Read and understand this manual thoroughly before attempting to install or operate the lift. If you have any questions, please contact your Authorized AmeriGlide Dealer or AmeriGlide's Technical Service Department.

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READ AND UNDERSTAND THIS MANUAL PRIOR TO INSTALLATION OR OPERATION.

Please read, follow, and fully understand the installation section of this manual before beginning. Knowing the lift’s adjustments and the tips on proper installation and operation techniques will save time, energy and avoid possible injury. If you do not understand any portion of installation or operation, please consult our technical service department.

SYMBOLS USED IN THIS MANUAL

READ MANUAL - Pay close attention to the instructions in the manual.

CAUTION - Hazardous situation. If not avoided, could result in serious damage to property.

WARNING - Hazardous situation. If not avoided, could result in serious injury to installer or user.

SHOCK WARNING - Disconnect from power source to avoid personal injury.

HEAVY - Be sure to have help available to avoid back injury.

TIP - Helpful tips that will facilitate ease of installation.

CHECK - Reminder to check certain portions of installation before continuing.

INDICATIONS OF USE STATEMENT

The Rave and Escort Stair Lifts assist with the transfer of patients or mobility impaired persons, up and down between levels of a residential or private facility.
INSTALLATION AND APPLICATION NOTES

INCLINE
The maximum inclination (angle) the Escort or Rave lift can be installed is 45 degrees.
The minimum inclination (angle) the Escort or Rave lift can be installed is 25 degrees.

MAXIMUM RAIL LENGTH
32 Feet

LOAD CAPACITY
The maximum load capacity is 300 lbs.
The lift is not to be used to transport cargo.

ELECTRICAL POWER SUPPLY REQUIREMENTS
A dedicated 120 VAC 15A 60Hz, 3-wire grounded outlet. NEC requirement.
Electrical equipment shall be certified to the requirements of CAN/CSA B44.1/ASME A17.5.

ASME 18.1 REQUIREMENTS INSTALLATION REGULATIONS
The Escort or Rave lift is an incline stairway chairlift for private residence use only.
Installation of this lift must comply to the following American Society of Mechanical Engineers ASME 18.1 – 2011 standards.

• 7.1.1 The structure on which the equipment is installed shall be capable of safely supporting the loads imposed.
• 7.1.2 The installation of all electrical equipment and wiring shall conform to the requirements ANSI/NFPA 70.
• 7.6.4 At no point in its travel shall the edge of the footrest facing the upper landing be more than 24 in. above the step or landing as measured vertically.
PREPARATION

TOOL CHECKLIST

- 1/2 inch Combination Wrench
- Ratchet with 1/2, 5/16 and 1/4 inch Hex Sockets
- 6 inch long Ratchet Extension
- Stub Screwdriver - #2 size phillips tip
- Measuring Tape or Ruler
- Level
- 3/8” Power Drill
- Safety Glasses
WHAT’S IN THE BOX

Box 1
- Stair Lift Chassis
- 2 Remote Controls with Batteries
- Installation Manual
- Owners Manual
- Warranty Registration Card
- Rail Mounting Brackets
- Power Supply & Power Cord
- Limit Cams
- 7 mm Manual Lowering Device
- Timing Gear Rack
- 3/32 Hex Wrench
- Tube of gear lubricant

Box 2
- Seat Assembly

Box 3
- 2 Aluminum Rails (Installations over 16 feet will be shipped with 3 or 4 rails, depending on installation requirements)
- 2 Splice Bars (Installations over 16 feet will be shipped with 4 or 6 splice bars, depending on installation requirements)
- 2 Rail End Covers
- 2 Charging Stations (Installed on rails)
- Gear Rack (Installed on rail)
The following sections are instructions for installing the rail and adjusting the gear rack for lifts that have been shipped with pre-cut rails and gears. If your rail and gear require customization you MUST read and follow the instructions in Appendix I and II before continuing.

**IMPORTANT!**

Each section of rail must be mounted with two mounting brackets.

A mounting bracket must be placed on the next step directly above and below the rail splice joint.

Teeth of the gear rack must face toward the wall nearest to where the lift will be installed.

The rail should be installed 5 in. (Escort) or 6 in. (Rave) away from walls or obstructions.

1. Splice bars are inserted in one end of one rail section. Loosen the set screws with the provided 3/32 hex tool. Slide the splice bar half-way out and re-tighten the set screws. *[Figure 6-1 and 6-2]*

![Figure 6-1](before.png)  
**BEFORE**  

![Figure 6-2](after.png)  
**AFTER**
2. Position the two ends of the rails close together. Connect the plugs on each end of the two power supply wires inside the rail pieces. [*Figure 7-1 and 7-2*]

3. Tuck the wire back into the rail channel

4. Slide the rail onto the splice bars and tighten all splice bar screws. [*Figure 7-3*]

   **CAUTION**

   *Be careful not to pinch wires when sliding rails together.*

5. Slide rail mounting brackets onto rail to the approximate locations shown [*Figure 7-4 and 7-5*]. Exact positions of brackets will be determined later.

   **NOTE:** The nut side of bracket goes toward the wall side.
6. Install lower limit cam onto rail. [Figure 8-1]

7. Position the end of the cam at 1-3/4” within the end of the rail. Secure the limit cams with (2) 10-24 screws and square nuts (provided). [Figure 8-2]

TIP The position of the limit cam can be adjusted later if needed.

8. Install an end cap onto the end of the lower rail before placing the lower rail onto the staircase. Secure the end cap with the provided screws. [Figure 8-3]

NOTE: The installed rail can set directly on the stair nosing.
ADJUSTING THE GEAR RACK

1. Loosen the splice bars just enough to allow for some play between the rails.

2. Loosen all of the screws in the gear rack using the 3/32" hex wrench included with the lift [Figure 9-1]. (Do not remove the screws)

3. Position the lower gear rack to the correct end of rail spacing dimension (shown below). [Figure 9-2 and 9-3]

**BOTTOM GEAR SPACING**

Left hand installation = 9 in. maximum
Right hand installation = 1-1/2 in. maximum

**TOP GEAR SPACING**

Left hand installation = 1-1/2 in. maximum
Right hand installation = 9 in. maximum

Left Hand Install Shown

Left Hand Install Shown
4. Tighten all screws in the gear rack

5. After securing the lower gear rack, slide the next gear rack against the lower gear rack. Bridge the mating ends of each gear with the timing tool.

6. With the timing tool engaged in teeth of both gear sections, tighten the upper gear rack to the rail. [Figure 11-1 and 11-2]

7. Repeat with remaining gear rack pieces.

8. Retighten all the splice bars screws.

☐ ALL GEAR RACK MOUNTING SCREWS ARE SECURE
☐ TOP AND BOTTOM GEAR RACK SPACING IS CORRECT
INSTALLING THE RAIL

1. Set the lower section of rail onto the steps. The bottom of the rail should be resting on the stair nosings and the bottom end should be 1/2” off of the floor at the bottom landing [Figure 9-1]. Position the rail 5 in. (Escort) [Figure 9-2] or 6 in. (Rave). [Figure 9-3] from the wall or any protruding object. [Figure 9-2]

2. Secure the rail by positioning one lag bolt in the lower rail bracket and tightening to step. [Figure 9-4]

3. Verify each segment of rail is 5 in. (Escort) or 6 in. (Rave) from the wall or any protruding obstruction and secure the remaining rail brackets to the staircase steps with the remaining lag bolts (four (4) per bracket).

- ALL RAIL MOUNTING SCREWS ARE SECURE
- ALL SPLICE BAR SCREWS ARE SECURE

TIP

If a pilot hole is required use a 7/32” diameter drill bit.
CHASSIS INSTALLATION

1. The chassis slides onto the top of the rail. Carefully pickup the chassis and align the pinion and guide wheels with the rail channels. Insert the chassis onto the rail. [Figure 12-1 and 12-2] Let it slide down until it stops (the pinion gear will make contact with the gear rack, allowing it to stop). [Figure 12-3]

2. On the front side of the chassis, loosen the two screws on the seat support. [Figure 12-4]

3. Rotate the seat support until the top plate is level and tighten the screws.

Ensure that the charge strip wires at the top are not pinched when installing the chassis.

The chassis is quite heavy and can be difficult to install on the rail by one person.

HEAVY

CAUTION

SUPPORT MOUNTING SCREWS ARE SECURE
CHAIR INSTALLATION

1. Verify the latch spring loop is wrapped around the latch screw. [Figure 13-1]

![LATCH SPRING LOOP](image1)

![LATCH SCREW](image2)

2. While holding the swivel handle in the down position, set the seat onto the seat post on top of the seat support. [Figure 13-2]

![SWIVEL HANDLE](image3)

![LATCHING SCREW](image4)

3. Route the 3-pin wire connector through the hole in the top of the seat chassis down the left side. [Figure 13-3 and 13-4]
4. Plug the 3-pin wire connector from the seat into the mating connector from the chassis. [Figure 14-1]

5. On the backside of the chassis there is an on/off switch. Cut off and discard the shipping tie on the switch. [Figure 14-2]

6. Turn the switch to on position. The unit should beep once when it has completed booting.

7. Use the armrest control switch to run the lift down the rail approximately 30”. [Figure 14-3]

- LATCH SCREW ENGAGES LATCH SLOTS WHEN SEAT IS ROTATED
- UNIT DOES NOT OPERATE WHEN SEAT IS ROTATED
- LATCH SPRING APPLYs PRESSURE TO LATCH SCREW
INSTALLING THE UPPER LIMIT CAM

1. Insert the upper limit cam into the end of the rail.  
   [Figure 15-1 and 15-2]

2. Position the end of the cam at 1-3/4” from the top of the rail. Secure the limit cams with (2) 10-24 screws and square nuts (provided). [Figure 15-3]

3. Install the rail end cap onto the top end of the rail. The wire with the connector should be routed out of the end cap on the wall side. Excess wire can be tucked into the inside of the rail. [Figure 15-4]

IMPORTANT!

LUBRICATE THE GEAR RACK.

Lightly lubricate the entire gear rack. A tube of lubricant was provided in the chassis box.
CHARGE THE BATTERIES

1. The power supply has one wire with a connector that mates to a wire on the charge strip at either the top or bottom end of the rail. Plug the power supply into the wire. [Figure 16-1]

2. There is also a wire with a ring connector that must be grounded to the rail. Fit the T-bolt into the slot in the bottom side of the rail, (same slot that the splice bars use) and tighten the nut. [Figure 16-2 and 16-3]

3. Plug the power supply into a dedicated 120VAC 15A outlet.

NOTE: The power supply should be connected to power at all times.
CHECKLIST

COMPLETION CHECKLIST

Complete Checklist before riding the lift.

- Chair mounting bolts are secure.
- The chair locks in all positions when rotated.
- Lift does not operate when chair is rotated from the normal ride position.
- Rail mounting bracket and mounting feet bolts and nuts are secure.
- The spacing of the gear rack at each end of the rail is correct.
- The footrest safety pan stops lift when obstructed in each direction.
- The lift stops when it comes in contact with the limit cams.
- All electrical wires are clear of moving parts.
Lift Operation

OPERATION OF THE STAIRLIFT

Observe the following rules when operating the lift.

- Never stand on the footrest when the lift is moving.
- Never exceed the weight capacity of the lift.
- Never use the lift to transport cargo.
- Always place your feet in the center of the footrest.
- Always lock the seat in the ride position when using the lift.
- Always use the seatbelt and remain seated in the center of the seat.

DIRECTION CONTROLS

The Escort/Rave Stair Lift is equipped with an armrest mounted control or handheld control and two wireless remote controls. All controls are constant pressure.

To prevent accidental movement, the lift has a programmed delay before moving.

When using the remote control, aim the remote toward the lift’s receiver eye located on side of the lift.

FOOTREST SAFETY PAN

The lift is equipped with a safety pan mounted on the bottom of the footrest. Should the safety pan encounter an obstruction, the lift will shut down automatically. The lift will resume operating when the obstruction has been removed.

CHAIR LOCK

The lift will not operate if the chair is not locked in the ride position.

When using the lift at the top of the staircase, always verify that the seat is securely locked in the load (rotated) position before attempting to sit in the chair.

SEAT BELT RESTRAINT

Always use the seat belt.
ANNUAL MAINTENANCE

The rail gear should be cleaned once a year or more frequent if exposed to an outdoor environment or contaminants such as pet hair, excessive dust, etc. Wipe debris from the gear teeth. Apply a small amount of lubricant onto a clean cloth and wipe across the gear teeth. Do not apply too much lubricant, over lubricating will attract dirt and debris.

Ensure all rail and seat support fasteners are tight.

**TIP**

*Gear rack should be lubricated with a white lithium based grease.*
*DO NOT USE any type of light weight penetrating oil.*

**TIP**

*The lift and aluminum rail can be cleaned with any commercial window cleaner.*
*Do not use abrasive cleaners.*

**SHOCK WARNING**

*To prevent electrical shock or damage to the lift, disconnect the 120 VAC power when cleaning the lift. Never apply cleaning liquids directly on the rail mounted charging stations or electrical safety switches.*
CAUTION

Never touch the circuit board chips or circuits. Static electricity will damage the circuit board. When handling the circuit board always disconnect the 120 VAC power and use a static discharge wrist band.

AUDIO ALERTS

- When the lift receives a signal to operate the PCB will emit an audio beep.
- The PCB will emit two rapid beeps during operation if there is an electrical current overload.
- The PCB will emit a long beep and will not operate if the battery voltage is too low.
- The PCB will emit on and off audio beeps for 30 seconds every 5 minutes if the lift is not parked at a charge station.
REMOTE CONTROL PROGRAMMING

If there are multiple lifts in the home, the infra-red remote controls can be programmed to work with individual lifts.

1. Remove the battery door on each IR remote.

2. Move the dip switches to a different code. The two remotes must be set to the same code.

3. Replace the battery doors.

4. Use the seat control switch to move the lift so that it is not on a limit switch.

5. Turn the ON/OFF switch to OFF.

6. Swivel the seat toward the upper landing.

7. Press and hold the footrest safety pan to simulate an obstruction.

8. Turn the ON/OFF switch to ON. Fast beeping should occur indicating the circuit board is in the IR learning mode.

9. Release the footrest safety pan and swivel the seat back to the normal, riding position.

10. Aim the first IR remote at the chassis, press and release the UP or DOWN button. The fast beeping should end with a single beep, indicating that the first remote is programmed.

11. Aim the second IR remote at the chassis, press and release the UP or Down button. Two beeps should sound indicating the second remote is programmed.
CAUTION

If the lift is inoperable because it has driven onto the final limit switch, it has to be manually moved off the final limit

1. Turn the lift off at the power switch located on the back of the chassis.

   **NOTE:** Disconnecting the power supply does not turn the lift off. The power supply only charges the batteries

2. Remove the round plastic plug on the side of the chassis to access the end of the motor shaft.

3. Place the manual lowering tool onto the end of the motor shaft and rotate until the final limit switch becomes disengaged. (unit should be travelling away from the end of the rail)

4. Re-install the plastic plug and turn the lift "ON".
RIGHT VS. LEFT HAND INSTALLATIONS

THE FOLLOWING INSTRUCTIONS ARE ONLY FOR CONVERTING FROM A LEFT TO RIGHT OR RIGHT TO LEFT INSTALLATION

The Rave and Escort Lifts are designed to be used on either side of a stairway depending on the installation requirements.

Seat Support on Chassis

1. There are 2 bolts holding the seat support on the chassis. Loosen the top bolt, remove the lower bolt, rotate the seat support 90° and replace bolt. [Figure 29-1]

2. Everything on top of the seat support needs to be moved to the opposite side: post, switch and seat stop. [Figure 29-2]

Seat

The mechanism on the bottom of the seat must be reversed. [Figure 29-3]

1. Loosen the socket head cap screw on the lock rod collar using a 1/4" hex tool. (The cap screw is what drops into the seat support to lock seat in position)

2. Loosen the two shaft collars using a 7/64" hex tool. (These hold the lock rod in position)

3. Slide the lock rod out and insert it into the opposite side, thru the shaft collars and lock rod collar.

4. Tighten the socket head cap screw onto the flat area on the lock rod.

5. Slide the lock rock to position the socket head cap screw in alignment with the swivel tube and tighten the two shaft collars.
Service Notes

Service Description:

Service Date:

Performed By:

Service Description:

Service Date:

Performed By:

Service Description:

Service Date:

Performed By: