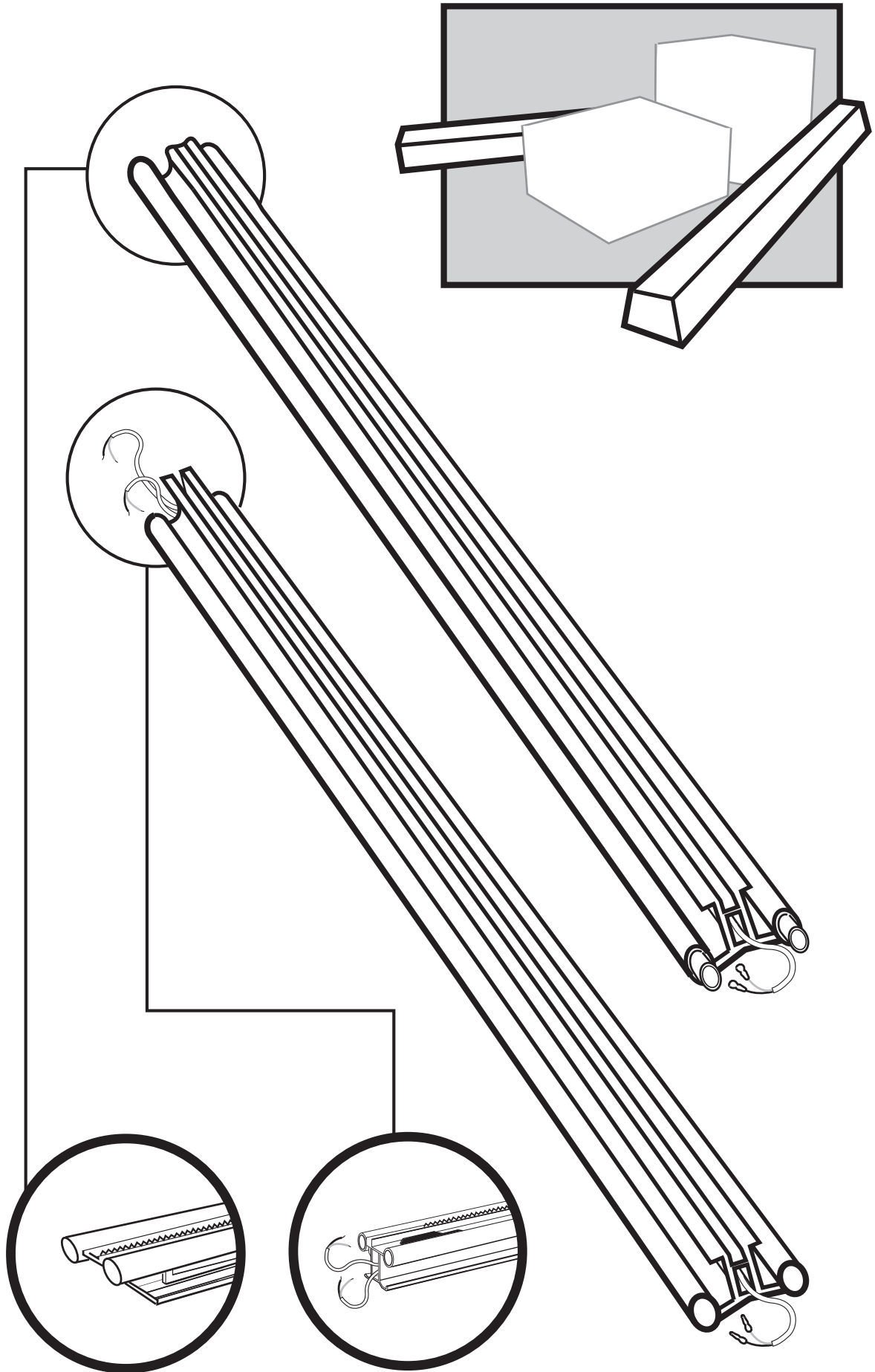
x16

x1 User manual



x1 End stop

# RAIL BOX

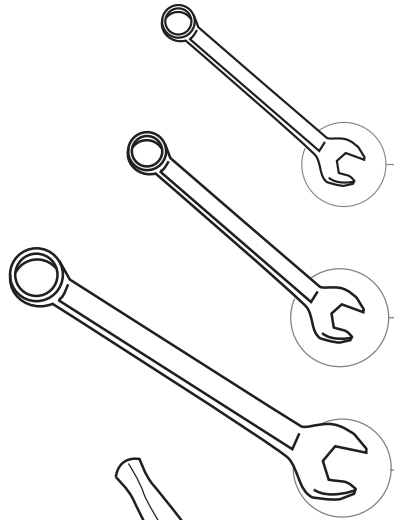




# Installation Tools

## Required

**Open / ring  
Spanner**

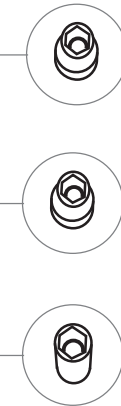


10mm

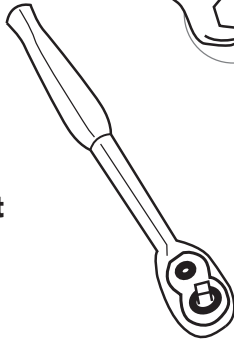
13mm

17mm

**Socket**



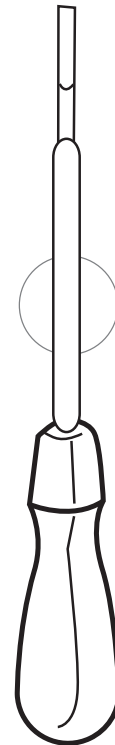
**Socket  
ratchet**



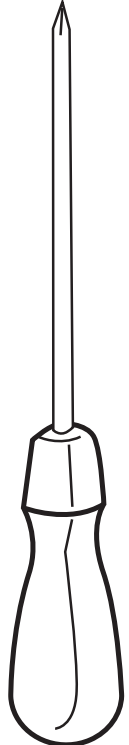
**Socket  
extension**



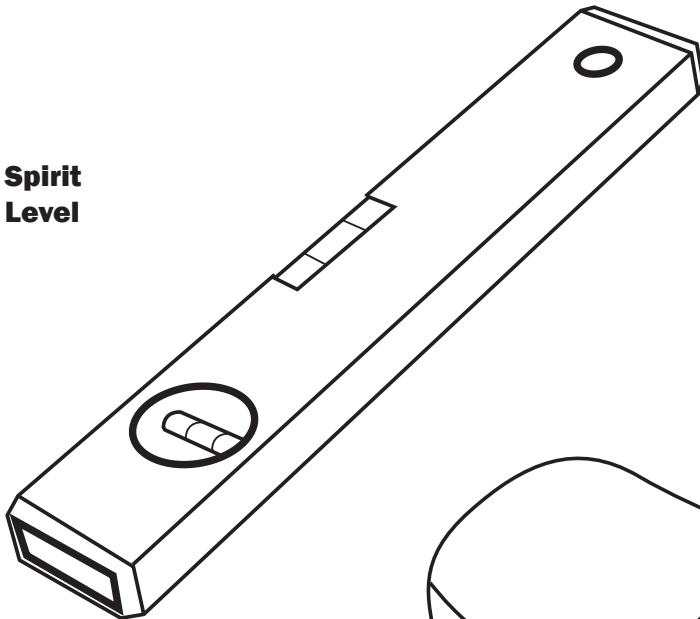
**Flat electrical  
terminal  
screwdriver**



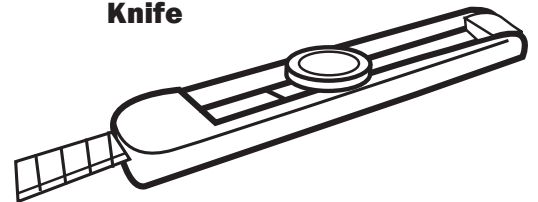
**N°2 / N°3  
Phillips  
screwdriver**



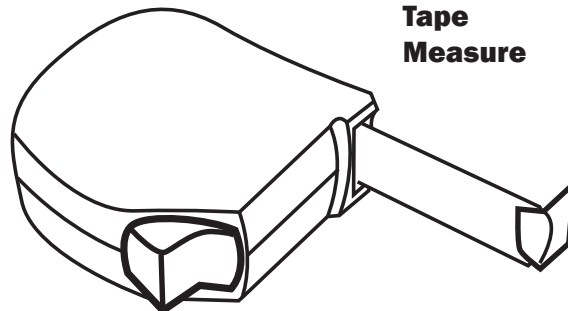
**Spirit  
Level**



**Knife**

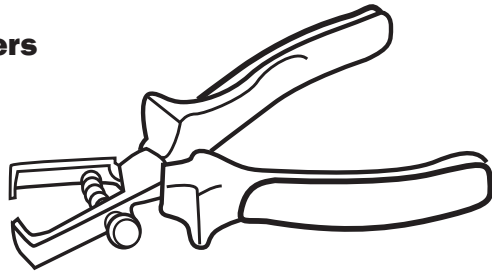


**Tape  
Measure**

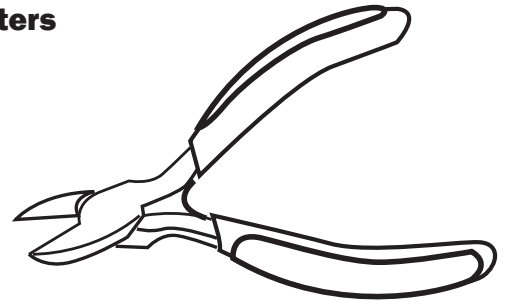


# Optional

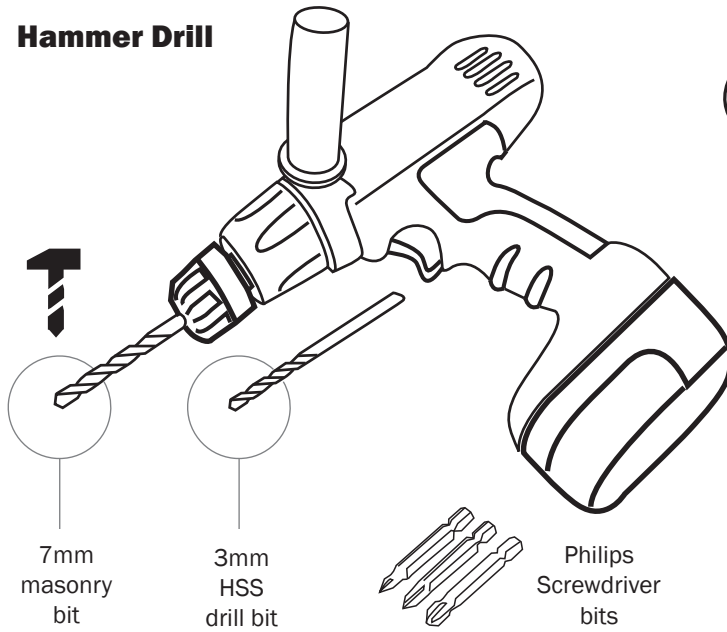
**Wire  
strippers**



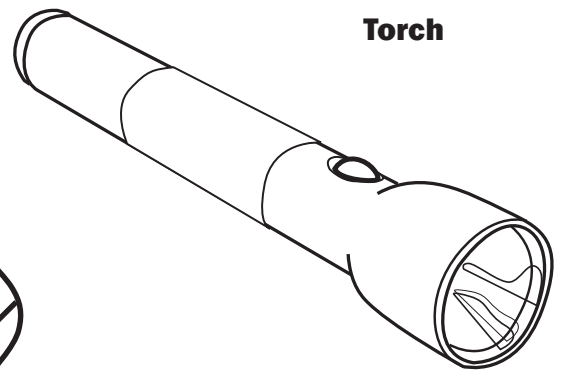
**Side  
cutters**



**Hammer Drill**



**Torch**

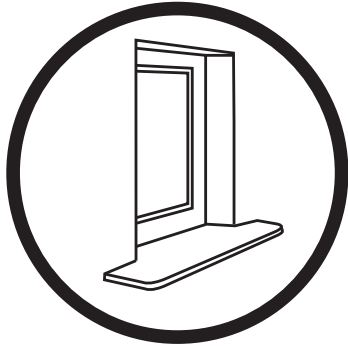


## 1.2 INSTALLATION PROCEDURE

### 1.2.1 Preparation on Site

It is recommended that the following examinations be carried out prior to taking the rail into the end users' property:

1.



Visually check the site making sure that all obstructions such as window sills, pipes, bulkheads, newel posts etc have been allowed for.

2.

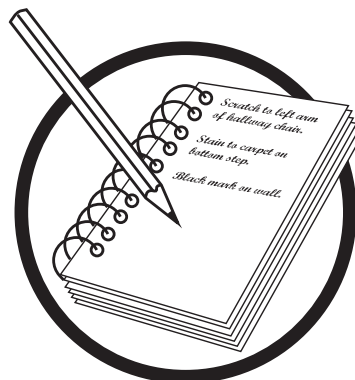


Examine the stairs, remove any removable objects that may get damaged or could cause a tripping hazard when the rail is brought into the property.






**If the stairway is open plan or there is access to the rear of the installation (not against a wall), then the installation must not go ahead until the access has been panelled off.**

3.



Identify existing damage to:

-  Decorations
-  Floor coverings, furniture and other furnishings
-  Windows, doors, etc

4. Do not remove the handrail until the rail has been installed, in case of mis-measure / abort.

## 1.2.2 Joining the Rail

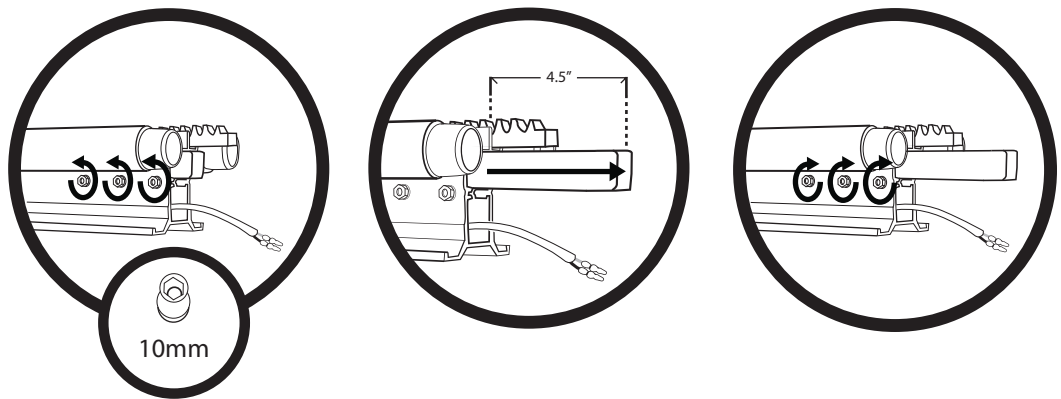
The stairlift rail is shipped in two pieces that are spliced together during installation.

The upper and lower charge points and upper and lower stopping limit ramps are installed on the rail sections at the factory.

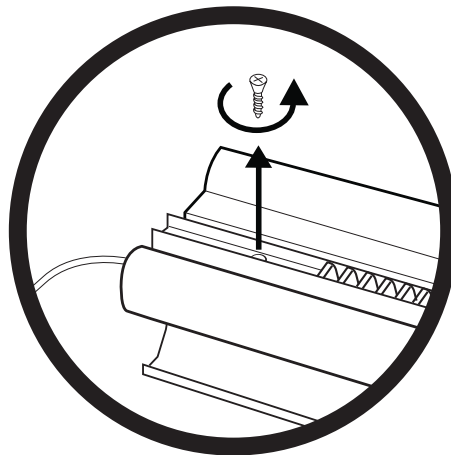


**Before positioning, it is recommended, whenever possible, to join the rail together at the base of the stairway making assembly easy.**

1. On the bottom rail, loosen the 3 pinch bolts and slide out the 1 inch square joint-bar until it protrudes approximately 4 ½ inches. Tighten the 3 pinch bolts.

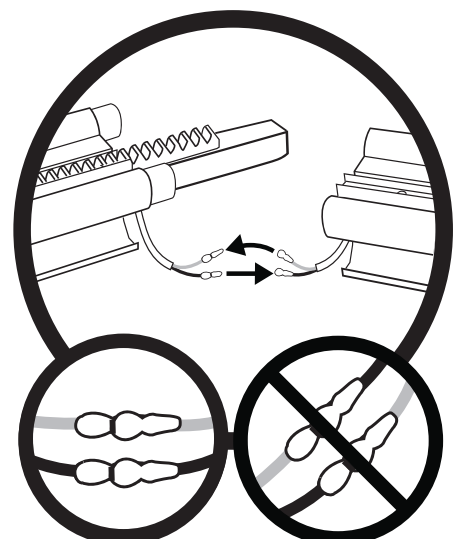


2. On the upper section of the rail, temporarily remove the screw from where the gear rack will go when fully assembled.

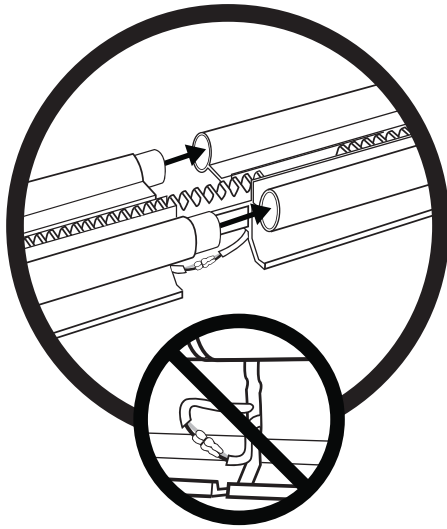


3. Connected to the lower charge point and running through the inside of the lower rail section is a two wire cable that terminates with two female wire connectors.

Connect the male and female wire connectors of the rail cable together (brown to brown, blue to blue).



4.

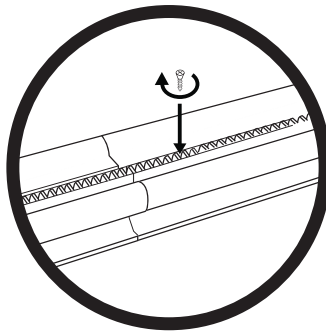
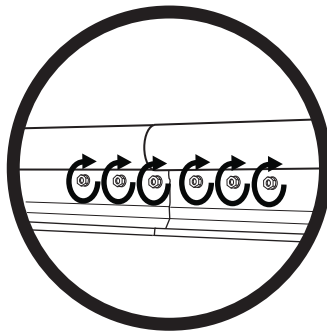


The two rail sections now need to be fixed together.



**IMPORTANT!**  
 Make sure that the wiring isn't trapped between the edges of the rail preventing a flush join.

5.



Re-tighten the pinch bolts to hold the joint-bar securely in place, using 2 x 10mm spanners.

Replace the screw into the gear rack and back into the upper rail.



**Do not remove the handrail until the rail has been installed, in case of mis-measure / abort.**

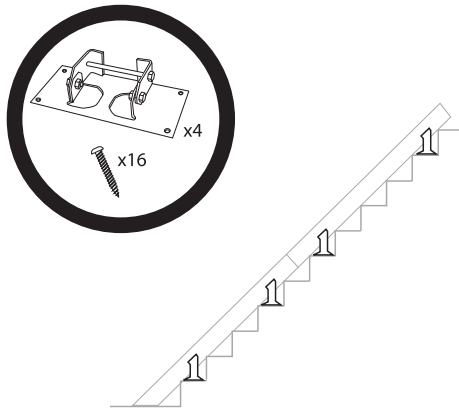
### 1.2.3

### Installing the Rail

1. Position the rail as one complete assembly on the staircase, with the lower (angled) end resting on the floor, at the bottom of the stairs and the steel toothed rack uppermost. Place the rail end on the bottom of the rail.



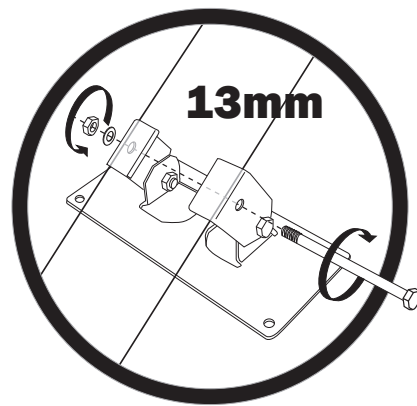
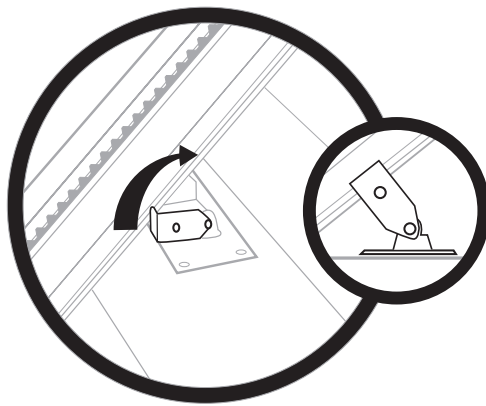
2.



Position the stair brackets underneath the rail - one on the first step, one on the very top step or on the landing and the middle two either side of the join in the rail.

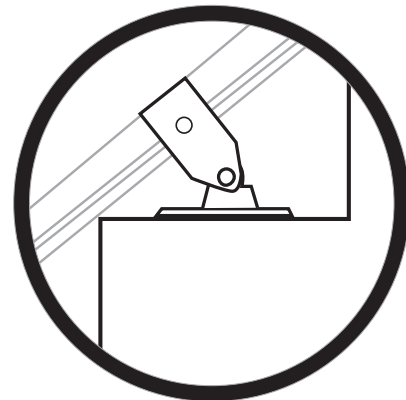
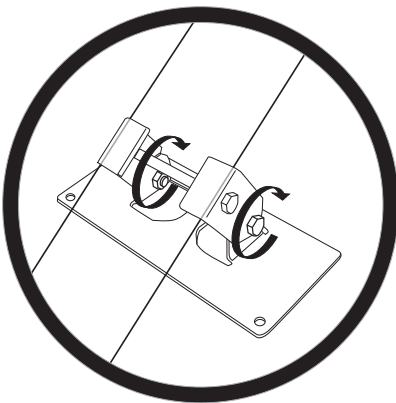
3.

The stair brackets clamp to the underside of the rail and are secured by tightening the long 13mm nut / bolt, which runs right through each bracket.

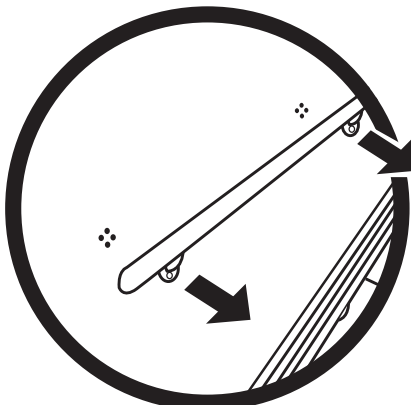


4.

Position the bracket so that its footrest sits firmly on the stair tread and tighten the two short 13mm nut / bolts on either side of the bracket. Do not fix the bracket to the stair tread at this time.



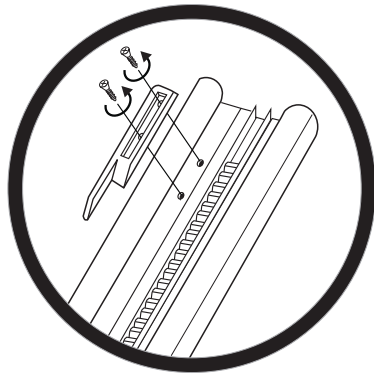
5.



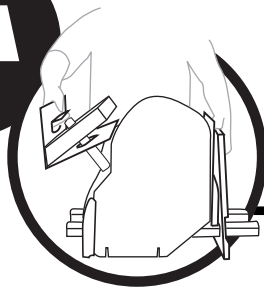
With the rail correctly sitting on the stairs the handrail if fitted can now be removed.

## 1.2.4 Installing the Stairlift Carriage

1.

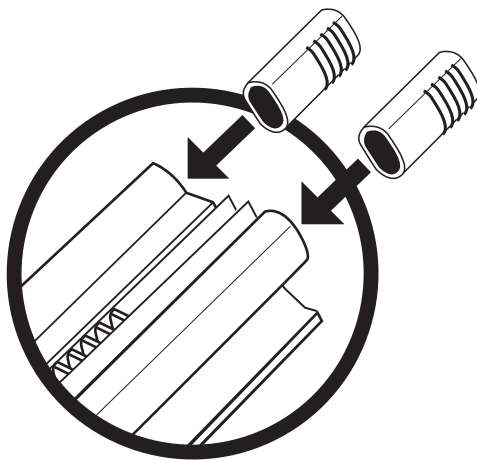


Remove the adjustable upper stopping limit ramp moulding from the top end of the rail.



**WARNING!** Take care when handling the carriage assembly, as this is a heavy component.

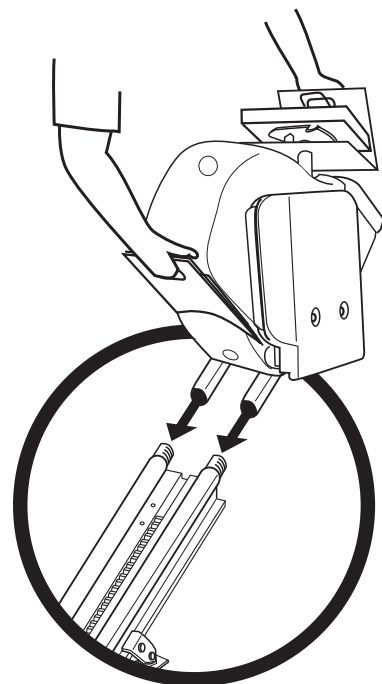
2.



Insert plastic end pieces to Rail top for Carriage installation.

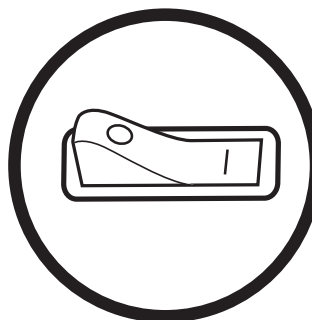
3.

Place the carriage on the top of the rail, positioning the two rail lengths on the carriage onto the plastic end pieces.

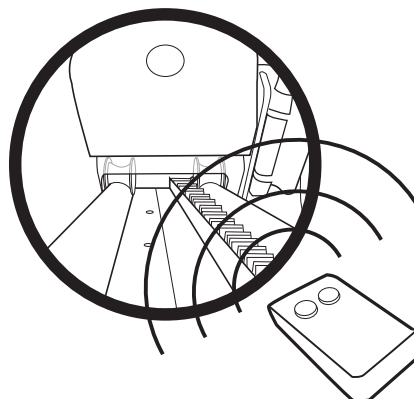
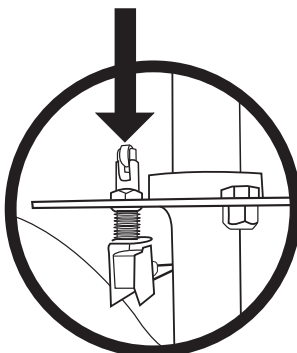



**WARNING!** Take great care not to damage any of the three micro-switches that protrude from the underneath of the carriage body

4. Switch on Battery isolation switch.

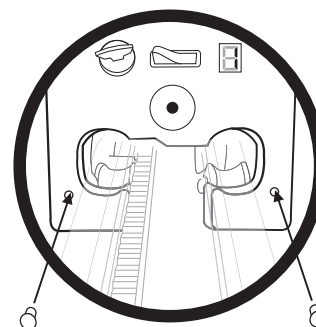
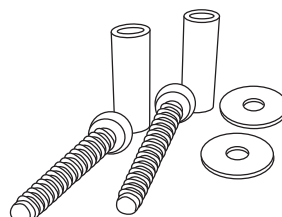
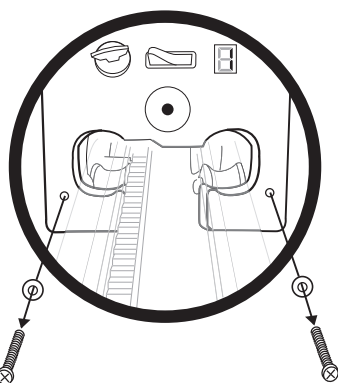


5. Hold down seat switch, and drive Carriage onto Rail using a remote control.

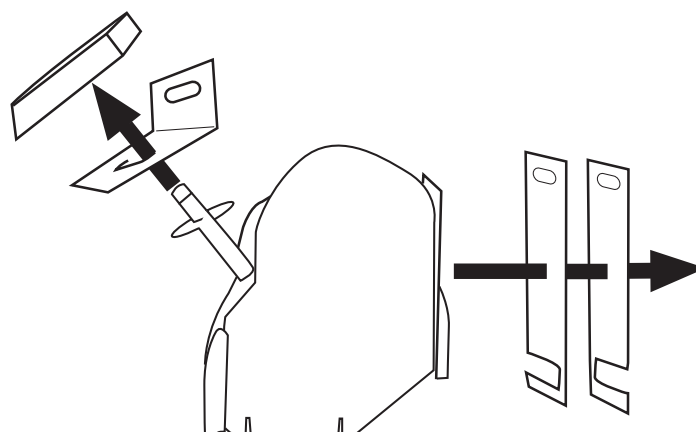


 **Remember to remove the plastic end pieces from the top of the rail.**

6. Remove yellow warning labels and transit screws attached to both upper and lower carriage safety edges then fit blanking plugs supplied into holes.



7. Remove the Safe Handling Aid. **SEE PACKING INSTRUCTIONS.**





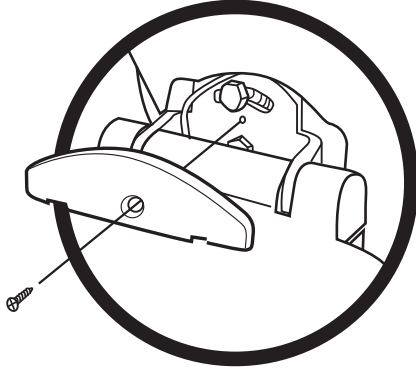
## 1.2.5

### Setting Seat Angle



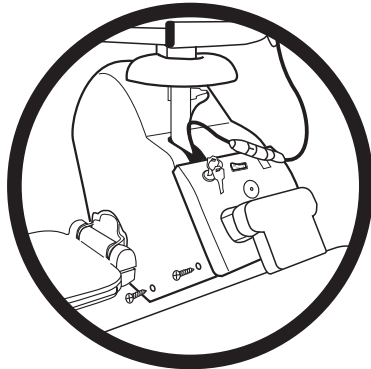
The following procedure must be **STRICTLY** adhered to, to avoid damage to the chassis plates.

1.



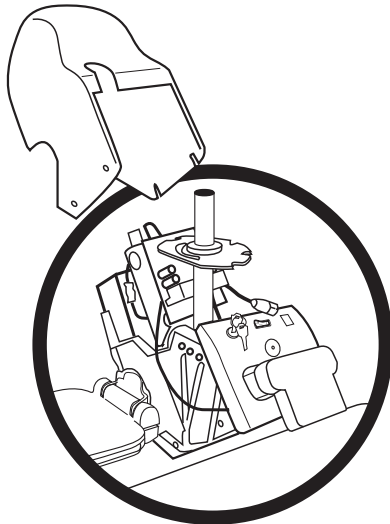
Remove the footrest hinge cover by removing the screw.

2.



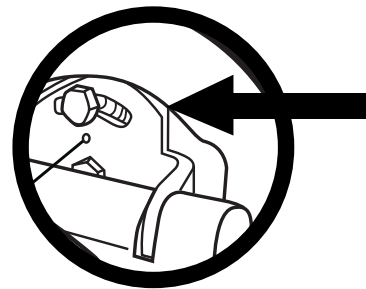
To remove main cover, remove the 2 screws that are located along the front bottom edge.

3.

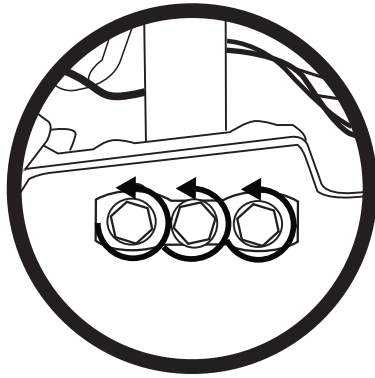


Gradually remove the cover on an angle.

It may be necessary to loosen the footplate adjusting bolt.

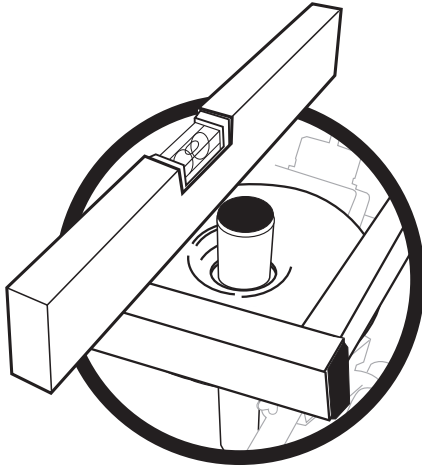


4.



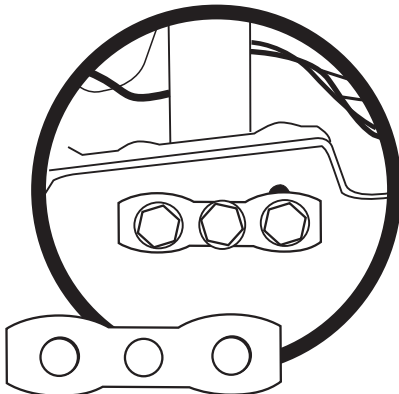
Loosen the 6 horizontal bolts (3 either side) until the post can just move.

5.



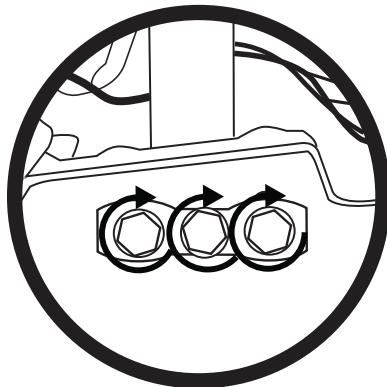
Adjust the seat to the correct angle by placing a spirit level on the seat post platform.

6.



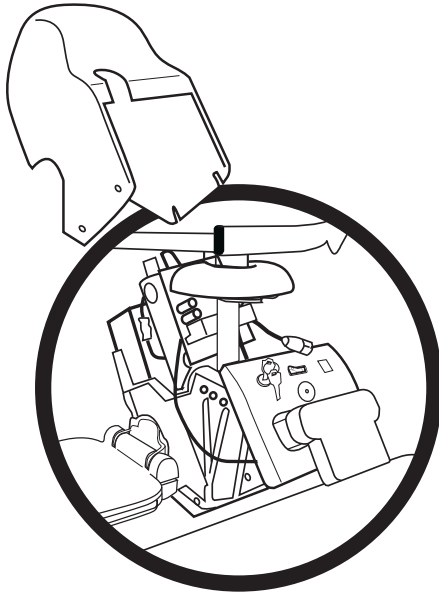
Ensure that the anti-slip clamps (butterfly brackets) are in the correct horizontal position. The serrated side should be facing inward towards the carriage, with the smooth side facing outward.

7.



Tighten the 6 horizontal bolts using a 13mm socket torque wrench set to 35Nm.

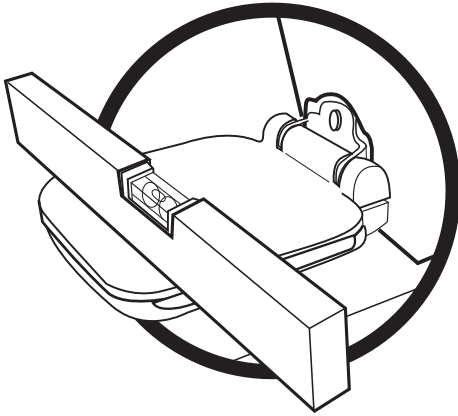
8.



Replace the carriage cover and replace the two screws.

### 1.2.6 Setting Footrest Angle

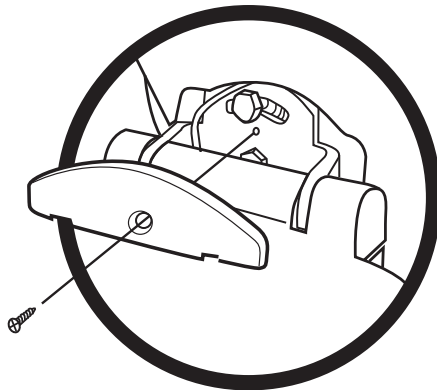
1.



Loosen the centre bolt and adjust to the correct level using the spirit level.

Once level, tighten the bolt back up.

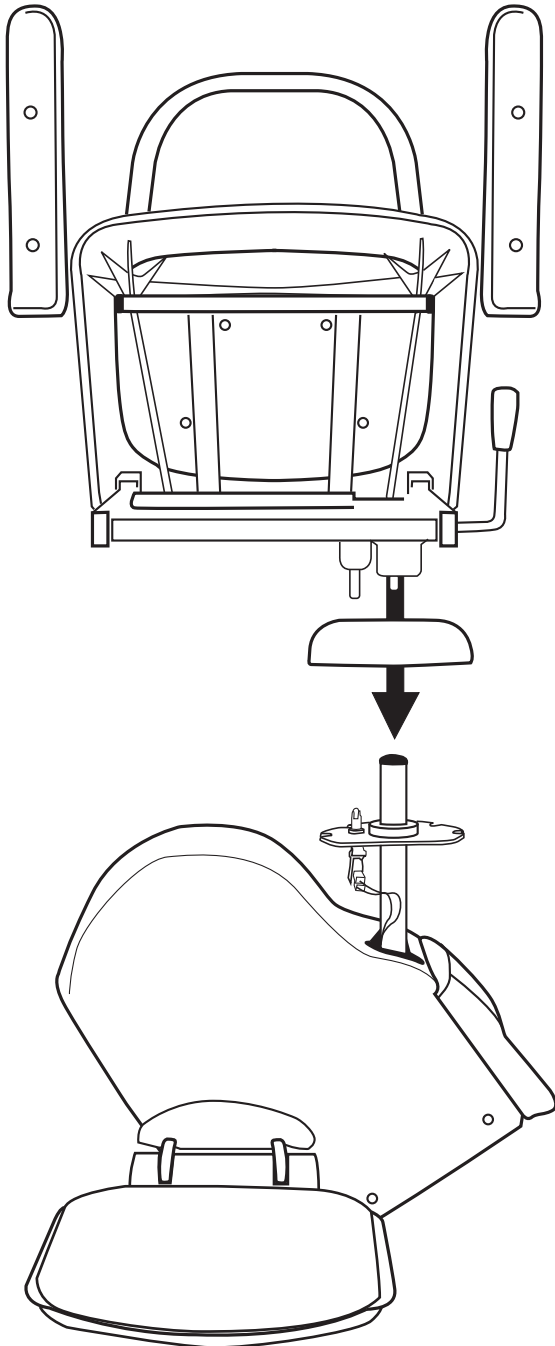
2.



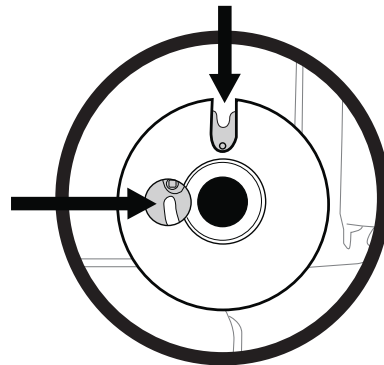
Return the footrest hinge cover by replacing the screw.

## 1.2.7 Installing the Seat

The seat assembly now needs to be fitted to the seat post on the carriage.  
Carry this out as follows:

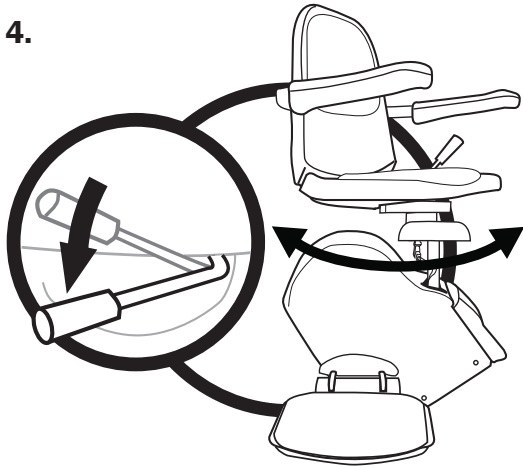


1. Fold up the seat arms and seat base.
2. Fit Seat Index Plate Cover. Ensure that all wires are clear and will not become trapped.  
Position the index plate as arrowed below.



3. Position the seat on top of the seat post protruding from the chassis.

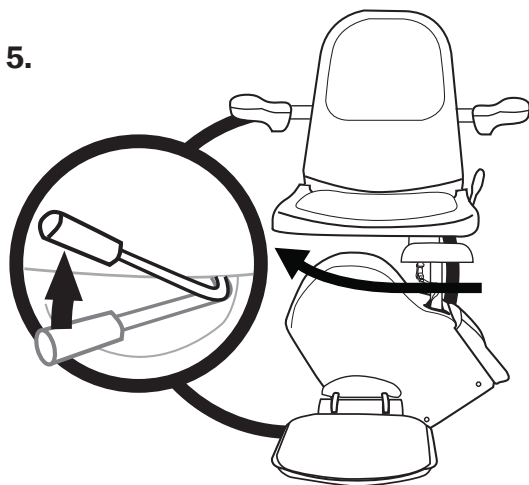
4.



With the seat facing across the stairs, hold the swivel locking handle down, and gently twist the seat from side to side, easing it downwards.

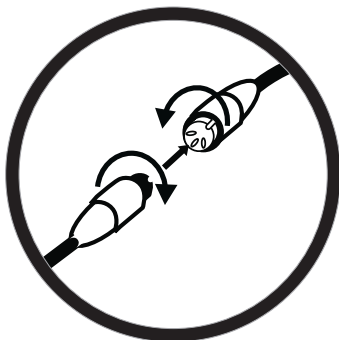
Do this until the seat will not lower any more, and check that the seat post appears flush with the top of the seat frame.

5.



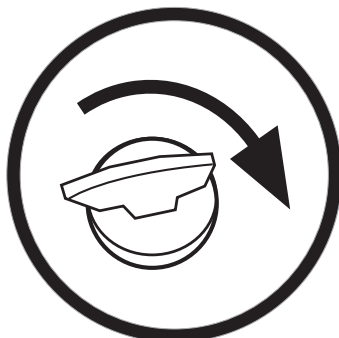
Release the seat swivel lever and rotate the seat until it is locked into the normal riding position – facing across the stairs.

6.




Connect the electrical connection between the seat and the carriage, by pushing together the 'DIN' plugs, and screwing the collars to ensure a safe, permanent connection.

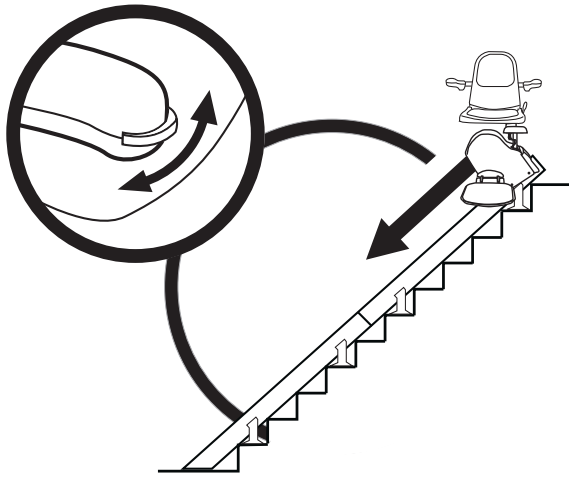
7.



Check that the key switch on the upper carriage safety pad is in the 'ON' position and that the seat is in a locked position facing across the stairs (see point 5).

When all parts are correctly located, the LED display will show  and beep showing the charging system is not connected to the mains). If other codes are displayed refer to the error codes in the User Manual.

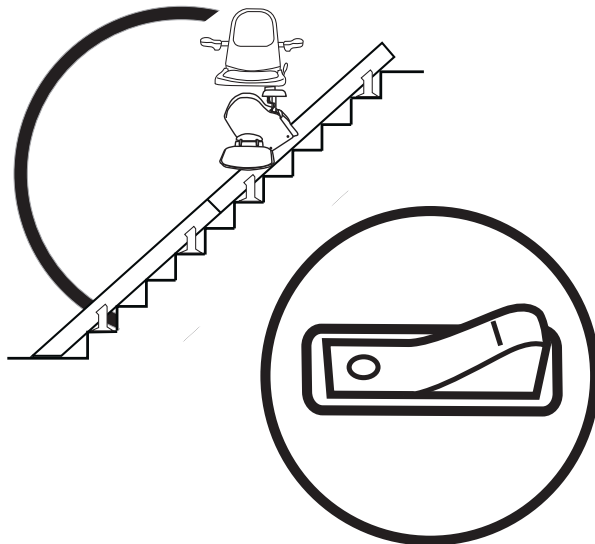
8.



The stairlift can now be 'driven' downwards to locate the motor drive pinion on to the toothed rack on the rail. Operate the toggle switch on the chair arm towards downstairs (in the direction of travel).

The lift should cleanly locate on the rack and begin its first descent.

9.

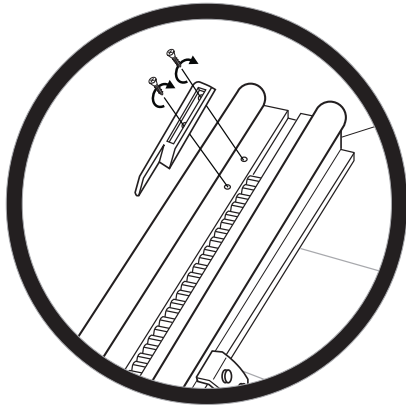


Stop the lift 3 or 4 steps down and switch off the battery isolator switch.

This is to stop the 'Batteries Off Charge' warning signal.

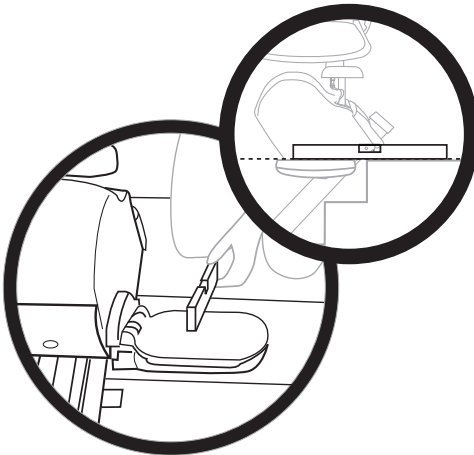
## 1.2.8 Setting Top Stopping Point

1.



Replace the top stopping limit ramp; but do not fully tighten the screws at this point.

2.

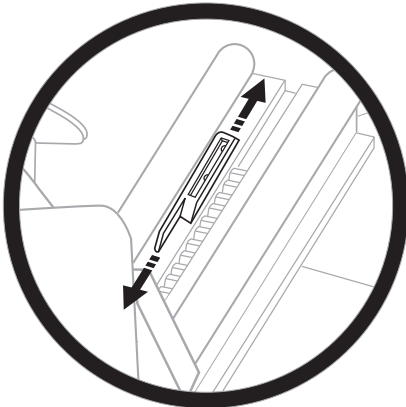


Switch the power back on to operate the stairlift.

Run the stairlift back to the top of the stairs until it comes to a full stop.

Check how level the footrest is with the landing using the spirit level.

3.



If the footrest IS NOT level with the landing, run the stairlift down 3 / 4 stairs and stop.

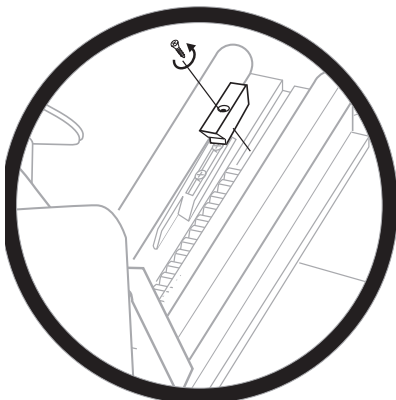
Slide the stopping ramp up or down to a suitable position.

Run the stairlift back to the top of the stairs and check to see if the footrest is level with the landing.

If not, repeat until correct.

When top stopping position is correct tighten the screws on stopping ramp.

4.



Position the plastic rail end stop at the end of the gear rack and drill a 3mm hole into the aluminium rail. Secure using the screw provided.



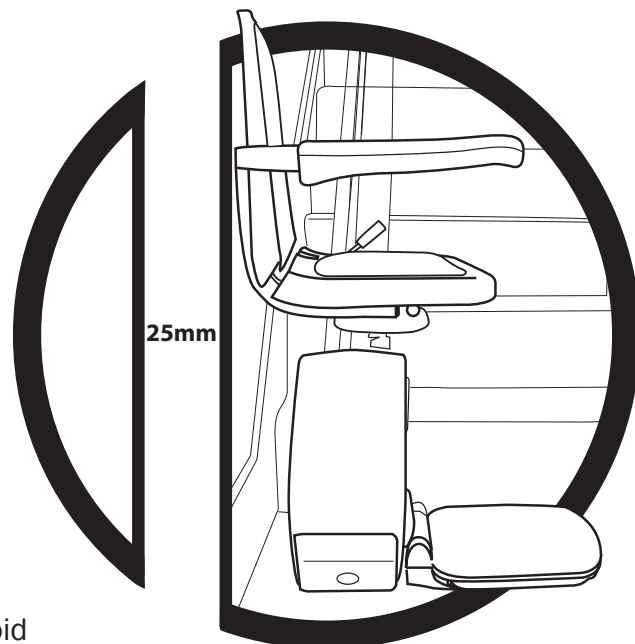
**In cases where it is necessary to cut the rail and gear rack to length, this plastic end stop will secure and prevent any possible movement of loose gear rack.**

## 1.2.9

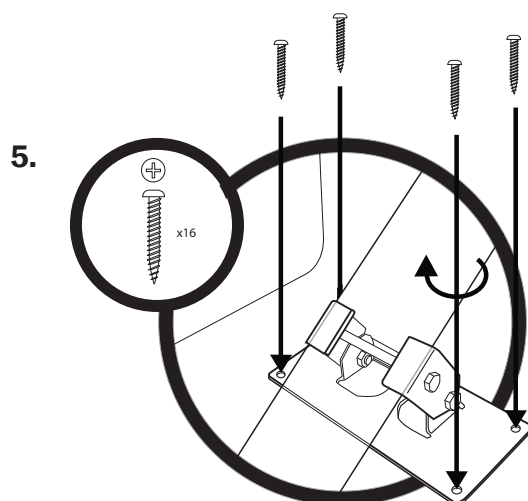
### Fixing Down the Rail

1. Run the stairlift down to the bottom of the staircase.
2. Visually check that the rail is parallel to the adjacent wall, and looking up the stairs, behind the seat that the stairlift will not catch the wall on the way up.
3. Also check that there are no obstructions such as window cills.

There should be approximately 25mm between seat back and the wall to avoid trapping hazards.



4. Adjust the clearance between the stairlift and the wall by moving the rail in or out appropriately.



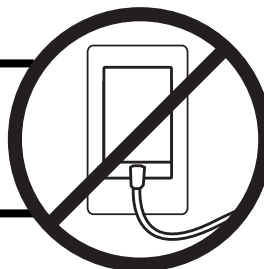
Once checked and final position verified, screw the rail brackets down to the stairs using the screws provided (four per bracket).

## 1.2.10

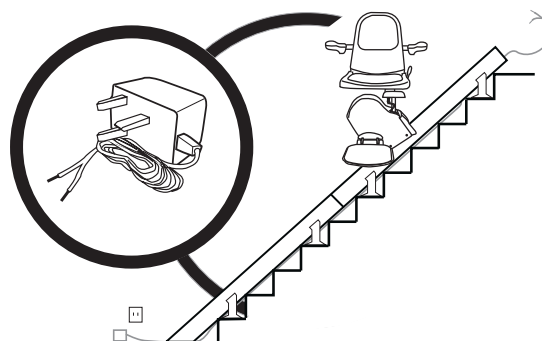
### Connecting the Transformer



**DO NOT plug the transformer into the mains socket YET!**

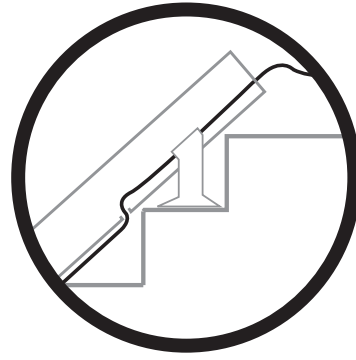


The transformer from the fitting kit now needs to be connected to the charge system wiring as follows:

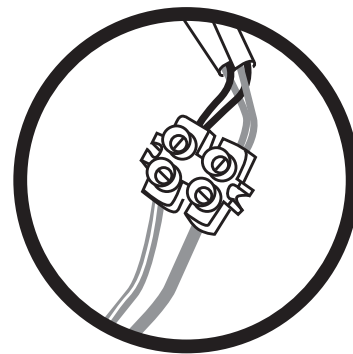
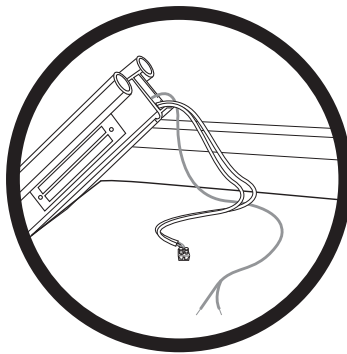




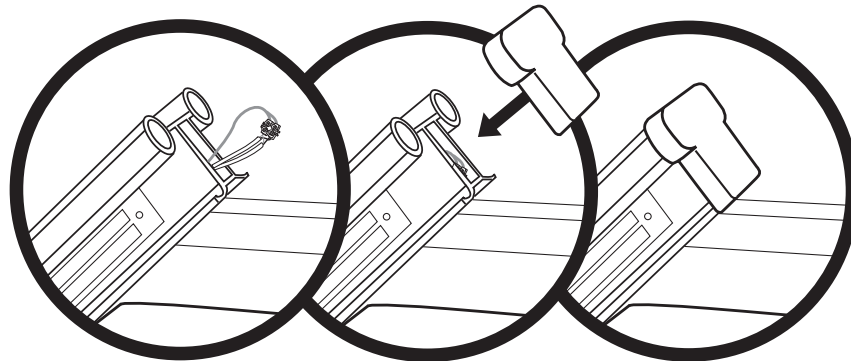
1. Insert the transformer lead through the hole on the underside of the rail (rubber-grommit) and out through the end of the rail.



2. Pull out the charge point wires and connector block from the end of the Rail and join the wires from the transformer into the connector block. The transformer output is AC, either wire can be connected to either terminal.



3. Push the jointed wires and connector block back into the rail end, push the rail end cap from the fitting kit over the end of the rail.



Ensure that the transformer wire is neatly routed so it will not cause a tripping hazard or get caught by the moving stairlift.



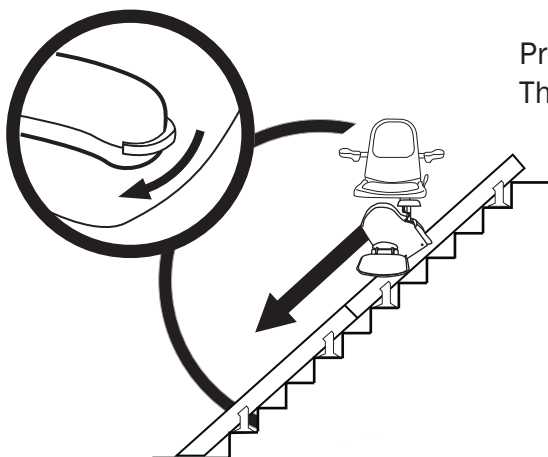
**Plug in the transformer only on completion.**

## 1.3 SAFETY CHECKS

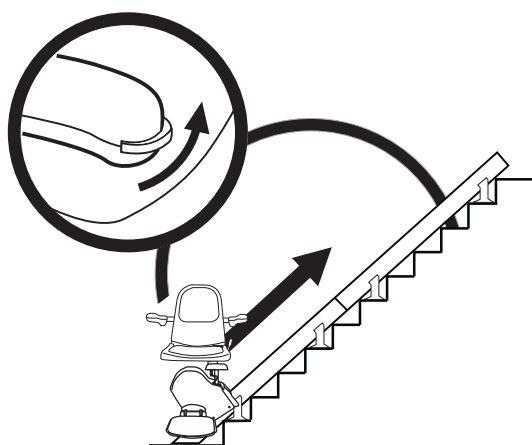
Checklist - to be completed after installation and, if applicable, recorded on the installation work report by ticking the appropriate box and making supplementary notes as required.

### 1.3.1 Check Controls

1. Press the toggle in the 'DOWN' direction. The stairlift should start to travel down.

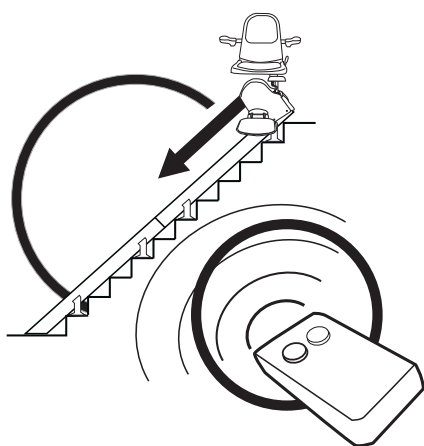


2. Press the toggle switch in the 'UP' direction. The stairlift should start to travel upwards.



### 1.3.2 Check Remote Controls

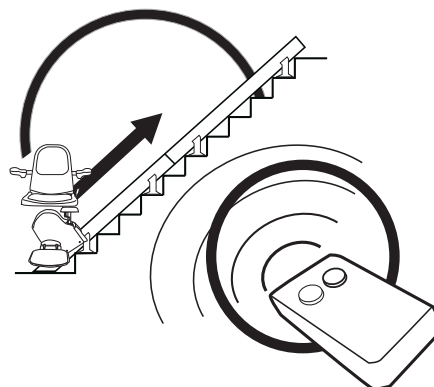
1. Press the GREEN button on the remote and the stairlift will descend.



By releasing the button the stairlift will stop travelling.

2. Pressing the RED button on the remote and the stairlift will travel in upwards.

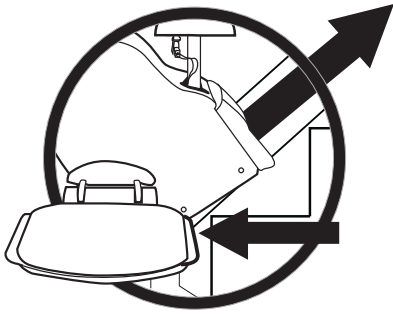
By releasing the button the stairlift will stop travelling.



### 1.3.3

### Check Safety Sensors

1.

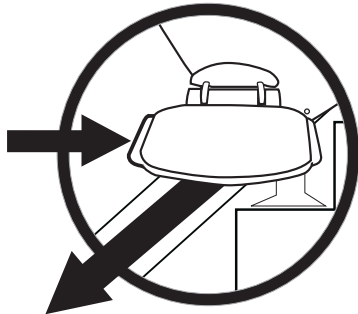


Footrest 'top' side sensor - with the lift ascending, push top-side spring-loaded edge of footrest - lift should stop immediately.

LED Display will show



2.

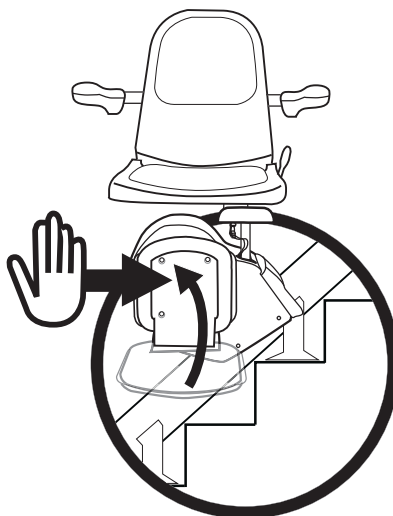


Footrest 'bottom' side sensor - with the lift descending, push bottom-side spring-loaded edge of footrest - lift should stop immediately.

LED Display will show



3.

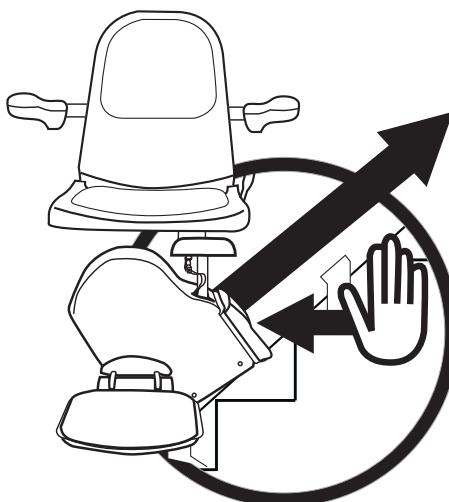


Footrest base sensor - with the lift descending, **push in the base of the footrest** - lift should stop immediately.

LED Display will show



4.

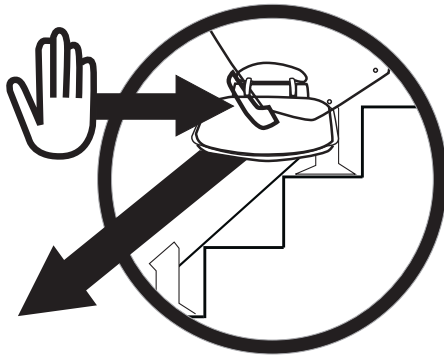


Carriage 'top' side sensor - with the lift ascending, push the top-side spring-loaded moulding attached to the carriage, immediately surrounding the rail - lift should stop immediately.

LED Display will show



5.

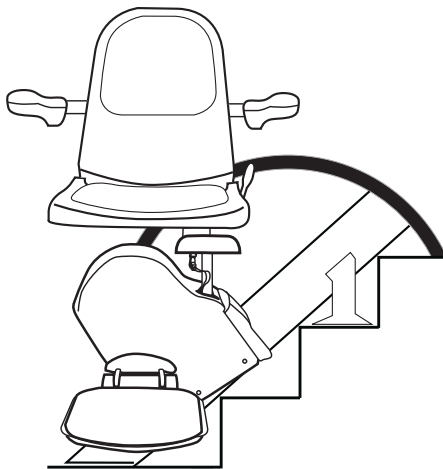


Carriage 'bottom' side sensor - with the lift descending, push the bottom-side spring-loaded moulding attached to the carriage immediately above the rail - lift should stop immediately.

LED Display will show 

### 1.3.4 Check Stopping Limits

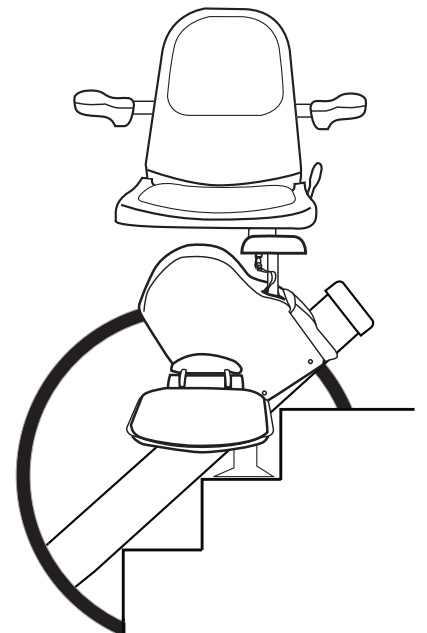
1.



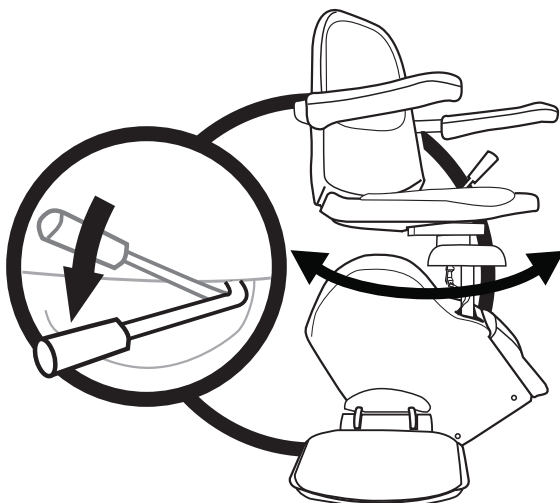
Bottom stopping limit operative - run the lift right to the bottom of the rail - lift should automatically come to a 'soft' stop at the foot of the staircase.

2.

Top stopping limit operative - run the lift right to the top of the rail - lift should automatically come to a 'soft' stop at the top of the staircase.



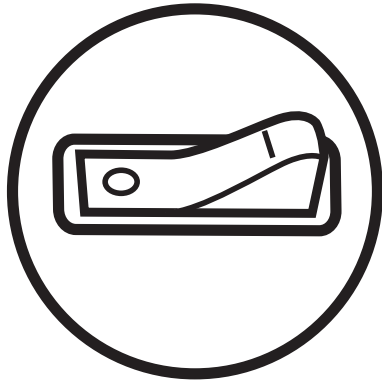
### 1.3.5 Check Seat Swivel



Turn the seat toward the top of the stairs away from the riding position.

The LED display should show  and the stairlift will not operate

### 1.3.6 Check Battery Isolation Switch

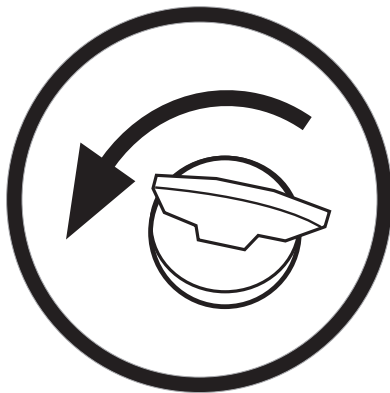


Turn the battery isolation switch to the OFF position or pull out the battery lead.

The LED display should go blank and the stairlift will not operate.



### 1.3.7 Check Key Switch

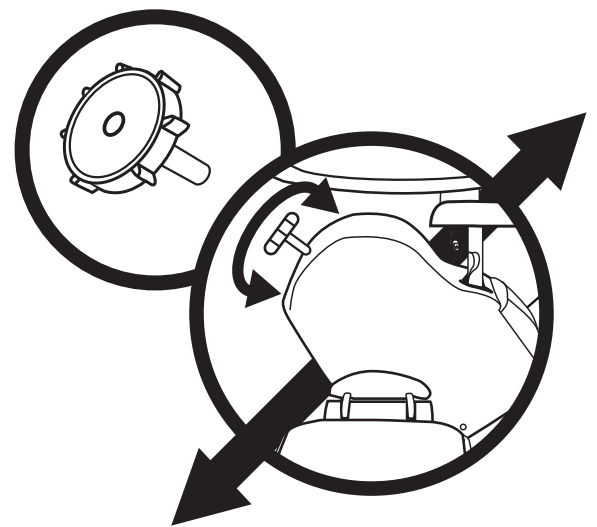


Turn the key switch to the off position. The LED display should change to



### 1.3.8 Hand winding

Remove the blanking plug from top of cover, insert the Hand winding wheel and turn a few turns observing the correct movement of the stairlift in both directions.

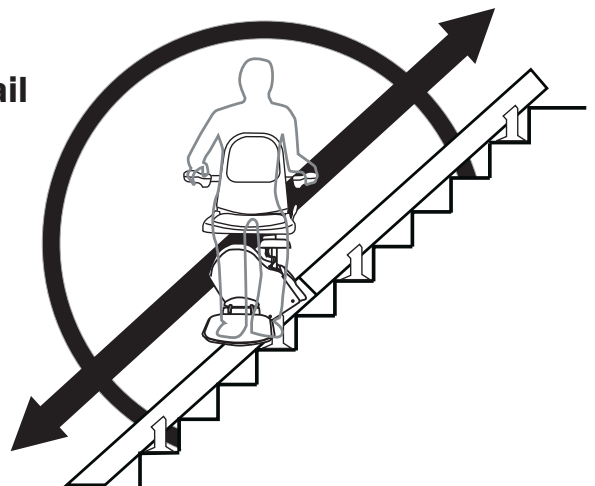


### 1.3.9 Labelling

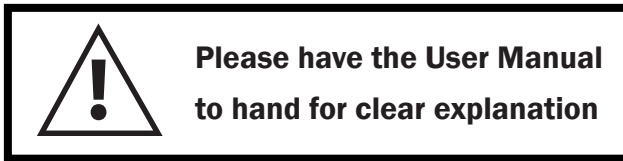
Check all labels are fixed to the stairlift.

### 1.3.10 Check Correct Fixing of Carriage to Rail

Ride the stairlift up and down once, ensuring the ride is smooth and stable and that the stairlift stops in the correct positions at top and bottom.



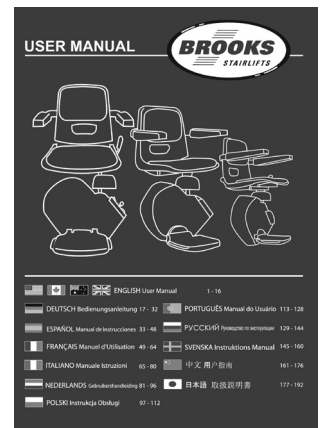
## 1.4 Demonstrate Stairlift to User (if applicable)



Correct operation of the stairlift, troubleshooting procedures and a description of the safety features must be demonstrated to the end user prior to hand over.

You should observe the user using the stairlift once upwards and once downwards **AT LEAST** until you are certain that they are able to use it safely.

If the user is unable to operate the stairlift correctly and safely, the stairlift should be removed, unless it is to be operated by an attendant. In this case, the attendant should be present at the installation.



## 1.5 Maintenance (if applicable)

Ensure that the purchaser is informed of requirements for the examination, testing and servicing of the stairlift and any associated national regulatory requirements.

## 1.6 Avoiding Unsafe Installations

- The installer should not proceed with an installation if, for any reason, it is considered unsafe.
- If the user exceeds the Safe Working Load of 127Kg, (300lbs or 20 stones) the installation should not proceed.
- If any of the final safety checks fail, they should be repaired and re-tested before the stairlift is put into service. **Under no circumstances should any safety feature be overridden or disabled.**
- In the event that there is no wall or solid vertical surface behind the stairlift in its intended position, or on an open plan stairway the installation should not proceed until adequate shielding has been fitted.
- If the angle of the stairs is greater than 55° or less than 23° the installation should not proceed.



REGISTER YOUR BROOKS STAIRLIFT AT

[www.brooksstairlifts.com/register](http://www.brooksstairlifts.com/register)

