PINNACLE™

INSTALLATION MANUAL

START-UP AND SAFETY TEST

TEST SAFETY STOP SWITCHES

5. In each of the above cases the unit should come to an immediate halt. The LED on the armrest control should turn to ORANGE and the unit should beep intermittently.

6. When the control switch is released, the unit should NOT be able to be driven in the direction that the lift initially engaged the obstacle. Test this condition.

7. Test to ensure that the lift can only be driven away from the obstruction. The LED will turn to GREEN and stop beeping indicating a safe operating condition.

8. Repeat the above tests while driving the lift in opposite direction.

9. If any safety condition does not function properly, carefully review all installation instructions, reset the ON /OFF switch and check that the LED is GREEN. Repeat the above tests.

10. If any safety stop switch fails to immediately stop the lift and/or a RED LED appears, remove the key to prevent further use of the lift and immediately call the manufacturer for assistance in diagnosing and repairing the problem. DO NOT USE THE LIFT.

ADDITIONAL SYSTEM CHECKS

1. After the successful testing of all safety edges, sit on the lift and operate to the top of the stairs. Keeping the control switch depressed continuously, the lift should gently decelerate and then stop at the top of the track.

2. **As a final adjustment, sit on the lift and do two (2) complete up trips. While sitting on the chair at the top of the stairs do a final tightening of the compression screw.**

3. Drive the lift to the bottom, keeping the control switch depressed all the time, and check that the lift gently decelerates and stops so the footrest pan is clear of the floor. If necessary adjust the limit cams with a 5/64” Allen wrench.

4. Move the lift about 3 feet from either the top or bottom of the rail. After 30 seconds the Armrest LED will show ORANGE and beep indicating that the lift is not positioned on a charge point. The beep will stop after 30 seconds, but the Armrest LED will continue to flashing ORANGE.

5. Test the seat swivel at the top by using the levers and swiveling the seat towards the landing and stop the seat at 35 and 85 degrees. The seat swivel levers will release into a locked position at each of these angles. The lift will not operate in any of these positions if the control switch is depressed, and the LED will turn ORANGE. Return the seat to its normal position and the LED will turn GREEN and the lift will now operate normally.

6. Drive to the top or bottom and check the battery charging light. If the light is ORANGE or RED the batteries are being charged. If the light is GREEN the batteries are fully charged.

7. The lift is now ready for use.

START-UP AND SAFETY TEST

TEST ARMREST CONTOL SWITCH – UP/DOWN

1. Test that the unit travels correctly by operating the armrest control switch while standing in front of the unit.

2. Depress the switch in the up-stairs direction to move up. The lift will beep, wait three seconds and begin to smoothly accelerate upwards. The lift will continue to move upwards as long as the switch is depressed.

3. Release the switch and the lift will come to an immediate stop.

4. Depress the switch in the down-stairs direction to move down. The lift will beep, wait three seconds and begin to smoothly accelerate downwards.

5. Release the switch and the lift will come to an immediate stop.

SET UPPER AND LOWER TRAVEL LIMITS

1. Test the lower travel limit. Operate the lift downward, keeping the switch depressed. The unit should begin to decelerate about 3” from its final resting position and stop clear of the floor.

2. The final stopped position can be adjusted by repositioning the limit cam located in a slot in the rail.

3. Use a 5/64” Allen wrench to loosen the set screw in the limit cam. Adjust the limit cam up or down and retighten the set screws. Repeat the above steps until the lift stops in the desired position.

4. Repeat the above steps to set the upper limits. For safety, the footrest should be set at least level with the upper landing.

5. The optimum position is met when the seat height above the floor is the same at the top and bottom of the stairs.

TEST SAFETY STOP SWITCHES

1. Safety stop switches are located in both the upward and downward ends of the chassis providing protection from obstructions on the rail.

2. Safety stop switches are located in the footrest bottom pan providing protection from obstructions and trapping hazards on the stairs.

3. A safety stop switch is part of the swivel seat mechanism and prevents the lifts from operating when the swivel is in use.

4. Test all the Safety stop switches by driving the lift down and touching the downward end of the chassis, the lower edge of the footrest, and the underside of the footrest in both its folded and unfolded positions.

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BOX CONTENTS

Inspect and check the contents of each box before proceeding. Report any damage to the shipping company and to Summit Lifts.
The following is a list of items in a typical Stairlift installation:

1. CHASSIS BOX

- Chassis
- Call/Send Parts
  - Antenna
  - 2 Call/Send Hand Controls
- Velcro Fasteners
- Battery Charger
- Installation Manual
- Owner's Manual
- Manual Handcrank

2. RAIL BOX

- Bottom Rail pre-installed with:
  - Bottom End Plate
  - Charge Strip Wire Harness
  - Bottom Limit Cam
  - Joint Pins, Joint Brackets (two-piece rail only)
  - Plastic gear rack
- Top Rail pre-installed with:
  - Charge Strip Wire Harness
  - Plastic gear rack
- Rail Accessories (plastic bag):
  - Top End Plate
  - Compression Bolts (3 sizes)
  - Self-Cutting Screws (1/4"-20 x 1")
  - Torx T30 driver bit
- Rail Parts (plastic bag):
  - Extra Plastic Racks (2 or 3)
  - Top Limit cam

3. RAIL BRACKET BOX

- Rail Brackets (2, 3, 4or 6 per set)
- Wood Screws #14 x 2" (4 per rail bracket)

4. CHAIR AND FOOTREST BOX

- Chair with Seat Belt
- Footrest complete with:
  - Adjustable Seat Height Frame
  - Plastic Vertical Cover
  - Nylon Plugs (5)
- Seat Swivel Post with Fasteners

REMOTE CALL/SEND CONTROL

Mount the Antenna to the Chassis before starting operation.

Press and hold the appropriate directional button on the front of the hand control. The LED indicator will turn GREEN when a signal is being sent.

The chairlift will operate with or without a rider.

All safety sensors on the chairlift are designed to continue to operate in their normal mode. The light indicator on the armrest will also display the appropriate color.

If the chairlift fails to respond, this may be an indication that the batteries are discharged and need replacing. Commonly available AAA batteries are easily replaced by removing the back over. Check to make sure that the polarity is correct.

REMOTE CONTROL RE-PROGRAMMING

All Call/Send units are factory programmed. Re-programming is not normally necessary during installation.

In the event that the Remote Call/Send Control needs to be re-programmed, it is essential to program BOTH controls in one programming cycle.

1. Start with the RED ON/OFF Switch in the OFF position (0)
2. **Disconnect the 6-pin footrest and 8-pin chair wire harnesses from the chassis.**
3. Continuously depress the Install Switch and turn the ON/OFF Switch to the ON position, then release the Install Switch.
4. The lift will beep rapidly for 20 seconds, followed by a long single beep, followed by a series of medium length beeps (the first Remote Controls is ready to program).
5. Press and release the UP or DOWN button of the ***1st Remote Control***, then press and release the Install Switch (the first Remote Control is now programmed).
6. The lift will continue to emit another series of medium length beeps (the second Remote Control is ready to program).
7. Press and release the UP or DOWN button of the ***2nd Remote Control***, then press and release the Install Switch (the second Remote Control is now programmed).
8. Upon completion, two beeps will indicate that both Remote Controls have been programmed.
9. **Connect the 6-pin footrest and 8-pin chair wire harnesses to the chassis and then turn the RED ON/OFF Switch OFF and then ON.**
10. Test each Remote Control in both, the UP and Down direction.

FOOTREST & SEAT INSTALLATION

The armrest control is factory set for right hand operation. If the user prefers to operate the armrest controls with their left hand, undo the single screw on the underside of each armrest and slide each armrest upwards.

Disconnect the plug on the armrest control, switch the armrests, and reconnect the plug. Replace the armrests and tighten the screws.

Ensure that the key-switch on the armrest control is in the locked position, with the key in a vertical position.

Turn on the RED ON/OFF Switch located on the top of the chassis. The LED indicator light on the armrest control should cycle through a test sequence, showing RED, YELLOW and GREEN respectively. If any of the system controls or safety sensors are engaged, the LED will turn to yellow.

If the LED is not GREEN, turn the unit off and recheck all wire plugs and safety sensors. Turn on the RED ON/OFF Switch and recheck the LED cycle. When the LED remains GREEN, the lift is ready to operate.

GETTING STARTED

TOOLS REQUIRED

Cordless Drill
Allen Wrench – 5/64”, 5/32”, 3/16”, 5/16”
Phillips Screw Driver - #3
Nut Driver - 5/16”
Torx Bit - T30 (provided)

DETERMINE OVERALL RAIL LENGTH (If track did not come pre-cut to length)

1. Determine the obstructions that will effect the position and length of rail. These would include walls, doors, hallway orientation, etc.

2. First, measure the overall length of the stairs from the nose at the top landing of the stairs to the floor at the bottom. (NOSE TO FLOOR MEASUREMENT) *e.g. 128”*

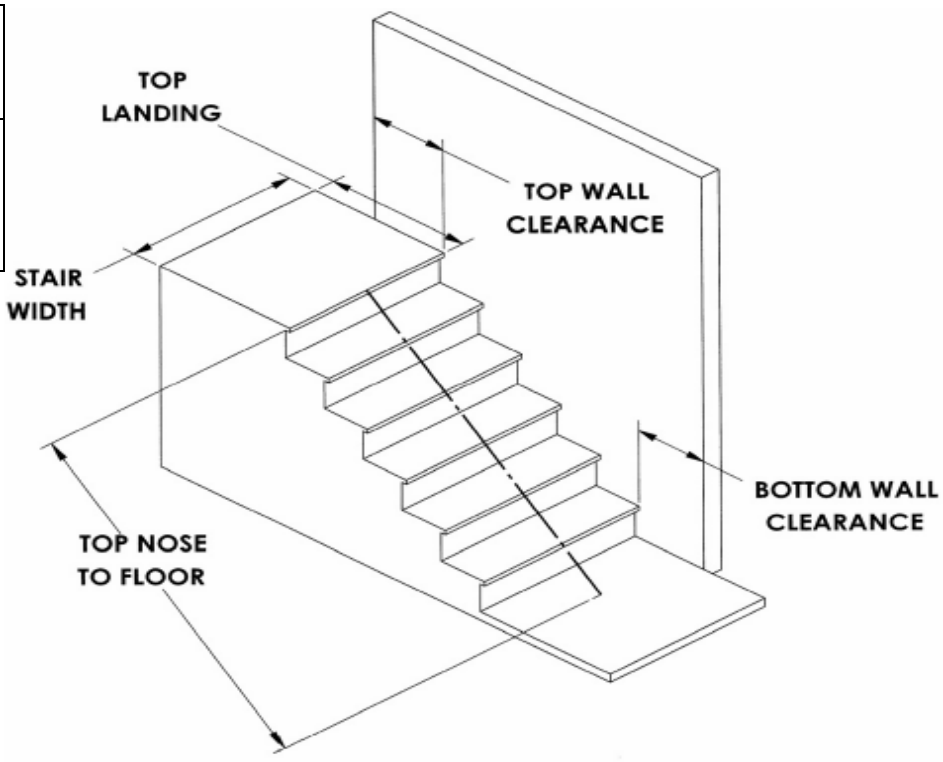
3. For a normal stairway where there is adequate space for a landing, add 13” to the above length. This will provide enough rail length to allow the stairlift to be adjusted so that the floor-to-seat height will be the same at both the top and bottom. *e.g. 141”*

4. If the top landing has restrictions (i.e. wall or doorway), use the chart below to determine the length of extension that can be used.

5. To cut Rail, use a standard 12” chop saw, with a blade designed to cut aluminum. **Do not cut Rail inside the home (aluminum chips are very hard to remove from carpets).**

IMPORTANT:
DO NOT cut the end of the rail that contains the joint holes.
Remove the charger strips and wire harness from rail before cutting.

Extension			
7”	9”	11”	13”
3.9”	5”	6.1”	7.2”
Horizontal intrusion on top landing			

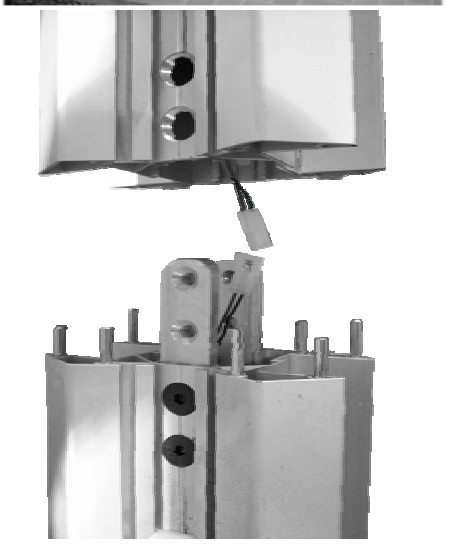


RAIL INSTALLATION

Open the RAIL BOX and remove the contents.

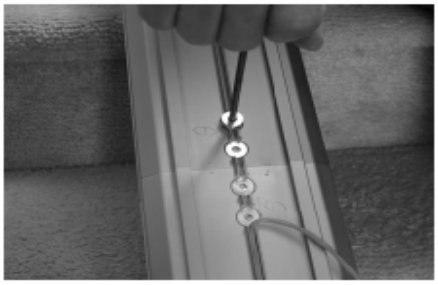
Position the BOTTOM RAIL directly on the stairs with the end plate towards the bottom of the stairs and plastic rack facing down. **Tip: Use the Chair box or toolbox at the bottom to prevent the rail from sliding away from stairs**.

Position the two ends of the track close together. Locate and connect the plug on the ends of the two charger harnesses inside the two track pieces.



With the plastic rack facing down, slide the TOP RAIL into the BOTTOM RAIL and guide them together using the preinstalled pins. Gently tap the top rail if necessary to get them close together. Be cautious to not pinch the charger harness.

Install the 2 joint fasteners and firmly tighten with 5/16" Allen wrench (bottom side).



FOOTREST & SEAT INSTALLATION

Check that the height of the seat-base is correctly set for the intended user. A seat height guide is provided behind the plastic footrest shroud.

Consult with the client. Use an existing chair or walker with arm rests as a guide.

If the seat height needs to be adjusted, undo and remove the four bolts on the sides of the seat base using a 5/32” Allen wrench. Adjust the seat base up or down relative to the footrest structure until the holes line up and replace and securely tighten the four bolts.

Connect the footrest cable to the 6-pin connector on the CHASSIS.

Position the keyed Seat Swivel Post in the hole in the seat base closest to the top of the stairs. Securely tighten the two (2) bolts using a 5/32” Allen wrench.

Use the white plastic plugs supplied to secure the vertical footrest shroud and the main footrest cover plate.

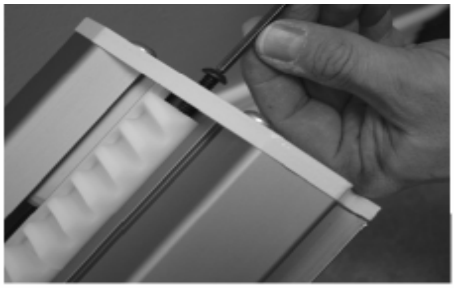
Position the seat assembly on the Seat Swivel Post ensuring that the swivel lever is depressed so that the seat is fully engaged with the swivel post. Check the swivel lever to test the locking mechanism.

The system will not function if proper engagement is not achieved.

Connect the seat cable to the 8-pin connector on the CHASSIS.

NOTE: When the 6-pin footrest and 8-pin chair cables are connected to the chassis, the black INSTALLATION SWITCH on the chassis will not function. It is disabled.

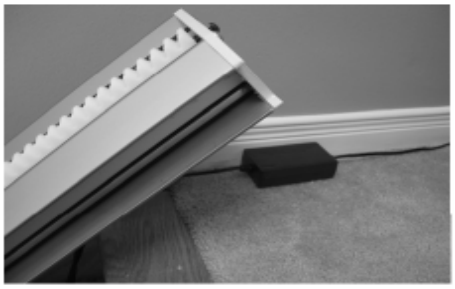
CHASSIS INSTALLATION



Install one of the rack pre-compression screws, and tighten it as firmly as possible by hand with a 5/32" Allen wrench.
There are 3 pre-compression screws:
1/2" – for tracks under 6'
3/4" – for tracks between 6' and 12'
1" – for tracks over 12'

Plug in the Battery Charger at either end of the rail depending on the closest or most convenient location of a wall power supply. Minimize wire length and intrusion.

Use electrical tape to secure charger plug and jack.



FOOTREST & SEAT INSTALLATION

Use the installation switch to drive the chassis downward to a position about 6" clear of the floor. This will provide a safe area to install and adjust the footrest and seat. Do not drive unit into bottom stop.
Position the footrest onto the 2 seat leveling bolts by aligning the large opening at the slot ends.

Ensure that the footrest is fully engaged.

Tightly secure the two seat-leveling bolts.

RAIL INSTALLATION

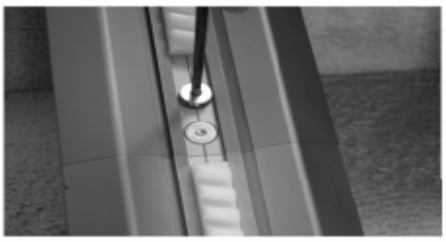
Install the Rail Brackets by placing one bracket edge into the rail slot and snapping the other bracket edge into the other slot.

The brackets are tightened from one side only. It is important that the bracket be installed with the screw side facing the stringer (or wall). When the rail is turned over to its correct orientation, the screws will be accessible.

For double rails, the Rail brackets should be placed (1) on the first step, (2 & 3) on the step either side of the rail joint, (4) on the first step closest to the landing.

For single rails, the Rail brackets should be placed (1) on the first step, (2) on the first step closest to the landing.

The bracket axle in the bracket base should be pre-positioned with the nose of each step. When the rail is turned over, the brackets will be lined up correctly.



Turn the rail right side up (plastic rack facing up)

Install the 2 joint fasteners and firmly tighten with 5/16” Allen wrench (top side).

Move the pre-installed plastic rack from the top rail towards the bottom to close up the gaps. Do not add extra plastic rack at this time.

The underside of the rail must be at least 2” above the stair tread nose to provide clearance for the footrest.

Position the bottom bracket and lightly tighten the bracket screws to hold the bracket in position.

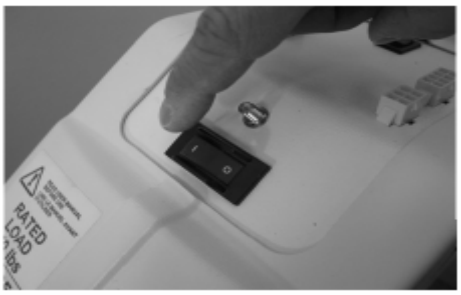
Position the top bracket and lightly tighten the bracket screws to hold the bracket in position ensuring that the rail is at least 2” from the nose of each step.

For double rails, adjust the 2 centre brackets to touch the stair tread ensuring that the total rail is straight and parallel to the stairs. Again, check the 2” nose clearance.

CHASSIS INSTALLATION

Remove plastic bag. Lift the CHASSIS (with the RED ON/ OFF Switch facing down the stairs) and gently slide the chassis onto the rail until it makes contact with the plastic rack. Do not let the chassis free fall down the rail.

Be careful not to trap fingers between the rail and chassis.



Remove the safety tie and turn the RED ON/OFF Switch to the ON position (1)

Use the Installation Switch to move the chassis at least 2 feet down the rail, pushing gently on the chassis to ensure the chassis does not pull any rack to the top.

Align the 4 seat leveling bolts (2 on each side of chassis) to a vertical position using a level.

Firmly tighten the 2 bolts on the backside of the chassis only.

Loosen the remaining 2 seat leveling bolts approximately ½”.

Position the rail so that the edges of the mounting brackets are clear of the outermost projection of the wall. Fixtures such as doors, windows, pictures and other obstructions must be taken into account. The vertical ‘plumbness’ and ‘squareness’ of the wall must also be reviewed.

The edge of the rail bracket gives an indication of the extent of the chair back can be placed against the wall to minimize intrusion into the stairs.

The edge of the bracket is generally placed as close to the stringer as possible. This varies approximately between 1/2” to 1-1/2” from the wall. If there is no stringer, place the bracket 1/2” from the wall.

CHASSIS INSTALLATION

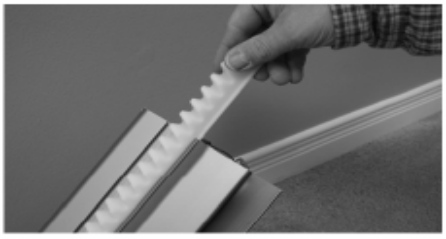
Install and fully tighten the rail bracket mounting screws (4 screws per bracket).

For hardwood stairs, a pilot hole should be drilled first.

For plywood or particle board stairs, care must be taken to prevent stripping.

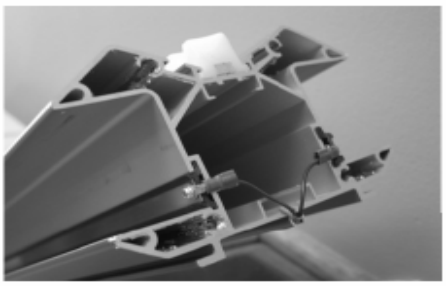
Fully tighten and secure the bracket screws (2 screws per bracket)

Install the remaining plastic rack pieces.



Using a hacksaw or chop saw, cut the last plastic rack piece flush with the rail end.

The exposed, cut end of the rack should be facing out the end of the rail. Place a piece of plastic on the floor to catch debris or, mark and cut the rack outside.



Install the top Limit cam and tighten with a 5/64” Allen wrench. This will be used to set the final upper and lower limits for the stairlift.

Install the end plate with the 4 self-cutting Torx screws.

Too much torque applied to these screws may result in damage. Take your time. Apply grease to threads.

CONTACT INFORMATION

If you have any questions about the manufacture, installation or operation of this equipment, please contact your local Authorized Dealer or Summit Lifts.

18505 E 163rd St.
Lake Winnebago, MO 64034
Toll Free: 866-378-6648
Fax: 816-537-0641
Email: info@summitlifts.com Website: www.summitlifts.com