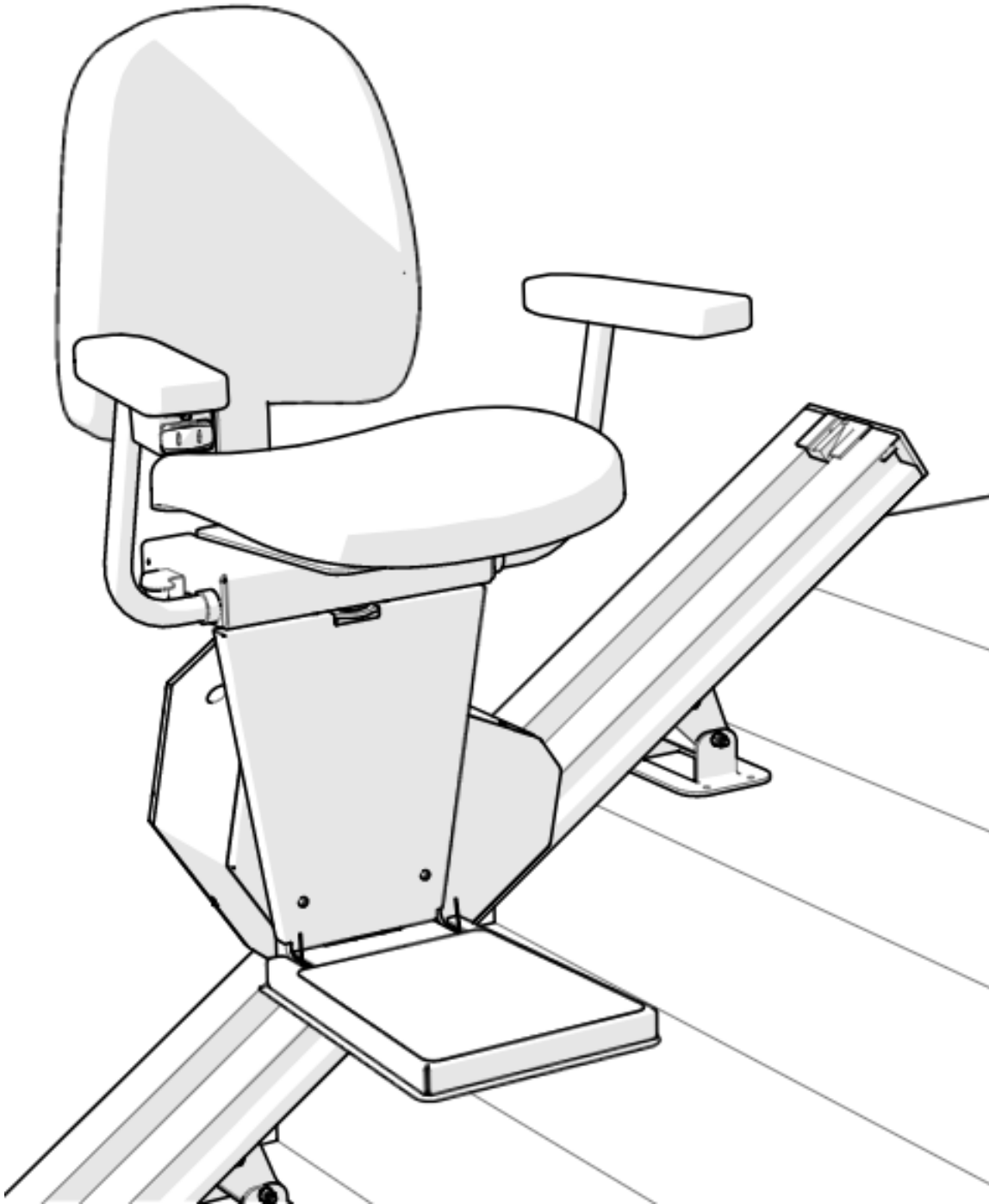


Crest HD Installation Manual

December 10, 2024



Preliminary Checks

Installation Site Requirements

- ___ 120 VAC, 60 Hz, 3-wire grounded outlet within 6' of the top of the staircase.
 - * Some states may require dedicated outlet.
- ___ Stair angle between 25° and 45°.
- ___ Indoor installation.

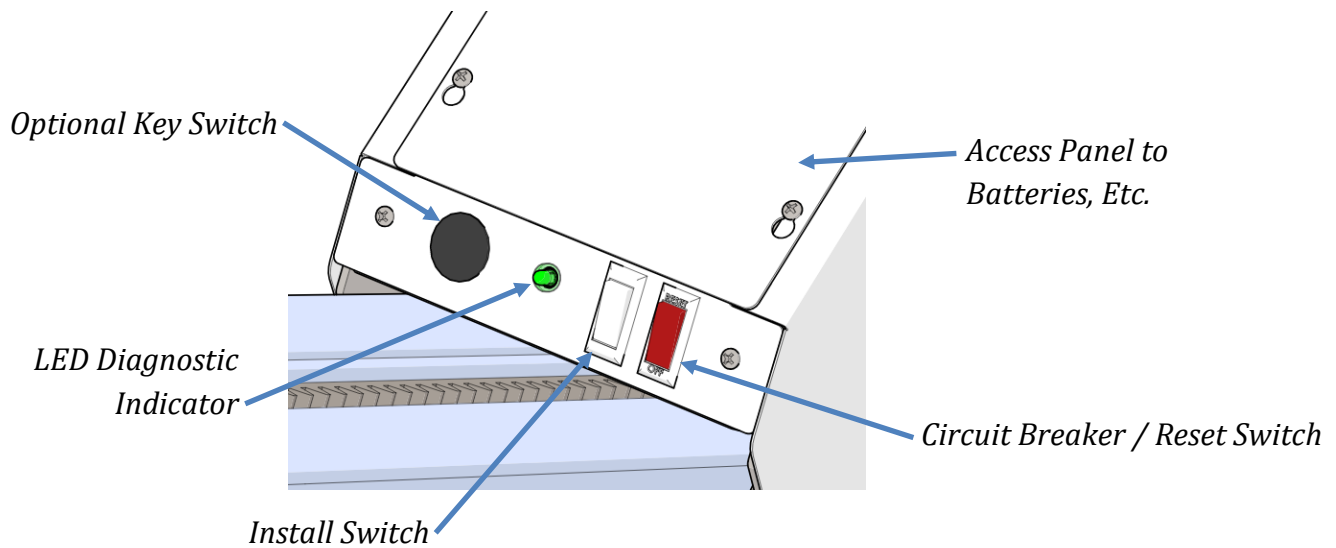
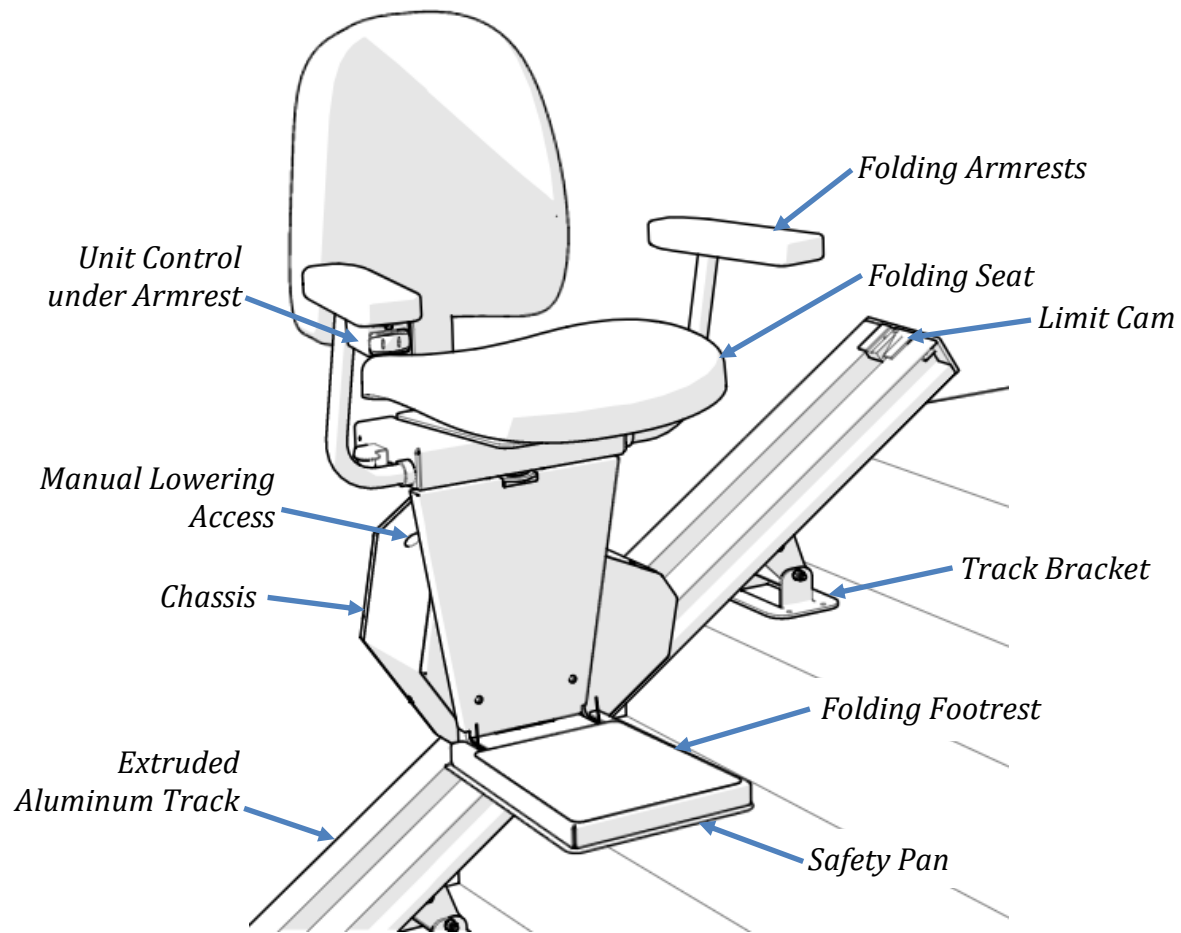
Included with Shipment

- ___ Aluminum track with gear rack and splice bars
- ___ (4-6) Track mounting brackets
- ___ Chassis
- ___ (2) Plastic cams
- ___ Footrest
- ___ Seat
- ___ Battery Charger with 6' cord
- ___ Header cover
- ___ Upper and lower track end caps
- ___ (2) Wireless call/send key fobs
- ___ Small parts bag
- ___ Installation Manual
- ___ Owner's Manual

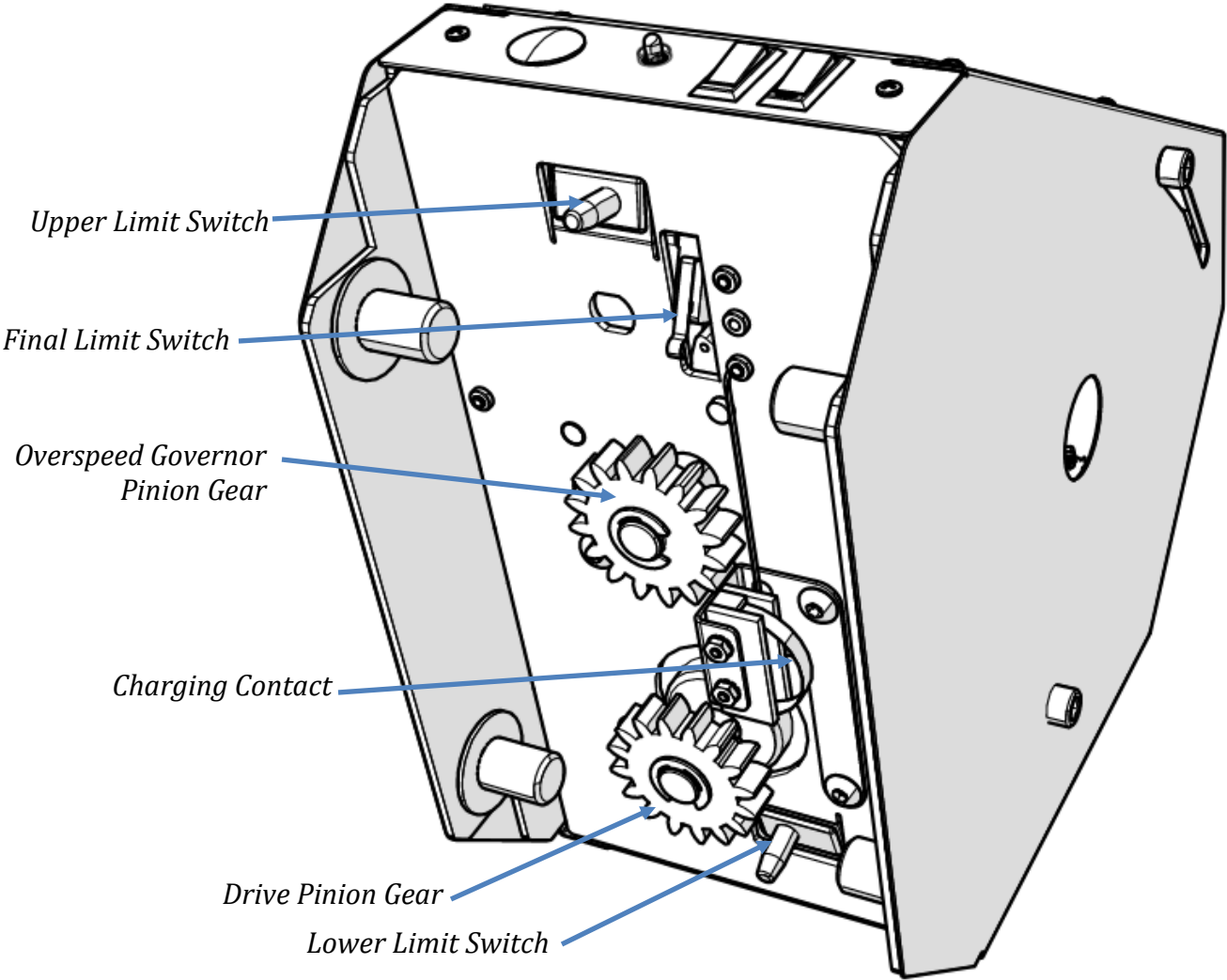
Tools Required

- ___ Set of nut driver bits
- ___ Set of screwdrivers (phillips)
- ___ Tape measure
- ___ 3/8" reversible drill w/8" extension
- ___ Allen wrenches
- ___ Portable band saw or hack saw
(for cutting stock track)
- ___ Small level
- ___ Combination wrench (7/16" & 1/2")
- ___ Tools to remove handrail if interferes
with the travel of the stair lift

Typical Components



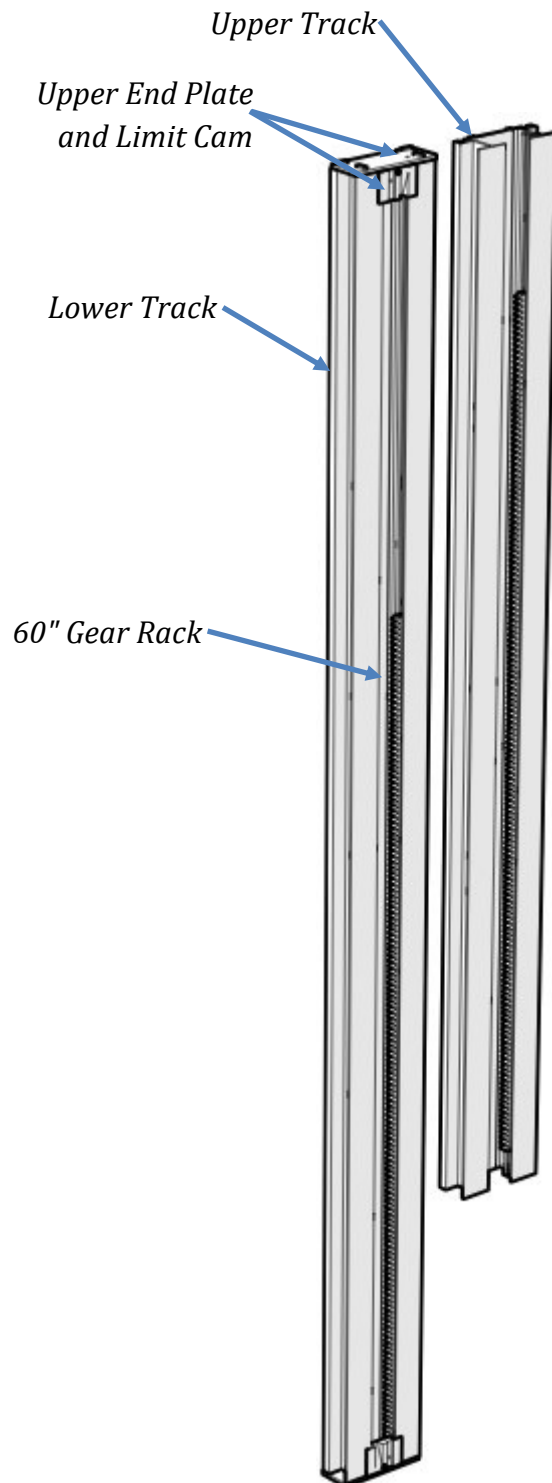
Underside of Chassis



Identify Track Pieces

Remove the upper end plate and limit cam from the top end of the lower track.

Red paint on the end of the gear racks indicates that end has been precision machined. Only butt-up the ends of gear racks that are red. If the end is not painted, it must be put toward the end of the track.



Installation Procedures for Stock Units

Track Installation: Track and rack should be cut **before** installing them on the staircase

If your track was factory cut, skip ahead to page 7.

Tracks are packaged in individual boxes. Generally, 2-3 sections of track along with steel gear racks are included. Based on the overall track length, there are (4-6) track mounting brackets and splice bar sets located in a small parts box in the seat box.

Note: The upper and lower ends of the track sections are marked top & bottom. *The gear racks and charge strips are already inserted in the track.*

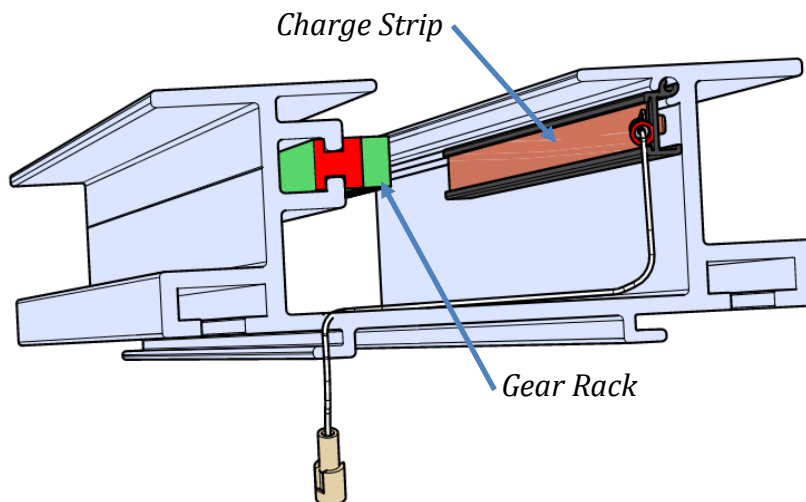
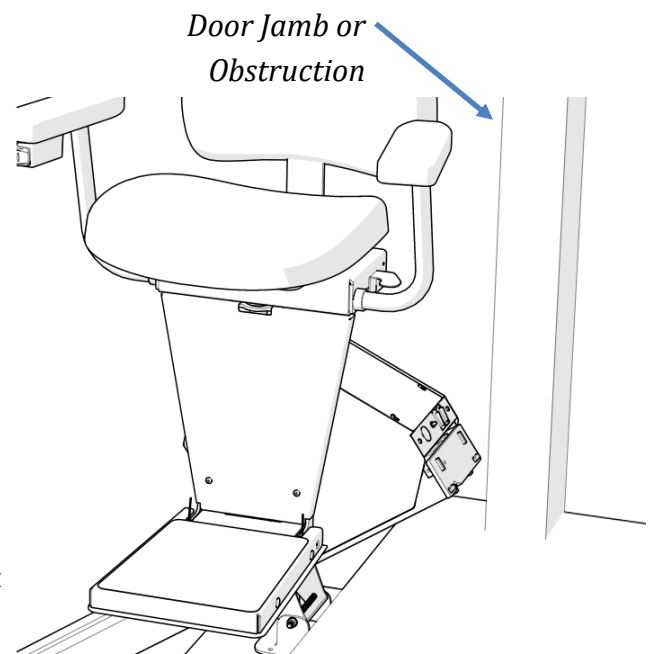
Look up the stairs and determine if the track is to be installed on the left side or right side. The gear rack should always be located on the right side of the track regardless of which side of the stairs the track is mounted.

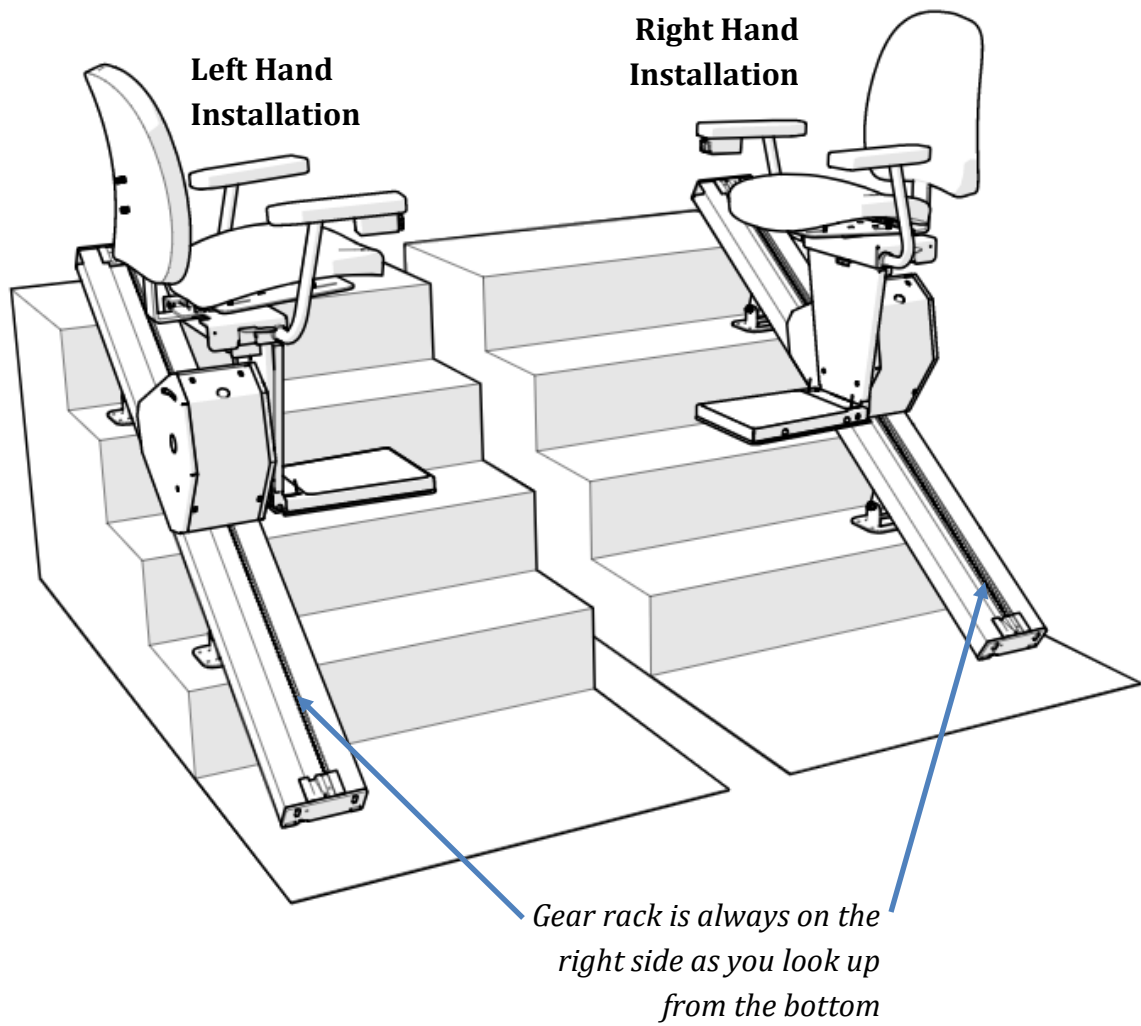
Measure the distance from the top nose of the staircase to the bottom floor and add 7" (*note: be sure to verify clearance from top nose to any obstruction at the top such as a door or door frame that would cause the chair to hit or block the seat from swiveling.*) It may be necessary to ramp the track away from the obstruction, consult factory for assistance if needed.

Note: The minimum track length for the upper track is 38". If your total track length is less than 128", you need to cut an amount off the bottom end of the lower track to compensate for the 38" upper track. *If the upper track is less than 38", the track splice pin will interfere with the charge strip.*

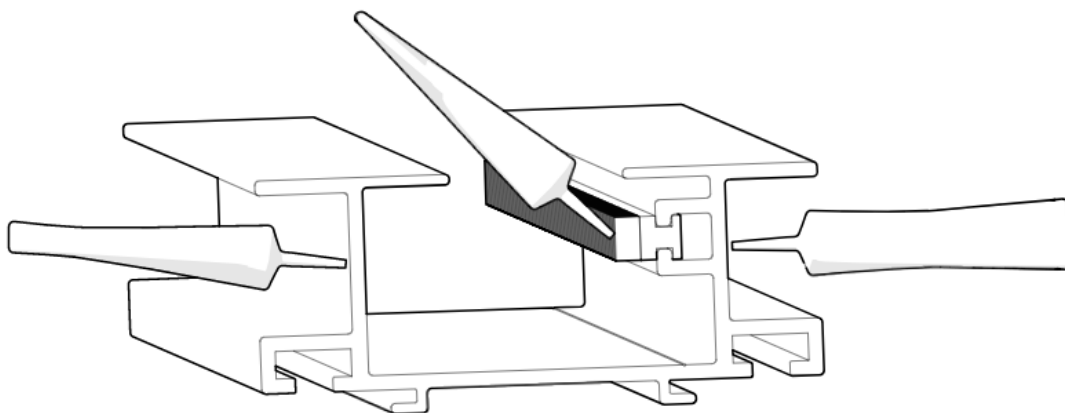
Do not cut through the charge strip, remove or slide it out of the way. Cut the track at the top, leaving the factory cuts at all other sections.

Cut the gear rack flush with the top of track.





Apply a light coat of lithium grease on the gear rack and vertical sides of the track .



Splice Track Pieces Together

The splice bars for this task are in the small parts box. First, check all the edges of your outside C-channels for any burrs. Any burrs should be filed down before splicing your tracks.

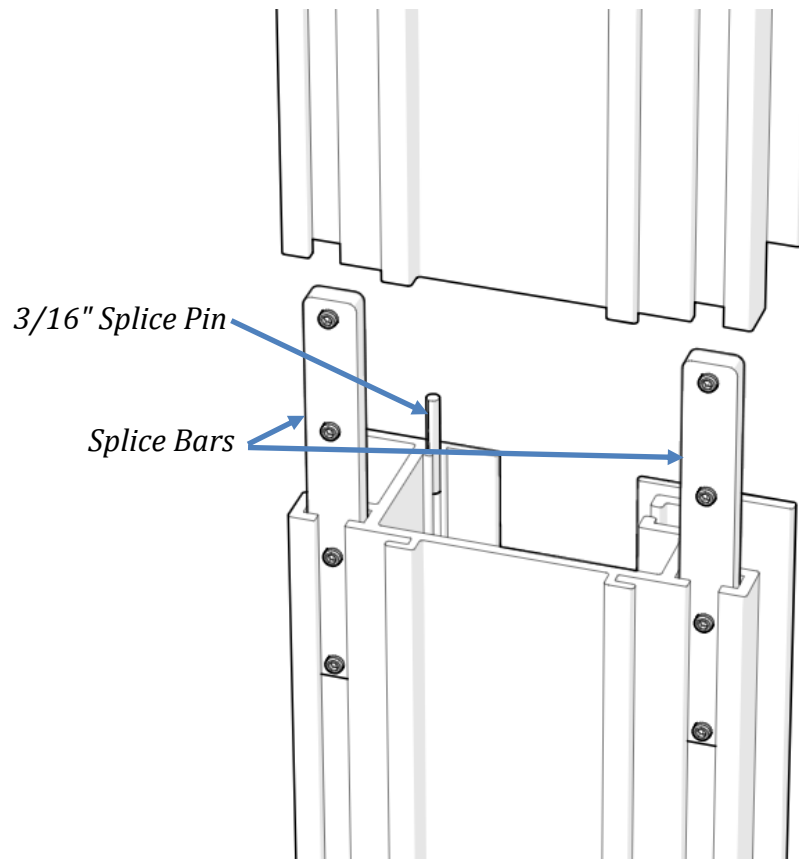
The splice bars are best used when they are half way inserted into one track.

Tighten the set screws on the bars.

Tap the large end of your 3/16" pin halfway into one of your tracks.

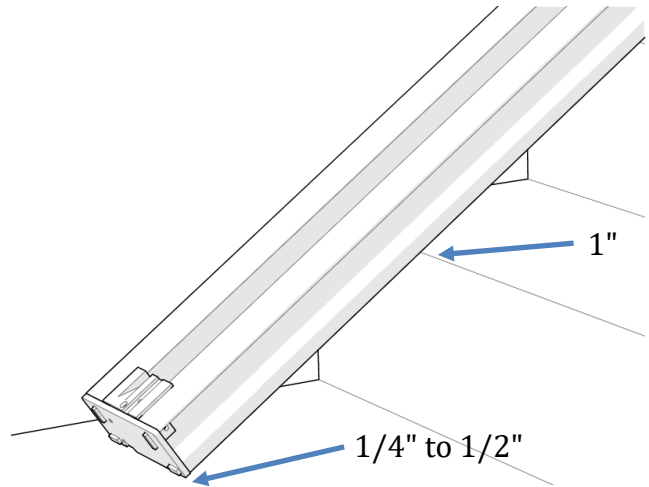
Take your other track, and slide it onto the splice. Be sure that the two track pieces line up on every side.

Then, tighten the rest of the set screws, which will lock everything together. Finally, run your finger along the outer edges of the tracks to make sure there aren't any significant edges protruding. If there are, you can separate the tracks slightly and realign them if necessary.



Secure the Track to the Stair Treads

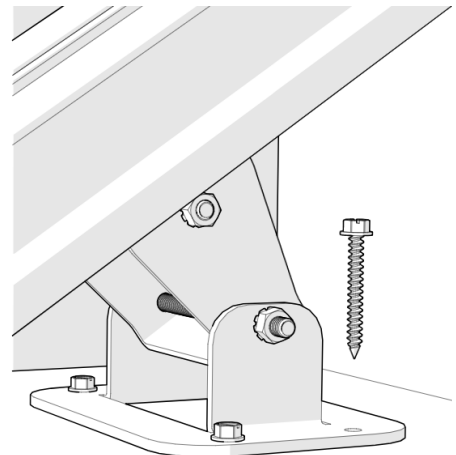
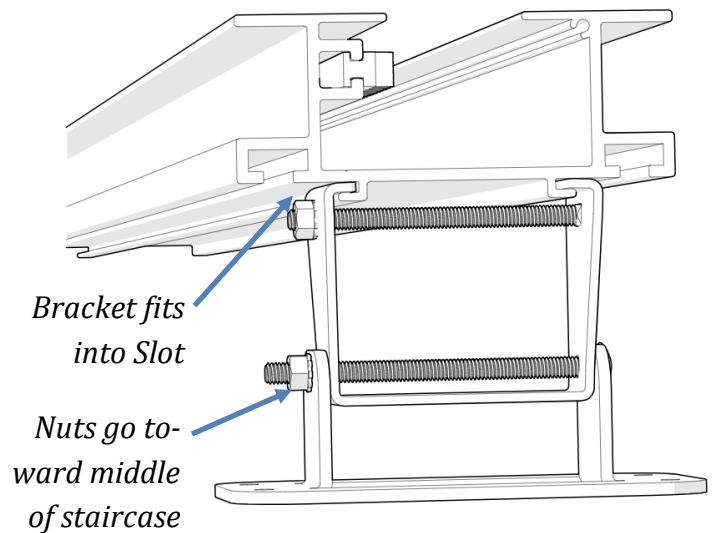
When the track is installed, there should be a 1" gap between the underside of the track and the stair nosings and 1/4" to 1/2" off the lower landing floor. The track should be at least 4" away from the wall or other obstruction.



Install rail brackets by loosening the screws and snapping each bracket edge into the slot or slide the brackets on from the top of the rail. The rail brackets are designed to lean the track toward the wall to offset the weight of the unit and user, therefore, the nuts on brackets should be on the staircase side (toward the middle of the staircase).

Place one bracket on first tread, one on the top tread, and one bracket immediately above and below each splice. Then use the other brackets to support any section of track left unsupported and measuring greater than 48".

Fasten each bracket to the treads with (4) #14 X 2" hex head lag screws.



Insert the Chassis into the Track

To make it easy to slide the chassis into the track, remove the top section of the gear rack.

Remove any tape or packing material used to secure the glide blocks on the chassis axles.

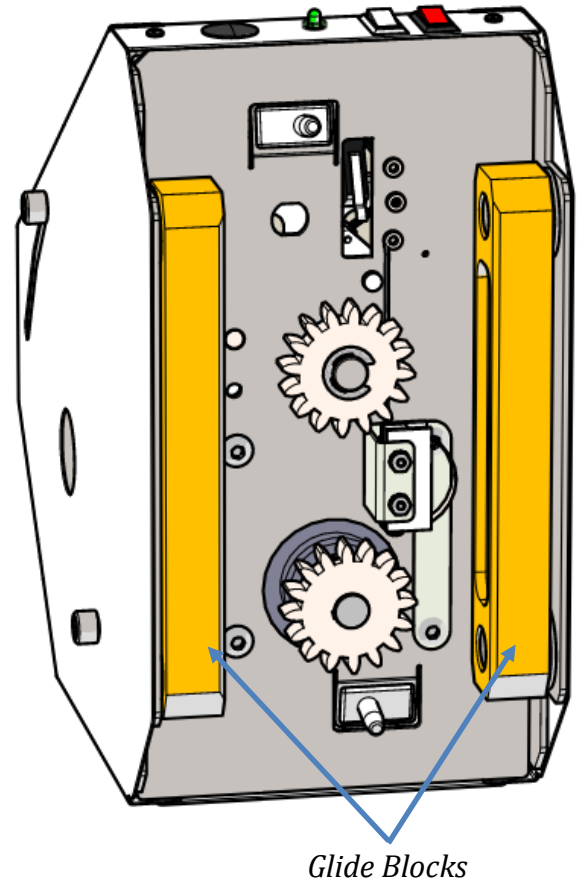
Now, you can insert the chassis into the top of the track.

Remove the access panel on the chassis and connect the black negative battery wire to the negative battery terminal. To do this, loosen the four screws on the top of the chassis.

Turn the red RESET/OFF switch to the RESET position. The LED indicator should turn red-yellow-green and then the lift should beep one time. The chassis is now ready to be lowered onto the gear rack using the black INSTALLATION SWITCH on top of the chassis.

Run the chassis down the track until it reaches the lower limit.

Replace the top piece of gear rack in the track.

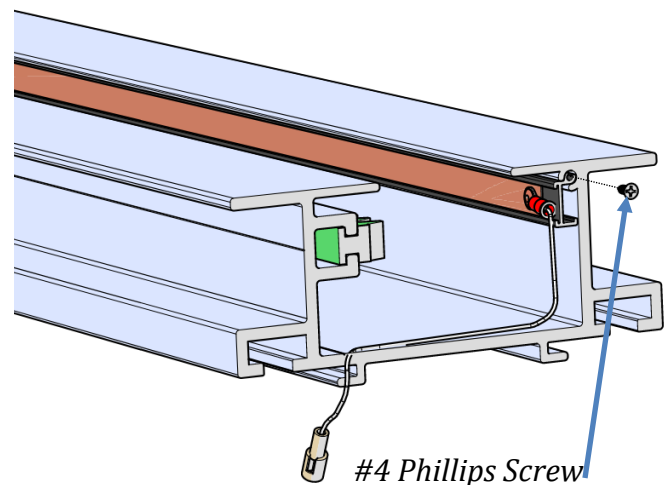


Setup Charging System

If you cut your track at the top, slide the charge strip to where the ends of the track and charge strip are flush. Secure with a #4 x 3/8" sheet metal screw.

Caution

The battery charger is not weather resistant. If installing outdoors, we recommend that the charger be placed inside a weather tight enclosure.



Place the upper limit cam inside the track and secure by tightening the phillips head screw.

Please note that the charge wire must be routed through the slot in the bottom of the end plate while it is placed onto the end of the track. Please also tighten the set screws in the end plate.

Once the end plate is secured to the end of the track, apply adhesive back tape to the underside of the end cap before placing the end cap onto the end plate and pressing firmly to secure.

Insert the gear rack compression screw and tighten to compress the gear rack pieces together. The screw must make contact with the gear rack. If the screw is too short, there is a longer one with the small parts.

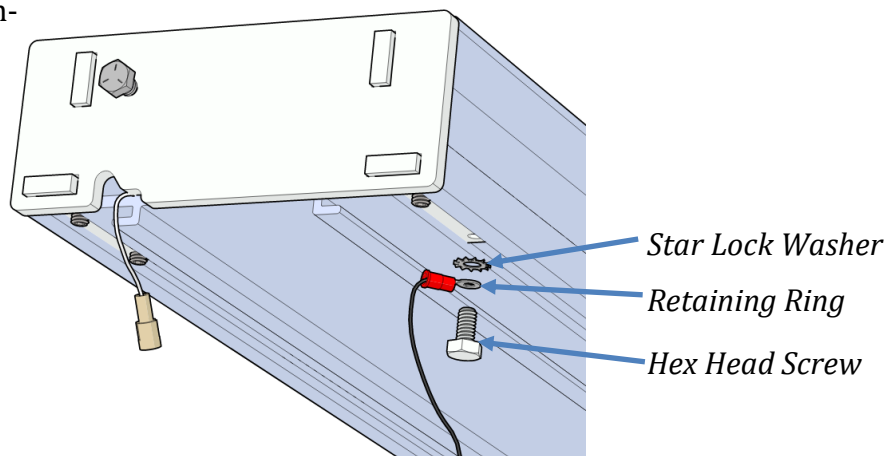
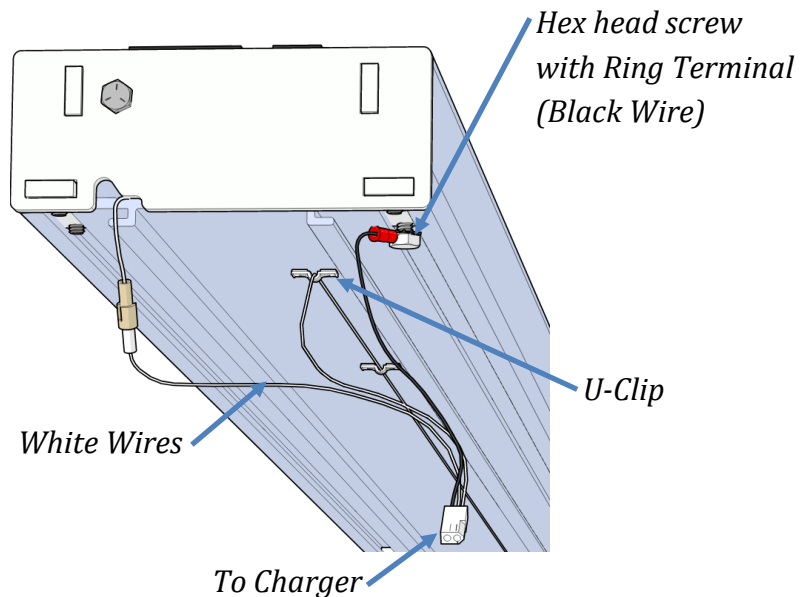
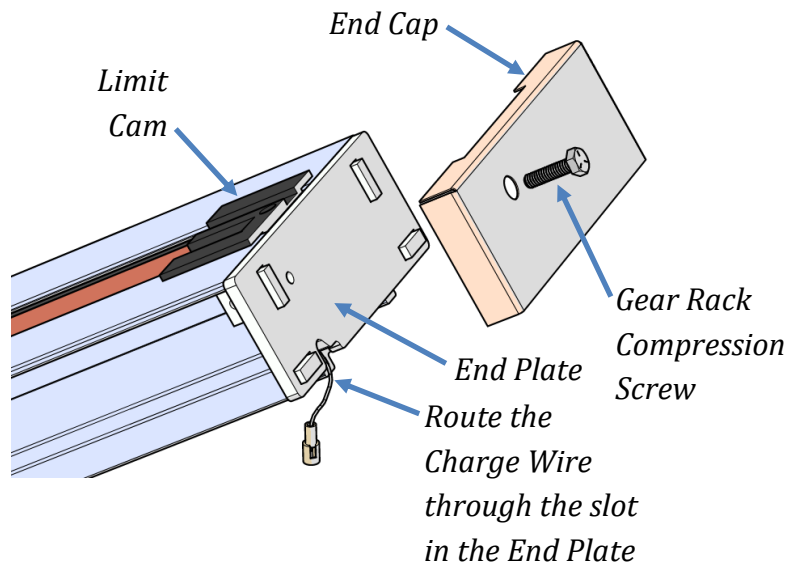
The battery charger can be placed at the top or bottom of the track. *The illustration shows the charger being at the top end of the track.*

Connect the short white wire to the mating connector from the top charge strip.

Route the long white wire to the bottom of the track and connect it to the mating connector from the bottom charge strip. *Adhesive back U-clips are provided to be applied to the bottom of the track for wire routing.*

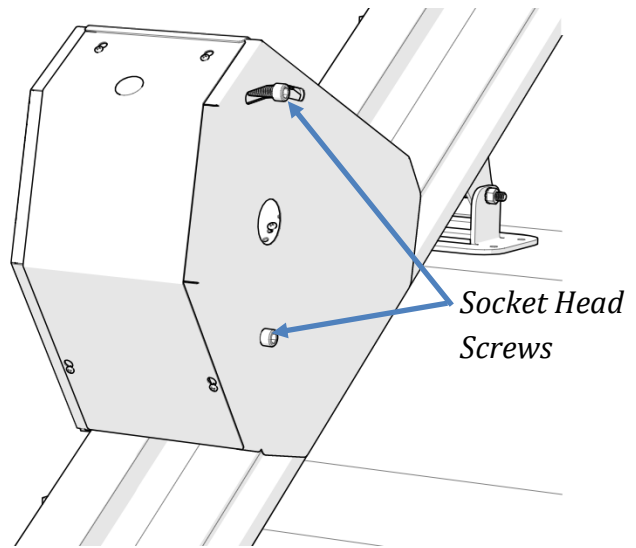
Remove the hex head screw and star lock washer from the bottom of the end plate and connect the black wire to the end plate. Connect the harness to the charger.

Plug the charger into 120V outlet.

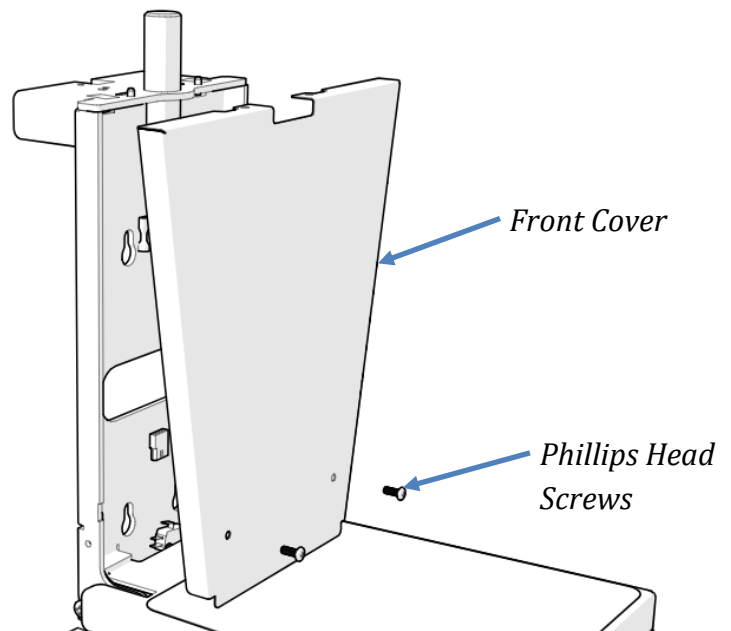


Attach Footrest

Loosen the (4) socket head screws on the sides of the chassis (2 on each side).



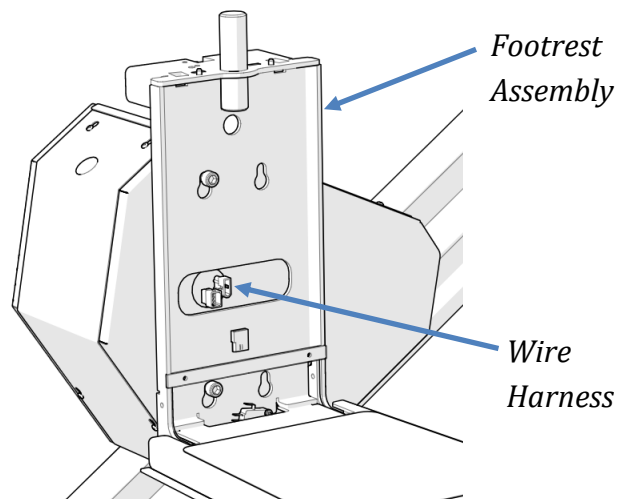
Temporarily remove the front cover from the footrest assembly (two phillips head screws).



Place the footrest assembly onto the two socket head screws on the chassis. Use the keyhole pattern that offsets the footrest assembly toward the top end of the chassis.

Connect the wire harnesses between the chassis and footrest assembly.

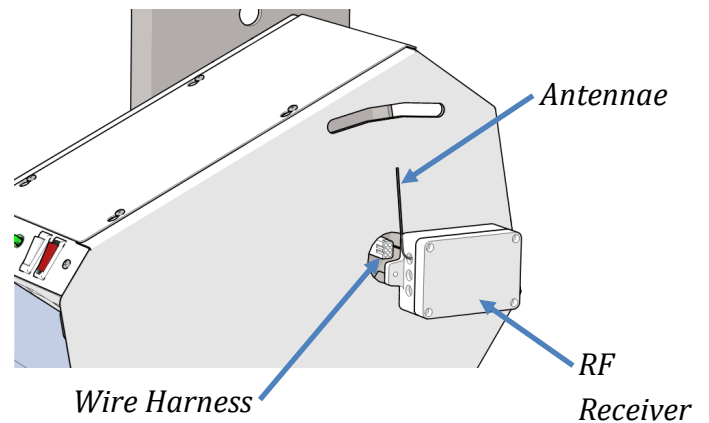
Level the footrest and tighten the (4) socket head screws (2 in front and 2 on back). *Note that the ETL listing is valid only when the track installed at maximum angle of 45°.*



Connect Wireless Receiver

Connect the wire harness from the RF wireless receiver to the mating connector on the backside of the chassis. Tuck the excess wiring into the opening in the chassis and mount the RF receiver to the chassis with the adhesive foam tape.

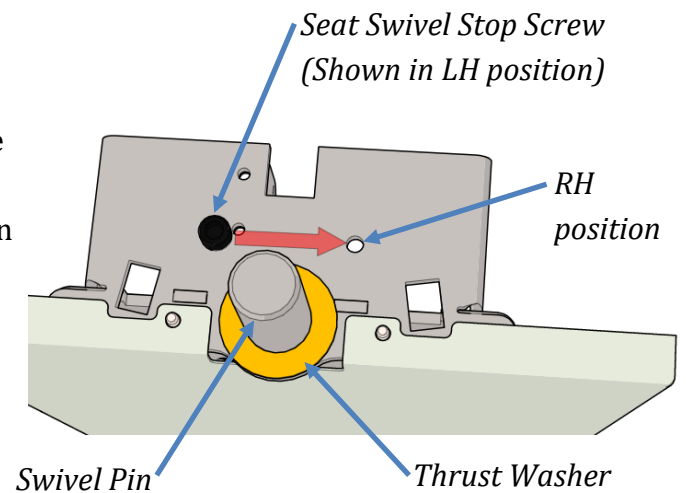
Adjust the position of the antennae as necessary.



Attach Seat

The swivel stop is factory set for a left-hand unit. If the lift is installed on the right-hand side of the staircase, move the seat swivel stop screw to the opposite hole on top of the footrest assembly.

Place the plastic thrust washer onto the swivel pin.



Place the seat assembly onto the swivel pin. It may be necessary to lubricate the swivel pin.

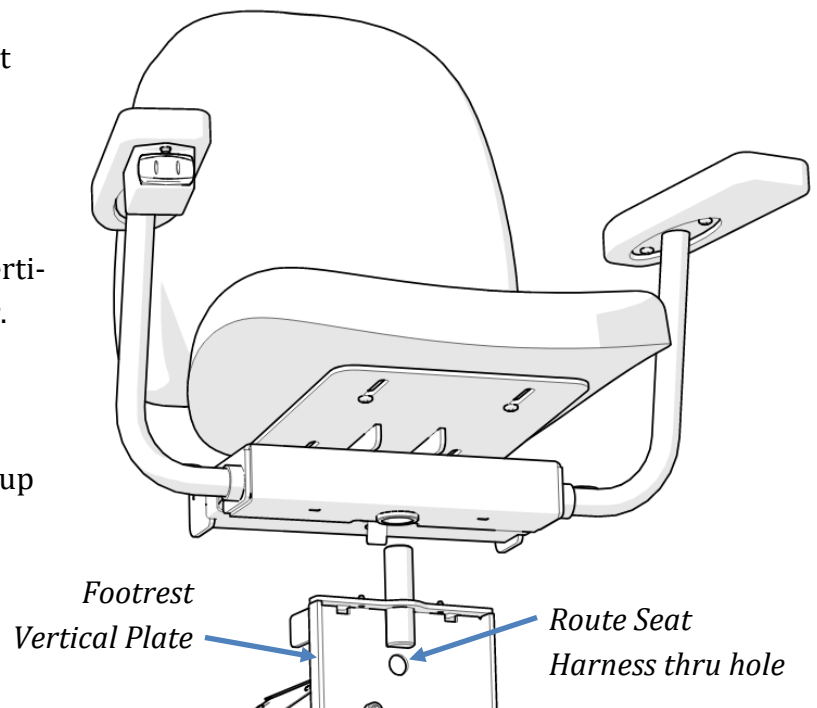
Verify the seat swivels the proper direction.

Route the wire harness from the seat control through the hole in the back of the footrest vertical plate and connect to the mating connector.

Replace the front cover on the footrest assembly.

Turn on the red RESET/OFF switch to power up the chassis located on the top of chassis.

The lift can now be operated by the unit control and the wireless key fobs.



RF Remote Call-Send Controls

The two key fobs (transmitters) have been factory programmed.

If you are installing two lifts in the same home, it is not necessary to change the program. However, two lifts cannot be operated from the remote fobs at the same time. Each transmitter and receiver is unique and has its own rolling code.

If a key fob needs to be programmed:

1. Press the program button on the RF receiver 5 times until the letter **A** is displayed. There should now be a slow flashing dot on the display.
2. Press and hold either button on one of the transmitters and then release when the dot flashes faster.
3. Repeat step 2 for each additional transmitter.

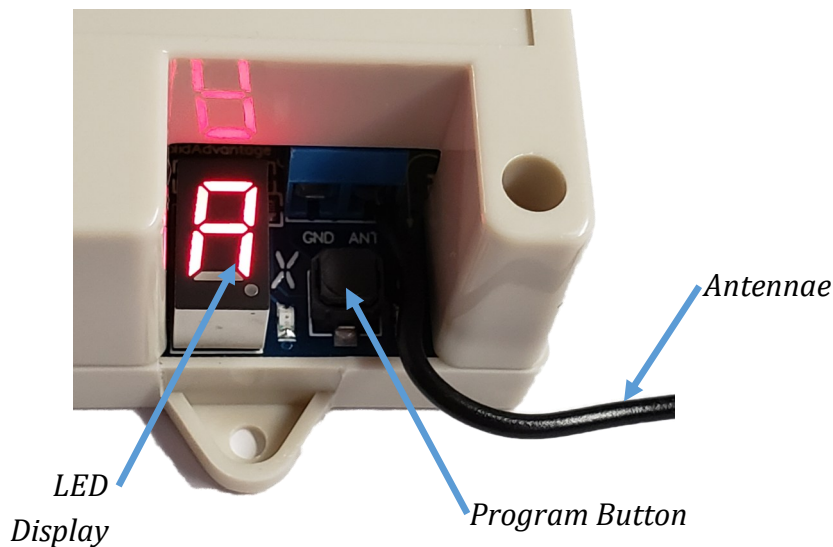
After the last transmitter is programmed, the LED display will go off and the transmitters can be tested.



RF Receiver #74033



*Key Fob Transmitter
#74034*



AUDIO/VISUAL STATUS INDICATIONS

The lift is equipped with a chassis mounted 3-color LED display light to indicate the operating condition of the lift. Accompanying this is an audible alarm that will sound accordingly.

STATUS LIGHT	AUDIBLE ALARM	CONDITION
RED-YELLOW-GREEN	1 Second beep	Power-up Cycle
SOLID GREEN	None	Ready to Operate
YELLOW BLINK	1/4 Second beep (30 Seconds)	Batteries are not being charged (Beeping repeats every 10 minutes)
YELLOW PULSE	1/2 Second beep (5 Minutes)	Low Battery Voltage (under 22.5 volts)
2 YELLOW FLASHES	1/2 Second beep	Seat Swivel Latch Sensor
3 YELLOW FLASHES	1/2 Second beep	Footrest Obstruction Sensor
2 RED FLASHES*	3 Second beep	Sensor Fault (2 or more sensors engaged)
3 RED FLASHES*	3 Second beep	Final Limit
4 RED FLASHES*	3 Second beep	Travel Timeout (Motor running for more than 2-1/2 minutes)
5 RED FLASHES*		Overspeed Governor Set
YELLOW SOLID (30 SECONDS)	1/2 Second beep (30 Seconds)	Overload (Over 22 amps for 3 seconds)
RED SOLID (3 SECONDS)	3 Second beep	Key turned off while traveling(Optional)
OFF (SLEEP)*	None	Very Low Battery Voltage (Under 20.5 Volts for 5 minutes)

FLASH = 2 per second

BLINK = 1 per second

PULSE = 1 per 10 seconds

*Requires power to be cycled OFF/ON.

Completion Procedures

Completion Checklist

The following features must be verified as operational before the stair lift can be released for use:

- _____ **Upper and lower limits:** Verify the lift stops automatically at the top and bottom of the track.
- _____ **Charger:** Verify that the light on the charger changes from green to amber when the lift is running.
- _____ **Running Clearance:** Verify the lift clears all obstructions.
- _____ **Unit Control:** Verify control functions in both directions.
- _____ **Call/Send Remotes:** Verify both call/send controls operate the lift up and down in the appropriate direction.

Track:

- _____ **Important: Top Track End Plate:** It is imperative the 6 small set screws under the top track end plate are very tight.
- _____ **Important: Lower Track End Plate:** It is imperative the 6 small set screws under the lower track end plate are very tight.
- _____ **Track Mounting Brackets:** Verify all track mounting brackets are securely attached to the stair treads, the track and at the pivot points.
- _____ **Track Splice:** Verify track joints are smooth and free of burrs and gaps.
- _____ Verify the rack tension screw is tight.
- _____ Verify chassis gear and rack is tight and no excess play.
- _____ **Verify the gear rack is lubricated with lithium or other all-purpose grease** (tube of lubricant is provided)
- _____ Verify the top track cover is securely fastened to the track.
- _____ Verify the inside of the track is free of foreign objects.

Footrest:

- _____ Verify the footrest is level.
- _____ Verify the footrest clears all stair nose.
- _____ Verify the lift stops when the footrest runs into an obstruction in the up direction.
- _____ Verify the lift will run down while the footrest is obstructed.
- _____ Verify the footrest folds up and stays in the up position.

Seat:

- _____ Verify the seat is level and securely fastened.
- _____ Verify seatbelt & buckle are secure and function.
- _____ Verify the seat swivels toward the upper landing and locks into position.
- _____ Verify the lift will not operate when the seat is not locked in the riding position.
- _____ Verify the seat will fold up and stay in the up position.
- _____ Verify both arms will fold up and stay in the up position.
- _____ **Clean Up:** Verify the stair lift has all grease, dirt, etc. cleaned off.

Before leaving the jobsite:

- _____ Clean up work area.
- _____ Assist customer on how to use the unit and ride it properly.
- _____ Demonstrate proper operation, seatbelt use, lubrication and maintenance procedures to the user of the lift and other family members at the residence.
- _____ Give customer a copy of the Owner's Manual for reference. Please take time to insert your business card or write your company name, address and telephone number inside the Owner's Manual in the area provided.