



**SRE-2750**

***ELECTRA-RIDE™ LT  
STAIRWAY ELEVATOR***

**Retail Customers**

**Please contact your Bruno dealer with any questions or service concerns, using the contact information shown below:**

**(Dealer: Place Label Below)**

**Dealer Name  
Address  
Telephone No.**

**INSTALLATION MANUAL  
MAN-2750-1  
05-17-2011**

## IMPORTANT NOTES

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### NOTE

This stairway elevator is intended  
**for indoor use only**  
in a heated, enclosed location  
**above 35° F (2° C).**

The warranty for the Electra-Ride™ LT  
Stairway Elevator is  
*rendered null and void*  
if the unit is installed by  
anyone other than an authorized Bruno dealer.

Electra-Ride™ is a trademark of Bruno Independent Living Aids, Inc.®.  
Loctite® is a registered trademark of the Henkel Loctite Corporation.  
Velcro® is a registered trademark of Velcro Industries B.V.

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# INTRODUCTION AND REGULATORY INFORMATION

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Thank you for purchasing an **SRE-2750 Electra-Ride™ LT** Stairway Elevator.

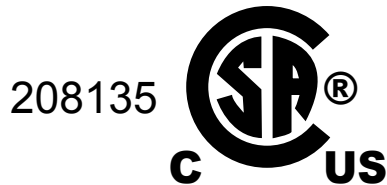
Be sure to check carton contents for shipping damage as soon as they are received.

Also, check the carton contents against the packing list **before** leaving the shop to install product on site.

**Report any discrepancies immediately to Bruno Independent Living Aids.**

Bruno encourages you to read through the installation manual before installing the Stairway Elevator. Doing so will help you install the elevator more quickly and avoid the frustration of getting to the job site only to discover that you are missing a critical tool or piece of equipment.

## **CSA CERTIFICATION**



The "C" and "US" indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This "US" indicator includes products eligible to bear the "NRTL" indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.

This lift is intended to be installed in accordance with the current editions of the National Electric Code NFPA-70 and applicable sections of ANSI/ASME A18.1.

## ***FDA MEDICAL DEVICE RESPONSIBILITIES***

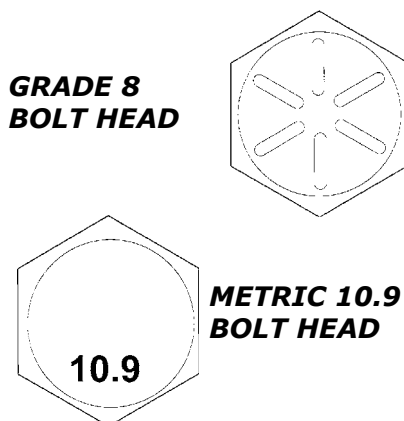
This unit is a US-manufactured FDA-regulated medical device classified in the USA as a Class II Patient Transporter. The installing dealer has responsibility to report any malfunctions, safety concerns or events to the manufacturer in a timely manner. The installing dealer also has the responsibility to ensure that the users are properly trained in the use and operation of the unit.

## **MATERIAL SAFETY DATA SHEETS**

Material safety data sheets (MSDS) on materials used on this unit may be requested through the Bruno Technical Service Department.

# SPECIFICATIONS

<b>Weight Capacity</b>	275 lbs. (125 kg)
<b>Speed</b>	0 - 32 fpm (0 - 9.75 m/mn)
<b>Power Source</b>	two (2) 12-volt sealed, maintenance-free batteries with 24-volt continuous-duty charger
<b>Motor</b>	24 VDC, 2-pole, 1/2 hp
<b>Drive</b>	self-locking gearbox, rack-and-pinion drive
<b>Control</b>	constant pressure switch (armrest and 2 transmitters)
<b>Brake</b>	self-locking worm gear
<b>Maximum Incline</b>	45 degrees
<b>Rail</b>	aluminum channel with integral drive gear rack
<b>Seat Swivel</b>	0, 67 and ( <b>optional</b> ) 90 degrees (or combination) at top and bottom
<b>Power Supply</b>	24VDC, 2A switch-mode battery charger powered by 120V wall outlet



### Torque Specifications

<u>GRADE 8 (US Fasteners)</u>			<u>GRADE 10.9 (Metric)</u> (Roughly equivalent to US Grade 8)		
3/8-18	Grade 8	45 lb.-ft	M 8	Grade 10.9	25 lb.-ft
3/8-24	Grade 8	50 lb.-ft	M 10	Grade 10.9	47 lb.-ft
7/16-14	Grade 8	70 lb.-ft	M 12	Grade 10.9	83 lb.-ft
7/16-20	Grade 8	80 lb.-ft	M 14	Grade 10.9	133 lb.-ft
1/2-13	Grade 8	110 lb.-ft			
1/2-20	Grade 8	120 lb.-ft			

# CARTON CONTENTS and TOOLS

The **ELECTRA-RIDE™ LT** is shipped in (5) cartons. Check the contents of the cartons to be sure you have all of the components before beginning an installation.

Check the carton contents for shipping damage upon receipt.

Damage claims must be filed by the **dealer**, not the manufacturer. Bruno Independent Living Aids, Inc.® cannot be responsible for shipping damage.

## CARRIAGE BOX

- (1) complete carriage assembly including footrest
- (1) battery charger
- (1) *SRE-K-1518 battery charger hardware kit*
- (2) IR transmitters
- (2) transmitter mounting brackets
- (2) *SRE-K-2701 transmitter mounting hardware kit*
- (2) pieces of Velcro®

## INSTALLATION AND SEAT BOX

- (1) complete seat assembly

## INSTALLATION PARTS BOX

**Parts Box A (see box label for contents)**

**Parts Box B (see box label for contents)**

## RAIL BOX (left side)

## RAIL BOX (right side)

## Tools

- Snap ring pliers
- Protractor level, builder's level
- Socket set, metric (10 mm through 19 mm)
- Ratchet, with 6" extension
- Allen wrench set, metric
- Combination wrench set, metric (10 mm through 19 mm)
- Torque wrench (one that handles 50-80 ft.lb./68-108 Nm)
- Phillips screwdrivers
- 3/8" socket (clamp screws)
- 9/16" and 5/8" open-end wrench (limit switch adjustment)
- 5/16" open-end wrench
- Drill with and 1/8", 5/16" and 1/2" bits
- Hacksaw with 2 or 3 blades, or metal cutting bandsaw
- 20' tape measure
- C-clamp
- **\*Highly recommended\***: Bruno Joint Plate Mounting Clamp (P/N FIX-00525, available from Bruno)
- Wire stripper and crimper
- Flashlight
- Needle-nose pliers
- Scissors or knife
- Extension cord
- File
- 12" adjustable wrench
- 90-degree needle-nose pliers
- Vise-Grip®

**FOR A FASTER,  
SMOOTHER  
INSTALLATION:**

**Be sure you have all  
necessary parts and  
tools before traveling  
to the  
installation site.**

Vise-Grip® is a registered trademark of the IRWIN Industrial Tool Company.

## ASSEMBLY



**The standard stairway elevator is suitable for stairway angles up to 45 degrees.**

### ***Left side or right side?***

"Left" or "right" refers to the side of the stairway on which the rail is installed (as viewed from the bottom of the stairs).

*Unless otherwise specified Bruno Stairway Elevators are shipped from the factory in the left-side configuration.*

Conversion to right-side installation is easy (instructions included later in this manual ).

1. Identify and locate lower rail section appropriate to the installation (left or right).

### ***FITTING THE RAIL***

1. Determine the correct length for the rail by measuring along a straight line placed on the stairs. (SEE STEP 4 IN THE APPLICATION GUIDE).

To that amount, add Measurement B (STEP 4 IN THE APPLICATION GUIDE).

This process will allow you to custom fit the Elevator to your customer by determining the most comfortable seat-to-floor height within the space available at the top of the stairs.

NOTE: *The rail must rest approximately 2" (5 cm) above the step nosing, and extend from the lower floor to a point beyond the nosing of the top step (see Step No. 4 of the Application Guide). In some cases where the bottom landing is made of material such as concrete, ceramic tile or slate, the last bracket on the landing may be omitted. In this case, a bracket must be added on the second-to-last step (bottom), and at the top of the stairway.*

# INSTALLATION

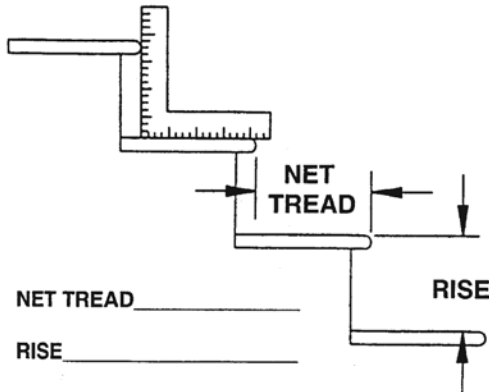


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## STRAIGHT STAIRWAY ELEVATOR APPLICATION GUIDE

Dealer No.: \_\_\_\_\_ P.O. No. \_\_\_\_\_ Customer: \_\_\_\_\_ Date: \_\_\_\_\_

### Step 1: Determine Staircase Angle



RISE	NET TREAD						
	12"	11"	10"	9"	8"	7"	6"
6"	27	29	31	34	37	41	45
7"	30	33	35	38	41	45	
8"	34	36	39	42	45		
9"	37	39	42	45			
10"	40	42	45				
11"	43	45					
12"	45						

NOTE: ANGLES ABOVE ARE ROUNDED TO THE NEXT DEGREE. FOR ANGLES ABOVE 45 DEGREES, CONSULT BRUNO FOR SPECIAL ORDER DETAILS.

### Step 2: Define Stairway Dimensions and Details

stair tread material \_\_\_\_\_ staircase width \_\_\_\_\_  
 \_\_\_\_\_ (32" min. for standard unit)  
 lower landing material \_\_\_\_\_ obstructions \_\_\_\_\_  
 \_\_\_\_\_ (ex. handrails, moldings)  
 upper landing material \_\_\_\_\_

### Step 3: Specify Chair and Rail Details

hand (looking from bottom of stairs):

- left  right

chair upholstery

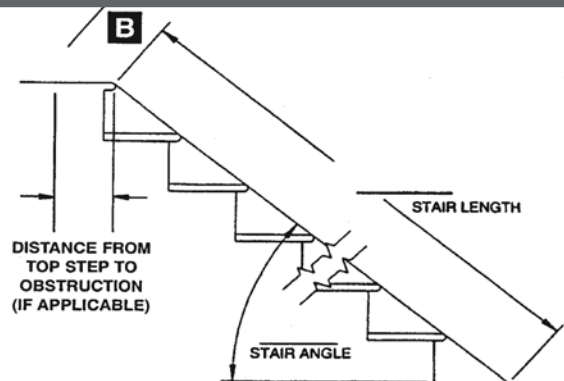
- tan vinyl  tan fabric  
 other (specify) \_\_\_\_\_

additional options

- keyswitch on chair  
 keyed call/send transmitters  
 commercial/overspeed package

Refer to Step 3 on following pages.

### Step 4: Determine Rail Length



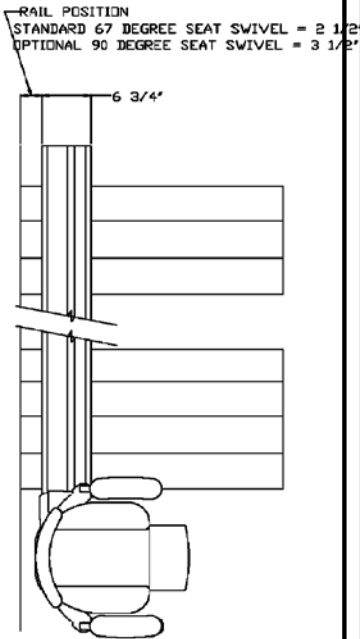
DETERMINE THE STAIR LENGTH: \_\_\_\_\_  
 ADD "B" TOP RAIL EXTENSION: \_\_\_\_\_  
 PLEASE REFER TO "STEP 4" ON THE FOLLOWING PAGE FOR DETAILS.  
 Overall Rail Length Required: \_\_\_\_\_  
 16' STOCK \_\_\_\_\_ 20' STOCK \_\_\_\_\_  
 CUSTOM CUT RAIL \_\_\_\_\_



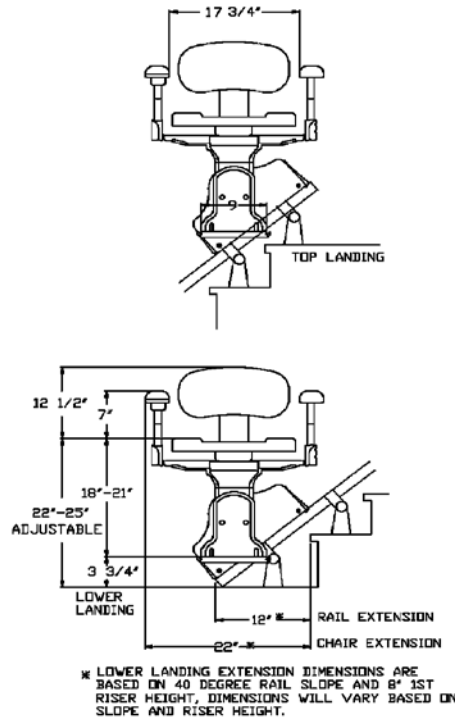
# INSTALLATION

## Step 3: SRE-2750 ELECTRA-RIDE™ APPLICATION DETAILS

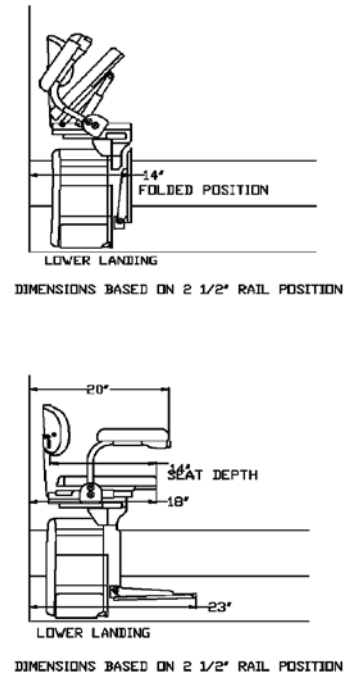
### TOP VIEW



### FRONT VIEWS



### SIDE VIEWS

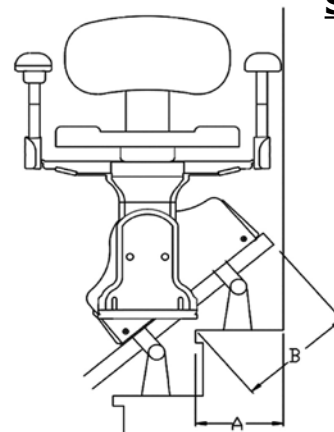


UPPER LEVEL ENTRY/EXIT SEAT HEIGHT IN INCHES

	17"	18"	19"	20"	21"	22"	23"	
35°	6.2	7.3	8.5	9.6	11.1	12.0	13.1	A
	7.5	8.9	10.3	11.7	13.2	14.6	16.0	B
36°	6.0	6.9	8.3	9.5	10.6	11.9	13.0	A
	7.4	8.8	10.2	11.7	13.1	14.6	16.0	B
37°	5.8	7.0	8.2	9.3	10.5	11.7	12.8	A
	7.2	8.7	10.2	11.6	13.1	14.6	16.0	B
38°	5.7	6.8	8.0	9.2	10.4	11.6	12.7	A
	7.1	8.6	10.1	11.6	13.1	14.6	16.0	B
39°	5.4	6.7	7.8	9.0	10.2	11.4	12.6	A
	6.9	8.5	10.0	11.6	13.0	14.6	15.9	B
40°	5.3	6.4	7.7	8.8	10.0	11.3	12.4	A
	6.8	8.3	9.9	11.6	13.0	14.6	15.9	B
41°	5.1	6.3	7.5	8.7	9.9	11.1	12.3	A
	6.7	8.3	9.9	11.5	13.0	14.6	15.9	B
42°	5.0	6.2	7.4	8.6	9.9	11.1	12.3	A
	6.6	8.2	9.8	11.4	13.0	14.5	15.9	B
43°	4.7	5.9	7.1	8.4	9.5	10.8	12.0	A
	6.4	8.1	9.7	11.4	13.0	14.5	15.9	B
44°	4.5	5.7	6.9	8.2	9.4	10.6	11.8	A
	6.2	7.9	9.6	11.3	13.0	14.5	15.9	B
45°	4.3	5.5	6.8	8.0	9.2	10.5	11.7	A
	6.0	7.8	9.5	11.3	13.0	14.5	15.9	B

DIMENSIONS ON CHART ARE WITH THE CHAIR IN THE LOWEST POSITION: 22".

## Step 4



The chair extends approximately 2" beyond the rail at the upper landing.

### ALTERNATE SEAT HEIGHT DIMENSIONS

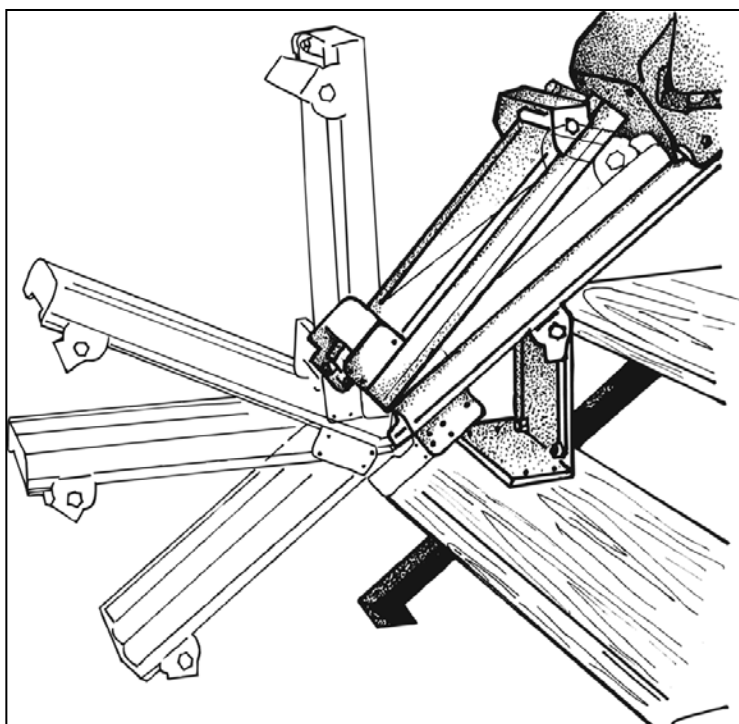
Measured @ Lower Level:  
23", 24", 25"

Reduce B by 1.5" for each inch the seat height is increased.

If A is < 3 or B is > 12, then one or more adjustable clamp sets (SRE-27291) are required.  
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## INSTALLATION

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**For installations involving a folding rail, please refer to the *insert "Folding Rail Installation Instructions"*.**

## **CUTTING THE RAIL: two-piece rail installations**

### **IMPORTANT NOTE!**

***Under no circumstances should a rail section be cut shorter than 18" (46 cm).***

***There must be at least (2) clamps on a short rail section  
(one at the rail joint and one at the rail end).***

***Cutting a rail shorter than 18" (46 cm) would not allow enough room for the  
(2) necessary clamps.***

### **Example:**

***After measuring the staircase, you determine you need 9 feet of rail. With your (2) 8-foot sections you decide to use (1) 8-foot section and cut the remaining (1) foot from the second 8-foot section. Doing this could yield a rail piece of insufficient length for support.***

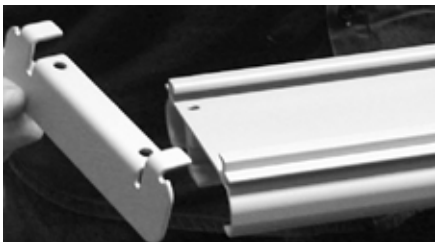
***Instead, cut at least one foot off one of the 8-foot sections (leaving 7 feet of rail) and then cutting 2 feet from the second 8-foot section. You will have a (1) 7-foot section and (1) 2-foot section, both of which are long enough to be properly mounted (2 clamps minimum per short rail).***

## ***DO NOT CUT OFF THE JOINT END!\****

The M6 bolts securing the gear rack ***must*** remain intact.

\*Unless installing a custom, one-piece rail. See next page.

## **END CAP: CUT END OF RAIL**



***NOTE: If you are installing a custom, one-piece rail, please see the instructions on the next page.***

1. Use a metal-cutting power saw or manual hacksaw to cut the rail to length.

***Locate the rail end with just (2) holes. Cut off this end.***

2. Use a file or other appropriate tool to deburr the cut end of the rail.

Soften any sharp edges which might damage the wiring insulation.

3. Use a C-clamp to hold the end cap in place at the cut end of the rail.

Use the holes in the end cap as guides to drill mounting holes in the rail (5/16" drill bit).

# INSTALLATION

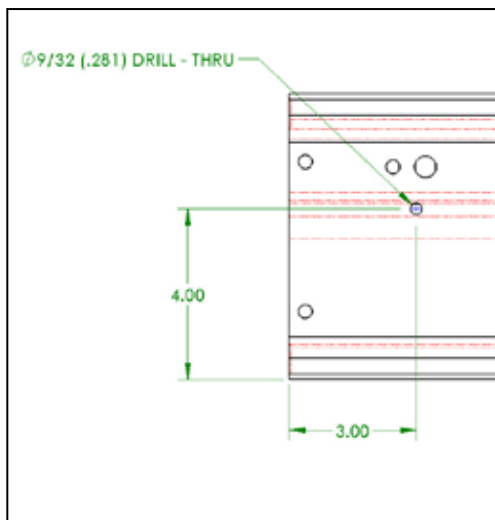
## CUTTING THE RAIL: ONE-PIECE RAIL INSTALLATIONS

### Procedure for making a custom one-piece rail

You WILL cut off the rail-joint end.

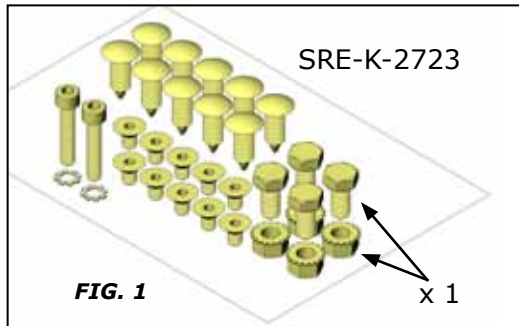
1. Remove the gear rack from the rail using the #5 and #2.5 Allen wrench.
2. Save the M6 x 1 x 25 mm screw!!!!!!
3. Measuring from the NON-JOINT PLATE END, mark the desired length for the installation.
4. **Cut at the joint end.**
5. Using the end cap and the drill templates, drill the end cap holes and charge strip holes as instructed on the previous page.
6. Cut the end of the gear rack that does NOT have threaded holes.

*NOTE: The finished length of the gear rack must be 3" to 4" shorter than the cut length of the rail.*

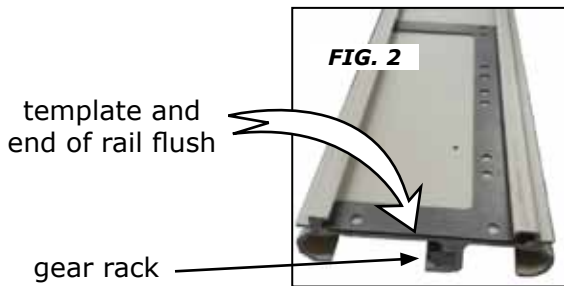


7. Mark and drill a .281 (I drill bit) hole in the rail as shown.
8. Reassemble the gear rack onto the rail by lining up the threaded hole in the gear rack to the .281 hole in the rail.
9. Tighten the M6 x 1 x 25 mm screw into this hole.
10. Tighten all M5 set screws.
11. **THE M6 X 25 MM MUST BE THREADED COMPLETELY INTO THE GEAR RACK.**

## DRILLING HOLES FOR CHARGE STRIPS



On the skin pack parts board, locate the drilling template (SRE-27204) and the nut and bolt from hardware kit (SRE-K-2723) (Fig. 1).



- Slide the template onto the rail (Fig. 2).  
**NOTE orientation of template to gear rack!**

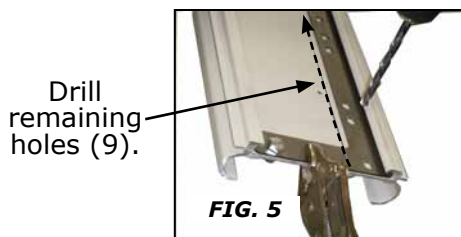


- Secure the template with a Vise-Grip® (Fig. 3).
- Using a **5/16" bit**, drill one hole in the template (Fig 3).

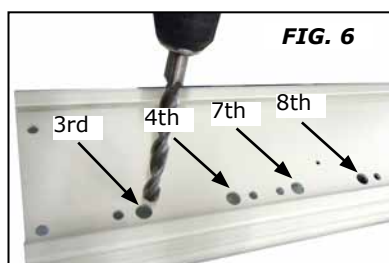
Vise-Grip holding template while drilling



- Insert one M8 x 16 bolt and **FINGER TIGHTEN** the nut to hold the template in place while drilling the remaining holes (Fig. 4).



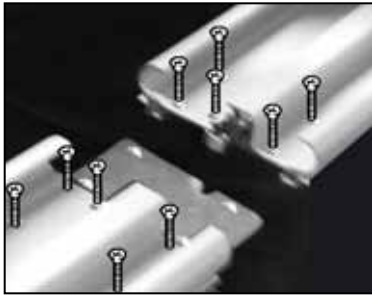
- Using a **5/16" bit**, drill the remaining (9) holes (Fig. 5).



- Remove the Vice-Grip, hardware and template.
- Using the **1/2" bit**, redrill (enlarge) the 3rd, 4th, 7th and 8th holes (Fig. 6).

# INSTALLATION

## RAIL JOINT ASSEMBLY



joint plate



end cap

**The rail is always installed with the gear rack towards the center of the stairs and gear teeth facing the wall.**

**The chamfered edges of the joint plate must face "up" toward the bottom of the rail.**

1. Attach the joint plate with the screws provided:
  - insert (2) screws through the joint plate *from the underside* of the rail.
  - insert (10) screws from the topside of the rail (see left).
2. Make sure the screw heads are flush with the surface of the inside of the rail.
3. Mount the lower end cap.

## POSITIONING FOOT CLAMP ASSEMBLIES



**2.5" (6 cm) from back edge of rail to wall.**

*If top or bottom clamp is omitted (landing is cement or ceramic tile, or the owner wishes not to drill holes in the landing), a set of clamps should be added on the second-to-last step and at the top of stairway.*

1. Loosely assemble the long bolt and nut to the clamp assembly. Do not tighten the nut too far onto the bolt. Otherwise, it will be difficult to install the upper clamps onto the rail. (see left).

**NOTE: If the application calls for the rail to be set off the floor, add the clamp wedge locks. See CLAMP WEDGE LOCK instructions later in this manual.**

2. Place clamps in the pattern as indicated below.

**Be sure to leave a minimum space of 2.5"\* (6 cm) as measured from the back edge of the rail to the wall.**

*\*The 2.5" clearance is needed for the standard 67-degree seat swivel.*

*For installations involving the optional 90-degree seat swivel, the rail-to-wall clearance increases to 3.5" (9 cm).*

*Frequently check the seat-wall clearance during installation.*

### **clamp placement order**

- bottom landing
  - first tread up from bottom landing
  - top landing
  - first tread down from top landing
  - closest tread above and below the rail joint(s)
  - minimum of every third tread over remainder of staircase.
3. Set the rail on the loosely-assembled clamps.

**On carpeted floors only:**

Place enough cardboard under the bottom end of the rail to raise rail approximately 16 mm off of the floor.
  4. Attach the upper clamp sections to the lower ledge of the rail.
  5. Finger tighten the nut, bolt and clamp plates until the clamp plates touch the rail.
  6. Secure the clamps to the rail by tightening the long bolt and nut using two wrenches. Torque to 10 ft-lb (13.6 Nm). One to 1-1/2 revolutions on the wrench will set the torque in the required range.

**Do not overtighten the bolts! Rail deformation can occur.**



## ***POSITIONING FOOT CLAMP ASSEMBLIES (continued)***

### ***INSTALLATION ON CARPET***

Before securing the foot clamp assemblies with hardware, add a 16 mm shim under the bottom of the rail.

On hardwood stairs, drill a pilot hole before inserting fasteners.

If a threaded fastener extends below an exposed stair tread trim it flush with pliers.

Bruno ships the stairway elevator with fasteners **appropriate for wooden stair treads only**. Other stair material may require different fasteners. Please contact Bruno.



distance off all step noses:

- hardwood: 2" (5 cm)
- carpet: 2.5 (6 cm)

7. Slide the leg/rail unit off the step noses:

### ***On hardwood floors:***

at least 5 cm off all step noses.

### ***On thick carpet:***

approximately 2.5" (6 cm) off all step noses so that when the installation is complete, the rail will rest at least 5 cm off the step noses. Remove the 16 mm shim from the bottom of the rail.

8. Starting at the *bottom of the rail*, secure the legs **to stair treads** with the hardware provided.

*NOTE: Screw in one bolt in the back foot of any 4 legs to lightly secure the rail to support the carriage only (no load or passengers). The legs will be fully tightened at a later stage.*

9. Frequently check the measurements at the key locations indicated to ensure proper positioning of the foot clamps.

10. Once the legs are positioned and **lightly secured** and

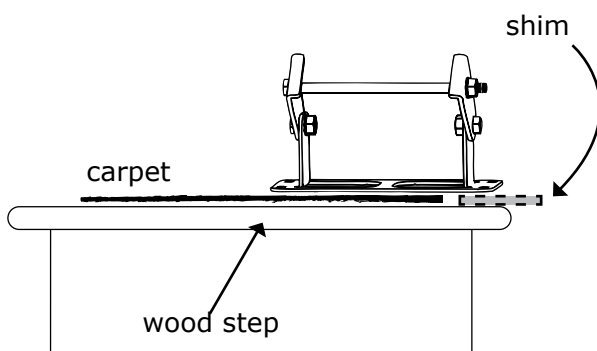
**before installing the carriage**, stand at the top of the staircase and look down the rail.

### ***The rail should be straight and true.***

If the rail is not straight and true, rest a builder's level on the rail, or route a taut string from the top to the bottom of the rail.

Measure the gap between the level or string and the lowest point of the dip.

If this gap is greater than 6 mm, install 6 mm shims at the low points or reposition the legs.



### **Carpet runners on the stairs?**

If the installation calls for placing clamps half on a carpet runner and half on a wood step, place a shim under the clamp leg resting on the wood.

### ***You do not have to shim both sides of the clamp!***

Shim the leg resting on wood until that leg is at the same height as the carpet.

# INSTALLATION

## CLAMP WEDGE LOCKS

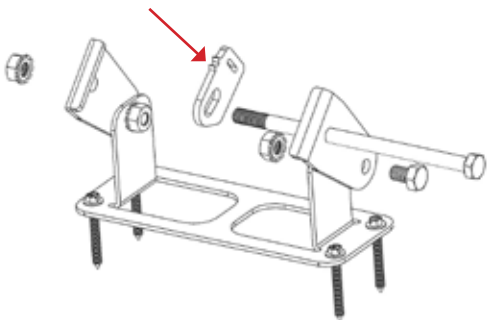
**Only for installations where the bottom end of the rail does not contact the floor**, Bruno has designed a rail locking wedge.

BEFORE you begin clamp installation, determine if the bottom end of the rail will rest on the floor.

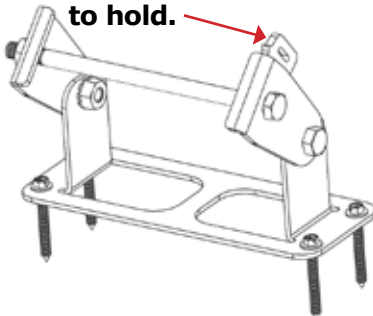
If it does not (for example, if the stairs are carpeted but the bottom landing is not), install the wedge lock to the **CLAMPS ON THE FIRST AND LAST STEPS ONLY**.

**To install the wedge lock to the top and bottom clamps only:**

**Teeth face up to contact rail.**



**Wedge must swing in from top side (toward top landing) to hold.**



1. Loosely assemble the wedge lock to the clamps as shown. *The wedge should swing freely to allow for positioning against the rail.*

2. At the top and bottom of the rail, mount the clamp to the rail as shown.

**NOTE: The teeth of the wedge face up to contact the rail.**

3. Tighten the top clamp bolt to capture the wedge between the clamp and the lower outside edge of the rail.

4. Tap the wedge with a rubber mallet until the wedge is firmly seated.

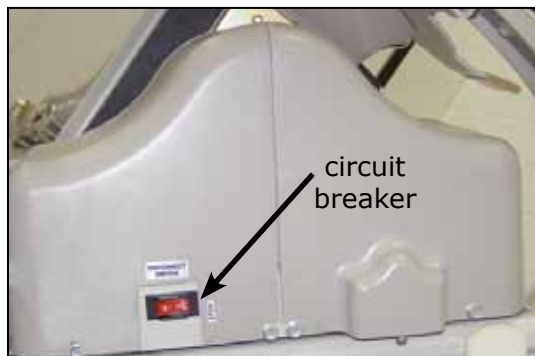
5. Push down on the rail to verify that it does not move.

6. Should you need to remove the wedge, use a flat head screwdriver as shown.





## MOUNTING CARRIAGE ON UPPER RAIL



1. Remove the carriage from the shipping package.
2. Be careful of the charge contacts under the carriage.
3. Make sure the (4) guide pads are clean.
4. Manually slide the carriage onto the rail until the spur gear rests against the gear rack.

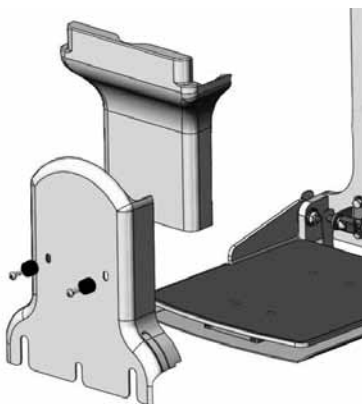
*NOTE: Make sure the gear aligns properly with the rack. It should not catch on the rack and freely engage.*

5. Cut the cable tie at the circuit breaker.
6. Turn the circuit breaker ON.
7. Run the carriage fully onto the rail by pressing the remote button.

*NOTE: During the initial power up, there will be a delay of up to 10 seconds from the time the remote button is pushed to the start of carriage movement. This is normal! Hold down the remote button until the carriage moves.*

8. Continue pressing the button until the carriage reaches the bottom of the rail.
9. Mount the upper end cap using the M8 x 1.25 x 16 mm hex head cap screws provided.

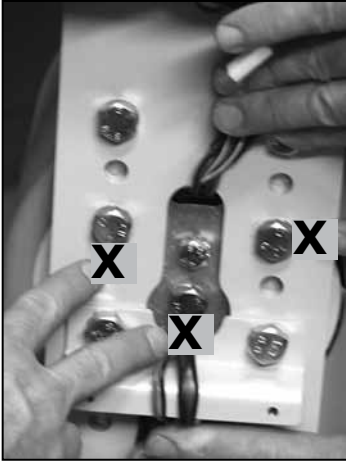
## ADJUSTING THE CARRIAGE ANGLE



1. Turn the circuit breaker OFF.
2. Remove the (2) Phillips screws securing the **seat post** front cover.
3. Remove the front cover.

# INSTALLATION

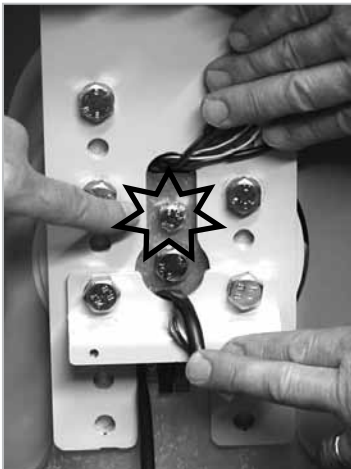
**Refer to torque specifications on page 5.**



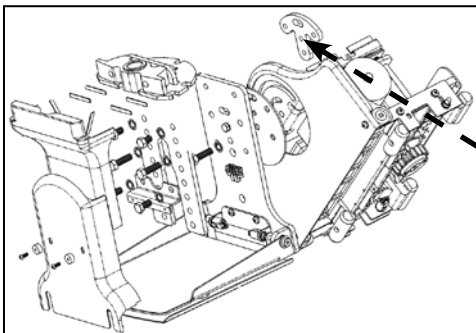
(3) M10 **gold** zinc hex head cap screws



\*If screws are accidentally removed, be sure to **re-install the safety lockwashers** (installed at the factory) when you re-install the screws.



M8 zinc hex head cap screw



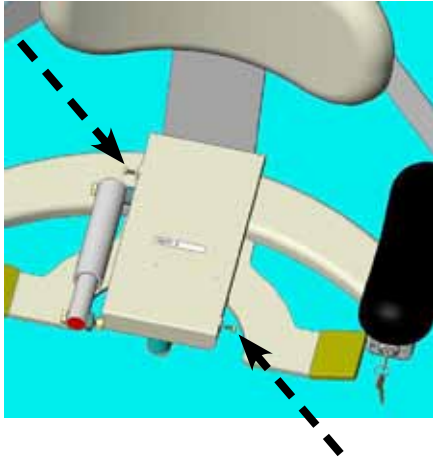
4. Fold down the footrest.
5. **LOOSEN BUT DO NOT REMOVE\*** the (3) M10 **gold** zinc hex head cap screws (17 mm wrench). See left.
6. Place a level on the footrest.
7. Pivot the seat post right or left as necessary to level the footrest.
8. While holding the seat post steady, tighten the (3) M10 **gold**/zinc screws to a torque of 80 ft. lbs.

## Right-hand installations

1. Fold down the footrest.
2. Remove the **M8** hex head screw (see left). This is the safety lock screw
3. **LOOSEN BUT DO NOT REMOVE\*** the (3) M10 **gold** zinc hex head cap screws (17 mm wrench). See above left.
4. Pivot the seat post assembly to the opposite side of the carriage.
5. Re-insert and tighten the M8 zinc hex head cap (safety lock) screw.
6. Place a level on the footrest.
7. Pivot the seat post right or left as necessary to level the footrest.
8. While holding the seat post steady, tighten the (3) M10 **gold**/zinc screws to a torque of 80 ft. lbs.

*The screw will penetrate a hole in the angle retainer lock plate mounted behind the carriage wall.*

## INSTALLING THE SEAT ASSEMBLY



1. Remove the seat assembly from the shipping package.
2. Remove the snap ring from the pivot tube.
3. **SAVE THE SNAP RING!**

*NOTE: The seat post covers are still removed from the unit at this stage.*

4. Slide the seat post tube into the bushing.
5. Remove the (2) screws securing the seat channel cover. See left



6. Route the harnesses down through the pivot tube, one at a time.

7. Remove the carriage jumper. Keep it with the carriage by sliding it over the harness. See left.

8. Remount the snap ring on the pivot tube.



9. Connect the seat switch and rocker switch.

10. Remount the seat channel cover.

11. Remount the seat post front covers using the (2) Phillips head screws and bumpers.

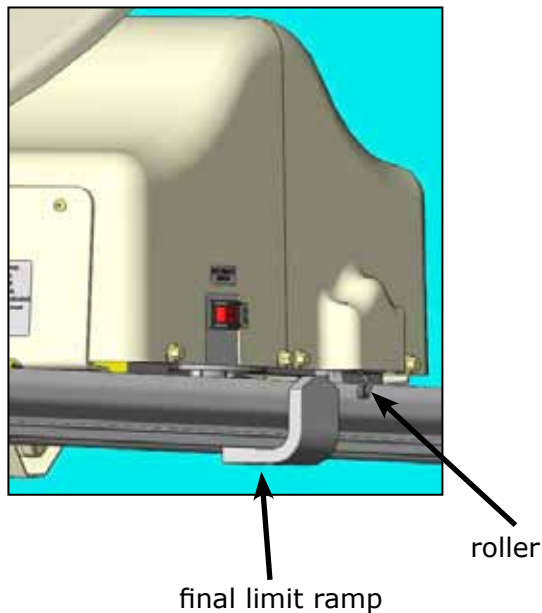


# INSTALLATION

## INSTALLING THE FINAL LIMIT RAMP AND SWITCH

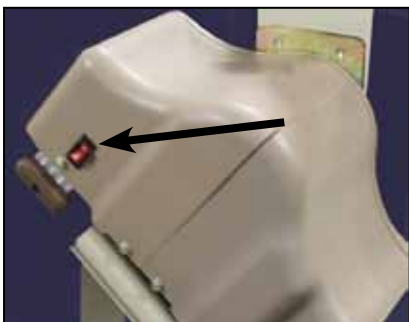


(2) M5 screws



1. Run the carriage to the top of the rail.
2. Note where the final limit switch is located in relation to the upper leg.
3. If the final limit switch is *below* the upper leg, snap the plastic final limit ramp onto the rail just below the upper leg.
4. Make sure the carriage is at the top of the rail, then proceed to Step No. 5.
5. If the final limit switch is *above* the upper leg, run the carriage down the rail (approx. 10 cm) to create room to remove the upper end cap.
6. Slide the final limit ramp onto the upper end of the rail.
7. Put the end cap back on.
8. Run the carriage to the top of the rail.
9. Adjust the limit ramp up or down the rail so that it is located *just before* the point where the small roller of the final limit *switch* touches the ramp.
10. Tighten the (2) M5 screws (Allen wrench) to secure the final limit ramp.

## CIRCUIT BREAKER



The on/off switch is built into the circuit breaker to protect the battery, controller and motor circuits in the Elevator carriage.

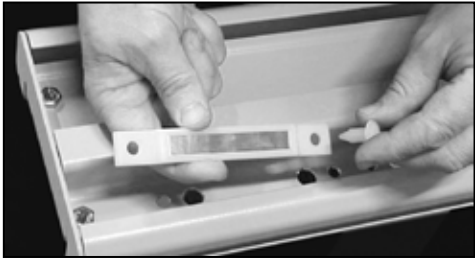
It is unlikely that this circuit breaker will ever "trip" during normal use. However, if the Elevator should fail to operate, check the circuit breaker as a first troubleshooting step and reset it if necessary.

If the circuit breaker should trip, determine the cause and correct the situation.

The most frequent causes of a tripped circuit breaker are (1) a foreign object jamming the rail or gear rack, and (2) exceeding the maximum rated load capacity.

**CONNECTING THE POWER SOURCE**

**CHARGE CONTACT STRIP BLOCKS**



1. Mount (2) contact strip blocks at each end of the rail.
  - Line up the (2) **5/16" holes** in the strip block with the corresponding 5/16" holes drilled in the rail.
  - The (2) copper leads on the strips insert through the (2) **1/2" holes** drilled in the rail.
  - Secure each strip block to the rail with (2) plastic finned fasteners (see left).



2. On the underside of the rail you will see the copper leads of the strip blocks coming out of the holes in the rail.
3. Connect the (2) red jumper wires (in parts kit) to the copper leads of strip blocks 1 and 3.

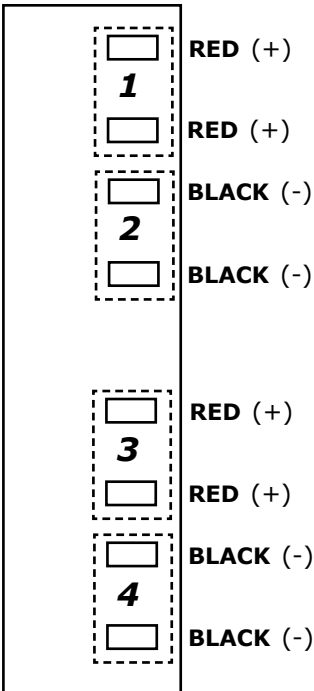


Connect the (2) black jumper wires (in parts kits) to the copper leads of strip blocks 2 and 4.

**NOTE: Once the wires are connected, there will be an exposed terminal on each strip. Cap if desired.**

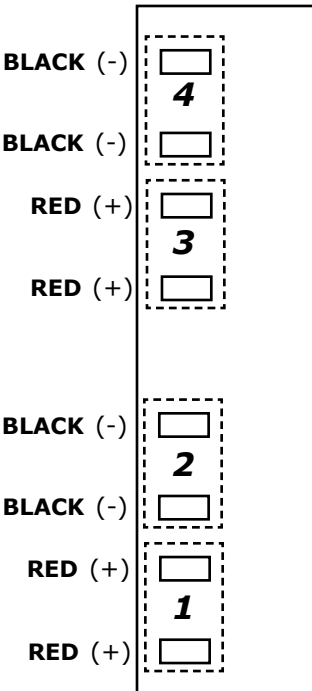
top of rail

**left-hand installation**



top of rail

**right-hand installation**



bottom of rail

bottom of rail

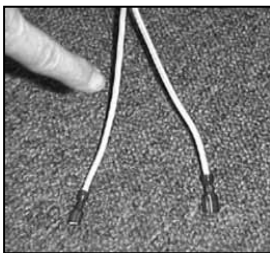
# ELECTRICAL

## CONNECTING THE BATTERY CHARGER

1. Check that the circuit breaker is OFF.
2. Determine the location of the wall outlet for the battery charger.
3. Position the battery charger in a suitable permanent **where it will not create a tripping hazard.** location near the top or bottom end of the rail, depending on the location of the wall outlet.

*NOTE: If the battery charger plug and wire will be located in an area where the charger could be accidentally unplugged, Bruno recommends the use of a plug lock (available at hardware and home improvement stores).*

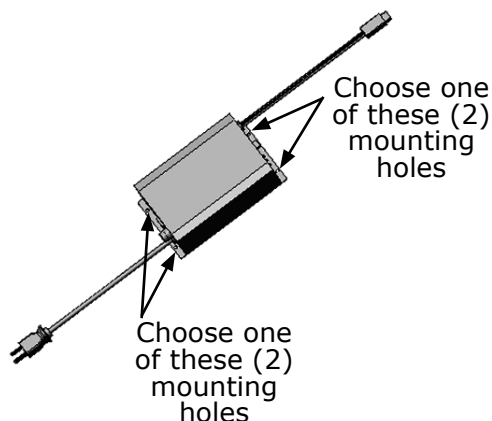
4. Place the pigtail harness end of the power cable near the battery charger.
5. Route the power cable to the end of the rail opposite the battery charger by threading it into the channel under the rail.
6. Notice that the end of the cable **OPPOSITE THE PIGTAIL HARNESS** has been split slightly, and includes one male and one female connector.



ribbed to red (+) (female)    smooth to black (-) (male)

The sheathing of one lead is ribbed (**in photo to left, finger points to ribbed sheath**). The other lead's sheathing is smooth.

7. Now that the power cable has been routed to the end of the rail opposite the battery charger (Step 8):
  - increase the split
  - cut off the excess lead
  - remove and discard the existing connectors
  - strip the freshly cut wire ends.
  - install the new connectors (provided)
8. Connect the battery charger leads:
  - ribbed wire to red jumper wire
  - smooth wire to black jumper wire.



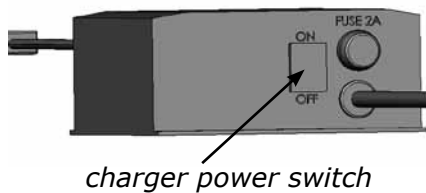
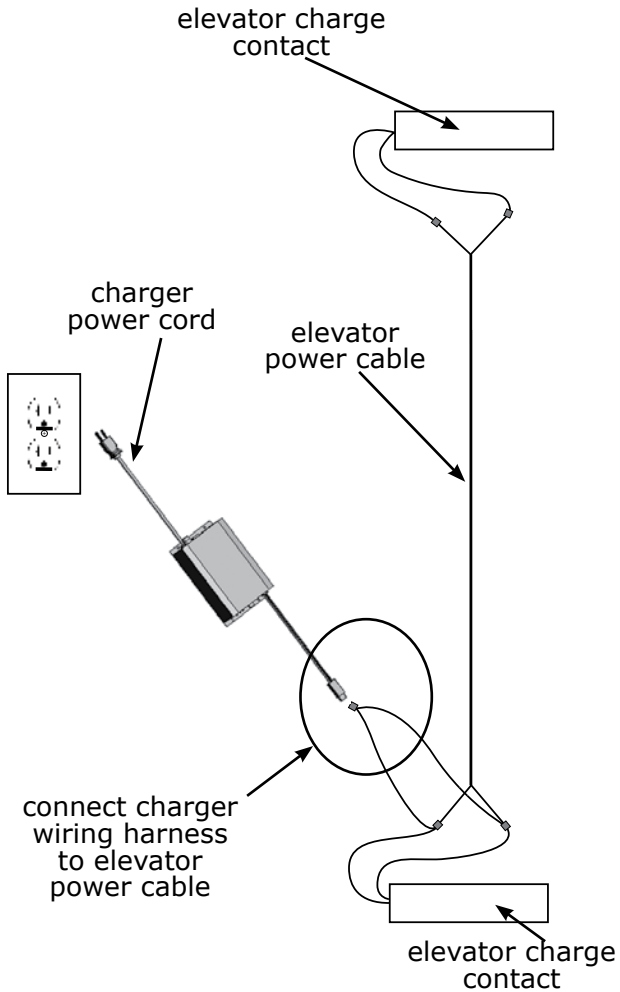
9. Tuck excess wire length into the channel.
10. Secure this harness to the rail clamps with wire ties.

**Be sure that this wiring is mounted securely to avoid damage.**

11. Secure the battery charger in the chosen location (Step 3) by inserting (2) screws (provided) through the mounting holes in the charger base.

*NOTE: There are (2) mounting holes on each side of the charger base. Choose one of the two on each side.*

## CONNECTING THE BATTERY CHARGER (continued)



12. Connect the battery charger power cord to the nearest grounded 120VAC wall or floor outlet.

*NOTE: The battery charger should be plugged into a household outlet at all times.*

**The only exception is when turning unit "off" (see Long-Term Storage section).**

13. Connect the battery charger wiring harness to the elevator power cable.
14. Bundle together loose wires.

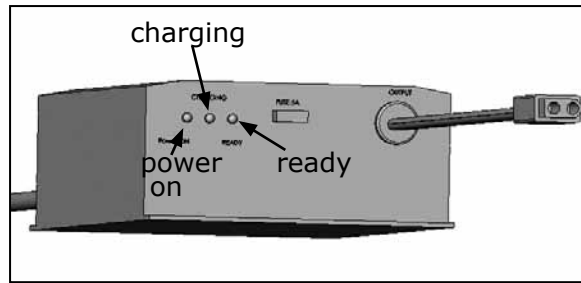
15. Turn ON the charger power switch.

16. Turn ON the unit circuit breaker.

17. Mount (1) remote at the top of the rail and (1) at the bottom of the rail. (Refer to the Mounting the Standard Call/Send Transmitter section later in this manual.

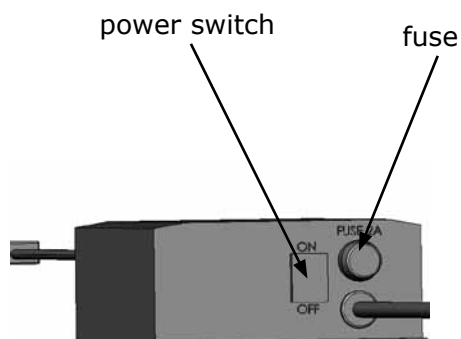
# ELECTRICAL

## Battery charger LED's



<b>RED</b>	<b>YELLOW</b>	<b>GREEN</b>	<b>STATUS</b>
ON	ON (< 1 sec.) OFF	OFF	charger not connected to battery
ON (<5 sec.) ON ON	ON (<5 sec.) OFF OFF	ON (<5 sec.) BLINK (5 sec.) OFF	battery disconnect situation detected; 5-second delay until yellow and green LED's completely off
ON	ON	OFF	charger delivering maximum current (2.2A)
ON	ON	OFF	charger at maximum voltage; current continues to drop
ON	OFF	ON	batteries fully charged; yellow LED occasionally turns off
ON	BLINKS ALTERNATELY	BLINKS ALTERNATELY	low voltage indication
BLINKS ALTERNATELY	BLINKS ALTERNATELY	OFF	battery defective or heavily sulfated
ON	OFF	FAST BLINK	partially open circuit; bad contact or battery sulfation

## Battery Charger Fuse Replacement



If the charger is subject to a power line surge, the AC input fuse may blow. Refer to the illustration to the left for fuse location.

### To replace fuse:

1. Turn OFF the battery charger power switch.
2. Remove power cord from wall outlet.
3. Twist the fuseholder cap and pull out to remove the fuse.
4. Replace with the same size and type: (Bussmann GMD-2A or equivalent) 2A, Slo-Blow, 5x20 mm.



## **INFRARED CALL/SEND TRANSMITTER**

The call/send system on the Bruno SRE-2750 is based on infrared (IR) controls — the same type of control used for televisions and stereos.

Like a television remote, the SRE-2750 hand-held transmitter may experience certain types of interference. Receivers are mounted on both sides of the SRE-2750 carriage to minimize interference.

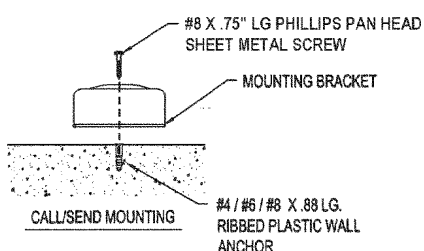
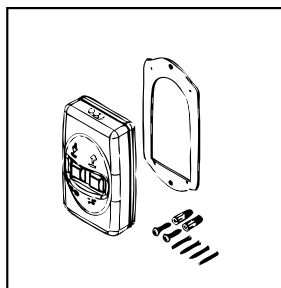
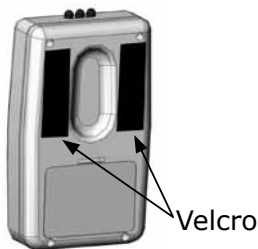
Should interference occur, the unit will stop. This feature has been integrated into the SRE-2750 to ensure your safety.

The direct line between the transmitter to either of the (2) transmitters should be clear of obstacles for optimal operation.

### **To reduce the possibility of interference:**

- While riding in the seat, ALWAYS operate the Elevator using the rocker switch on the armrest. Operating the SRE-2750 with a transmitter while riding in the seat can lead to signal interference.
- DO NOT mount the transmitters behind an obstacle such as a rail post.
- DO NOT allow direct sunlight to shine on the receivers (blinding the receivers on the carriage).
- DO replace transmitter batteries regularly.  
Depleted or nearly-depleted batteries alter the effective range of the transmitter.
- DO keep the transmitter and receiver lens free of dirt and debris.  
Use a non-abrasive cleaner suitable for glass or acrylic surfaces. Do not use polishes or cleaning products containing wax. These products will leave a film on the lens that will reduce the signal transmission range.

## **MOUNTING THE INFRARED CALL/SEND TRANSMITTER**



### ***Mounting STANDARD transmitter:***

1. Leaving the hook and loop halves of the (2) Velcro® strips (provided) together, remove the backing from the **hook** half of each strip.
2. Mount the (2) strips to the back of the transmitter as shown.
3. Remove the backing from the **loop** half of each strip.
4. Mount the transmitter to the desired surface (eg. wall, railing) by gently pressing against the transmitter.

### ***Mounting with OPTIONAL kit SRE-K-1580:***

1. Mount the bracket to the back of the transmitter using the (4) screws provided.
2. Position the bracket/transmitter unit in the mounting location on the wall and mark the top and bottom bracket holes.
3. Drill a pilot hole slightly smaller than the anchors provided.
4. Gently pound the anchors into the wall with a rubber mallet.
5. Position the bracket/transmitter unit on the wall so that the top/bottom bracket holes align with the anchors.
6. Secure the bracket/transmitter to the wall using the screws provided.

# ELECTRICAL

## TESTING THE CALL/SEND TRANSMITTER

### Soft Start Feature

The controller includes a *soft start* feature which causes a *short delay* between the time the rocker switch on the armrest is depressed and the initiation of carriage movement.

This is normal!

1. Using the rocker switch on the seat armrest, run the unit up and down the rail.

*NOTE: The unit should travel noticeably faster going up than down.*

2. Check for smooth operation and travel.
3. Now, using one of the remote call/send transmitters, run the unit up and down the rail.
4. Repeat Step 3 with the other transmitter.
5. Check for smooth operation and travel.

## CIRCUIT BOARD DIAGNOSTICS

The circuit board provided on the SRE-2750 is equipped with (4) diagnostic modes that continuously monitor the unit's operation. This choice of operational modes allows the SRE-2750 to respond to the requirements of a wide variety of installations.

**NOTE : The SRE-2750 is shipped in the MULTI-USER/DIAGNOSTIC MODE.**

### **MULTI-USER/DIAGNOSTIC MODE**

Provides full range of Audio diagnostic notices:

- \***Circuit Board Power Up:** Chirp
- \***Safety Device Activated:** Chirp
- \***Elevator Stopped Off Charge Bumper:** 5 Beeps (4 short and 1 long)  
Repeats every 3 minutes until the Elevator is returned to the bumper.
- \***Seat Safety Disengaged:** Chirp repeats every 3 seconds until seat safety switch is re-engaged.
- \***Battery Voltage Drop:** 5 Beeps (3 short and 2 long)  
Repeats every 4 minutes until seat safety switch is disengaged, the battery voltage increases, or the switch is pressed.
- \***Battery Voltage Critical:** 5 Beeps (2 short and 3 long)  
Repeats once a minute until the voltage exceeds 16V or the switch is pressed.
- \***Switch Active During Power Up:** 2 Beeps / Pause / 5 Beeps (long beeps indicate which switches are active)  
Repeats beeps every 5 seconds until all switches are off.
- \***More Than One Switch Active:** 2 Beeps / Pause / 5 Beeps (long beeps indicate which switches are active)  
Repeats every 30 seconds until all switches are off.
- \***Transmitter ID Memory Full:** 3 Beeps (1 short and 2 long)

### **SINGLE-USER MODE**

Provides the same audio diagnostic notices as the Multi-User/Diagnostic Mode, except for the Seat Safety Disengaged notice.

### **QUIET MODE**

In the QUIET mode, none of the Audible Warning Messages is active.

### **BATTERY WARNINGS ONLY MODE**

Provides battery audio diagnostic only.

- \***Elevator Stopped Off Charge Bumper:** 5 Beeps (4 short and 1 long)  
Repeats every 3 minutes until Elevator is returned to the bumper.
- \***Battery Voltage Drop :** 5 Beeps (3 short and 2 long)  
Repeats once every 4 minutes until the seat safety switch is disengaged or the battery voltage increases.
- \***Battery Voltage Critical:** 5 Beeps (2 short and 3 long)  
Repeats once a minute until voltage is above 16 V.

**CIRCUIT BOARD DIAGNOSTICS**



**NOTICE:**

*Before touching anything inside the carriage assembly, ground yourself by touching an unpainted metal surface on the unit such as an exposed bolt, or one of the mounting screws on the electrical panel. While you work, periodically touch an unpainted metal surface to dissipate any static electricity that could harm internal components.*

**AUDIO REFERENCE**

Chirp	0.25 seconds
Short Beep	0.50 seconds
Long Beep	1.50 seconds
Pause	1.00 second

**Changing the PCB Diagnostic Mode**

1. Turn the circuit breaker on the carriage to `OFF`.
2. Remove the left carriage cover.
3. The unit is shipped in the Multi-User Diagnostic Mode. Changes are made via the Number 1 and Number 2 positions on the 4-Ganged DIP Switch.

**4-GANGED DIP SWITCH**

DIAGNOSTIC MODE	DIP SWITCH POSITION	
	#1	#2
Multi-User	OFF	OFF
Single-User	OFF	ON
Quiet	ON	OFF
Battery Warnings Only	ON	ON

## ELECTRICAL

### ***LEARNING THE REMOTE INFRARED TRANSMITTER***

**(not necessary when installing unit for the first time)**

***The operating channel of the two (2) infrared transmitters included with the SRE-2750 is pre-set at the Bruno factory.***

Reasons for relearning transmitters:

- there are multiple units in the same location;
- you have to replace transmitters.

To relearn a transmitter:

1. Turn the circuit breaker OFF.
2. Remove the CARRIAGE COVER to expose the circuit board.
3. Locate the LEARN/ERASE button on the circuit board (see left).
4. On one of the IR TRANSMITTERS, remove the battery access panel.

***NOTE:*** If the transmitter is mounted to a wall, unscrew the (2) mounting bracket screws, turn the transmitter over and remove the battery access panel.

5. On the TRANSMITTER board, locate the switch labelled "SW3" (see left).
6. Change the configuration for switches 1 and 2.

***Note: There are four possible configurations:***

- 1 up, 2 down (default manufacturer's setting)
- 1 up, 2 up
- 1 down, 2 up
- 1 down, 2 down

7. Once you have changed the switch positions:
  - turn on the CARRIAGE circuit breaker;
  - wait until you hear a BEEP.

8. ***Clear the memory:***

- Hold down the LEARN/ERASE button until the LED goes out (approximately 12 seconds).

9. Press and hold the LEARN/ERASE button (LED is on). As you continue to press the LEARN/ERASE button, press either of the call/send transmitter buttons until the LEARN/ERASE LED goes out (approximately 2-5 sec.).
10. Release both buttons (LEARN/ERASE and transmitter). The remote is now "learned".

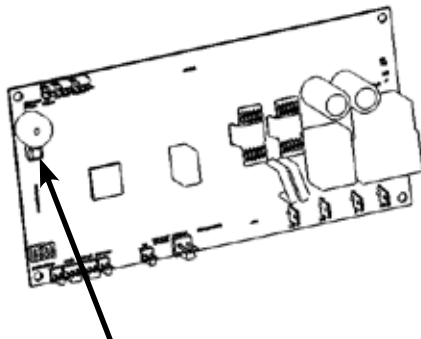
11. ***Test transmitter operation:***

- Depress either of the transmitter buttons.
- If the carriage moves, the new configuration has been accepted and the transmitter relearned.
- If the carriage does not move, repeat Steps 8 through 10.

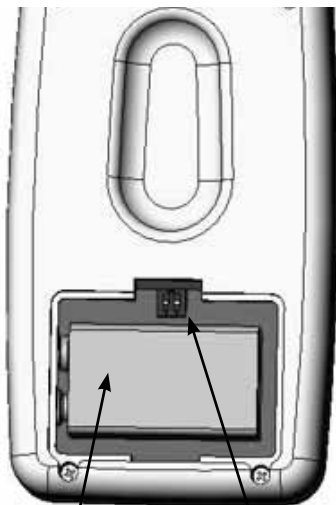
12. Make sure all transmitters are set to the same switch configuration.

13. Remount the transmitter back (remount on wall if applicable).

14. Remount and secure the carriage cover.



LEARN/ERASE button



9V battery

SW3 switch

(access panel removed)

# TESTING and LUBRICATION

## **TESTING ELEVATOR OPERATION**

### **Important to Know**

***Direction of travel of the seat and carriage corresponds to the side of the rocker switch depressed.***

A slight delay will occur between the time the rocker switch is depressed and the start of carriage movement.

This is normal and is a function of the *soft start* feature of the controller.

**The unit should travel noticeably faster going up than down.**

### **Torque Specifications**

<b><u>GRADE 10.9 (Metric)</u></b> (Roughly equivalent to US Grade 8)		
M8	Grade 10.9	25 lb.-ft
M10	Grade 10.9	47 lb.-ft
M12	Grade 10.9	83 lb.-ft
M14	Grade 10.9	133 lb.-ft

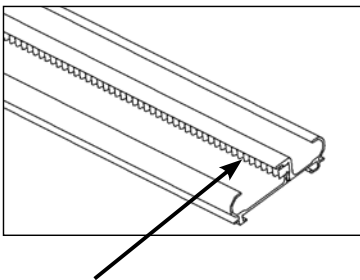
1. Before securing, all clamps and with the seat in the central riding position, use the rocker switch to run carriage/seat assembly completely down and up the rail.
2. Check the seat-to-wall clearance.  
***A clearance of 1/2" to 1" (13-25 mm) is acceptable.***
3. Repeat the run with the seat in the folded position. If necessary, adjust the rail placement by sliding it closer to, or further from the wall.
4. Make a total of 5 or 6 trial runs to be sure all components function correctly, and that proper seat-to-wall clearance is maintained over the entire length of travel.

5. Install and tighten the screws in the remaining foot clamps, starting at the bottom and working toward to top.

**NOTE: On each clamp, tighten the back foot first!**

6. Check tightness of all screws/bolts.
7. Run the carriage/seat assembly up and down the rail to recheck the seat-to-wall clearance, and to verify correct operation of all elevator components.
8. Verify proper operation of the power supply, call/send transmitters, on/off switch, footrest, safety switches, and carriage limit switches.
9. Adjust the seat height, if necessary, to maximize the customer's comfort (see ADJUSTMENTS).
10. Inform the customer of the location of the Operator's Manual. Encourage him/her to become familiar with the contents of the Operator's Manual.
11. *Train the customer to use the stairway elevator correctly and safely. Remind him/her to always buckle the positioning belt when on board the stairway elevator. Be sure to have him/her operate the unit while you are there to answer questions and address concerns.*

## **LUBRICATION**



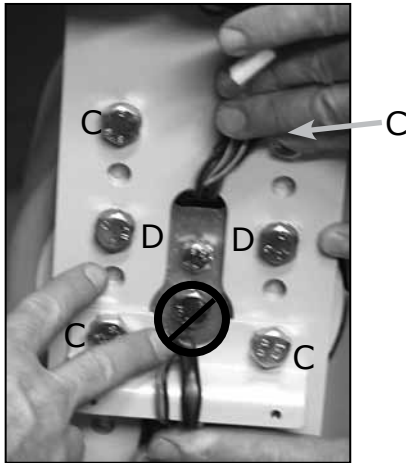
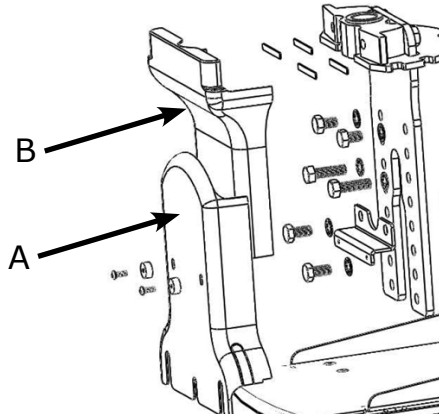
grease on gear rack **TEETH ONLY**

Apply a dab of white lithium grease to the gear rack **TEETH ONLY** (approximately every 6"/15 cm).

# ADJUSTMENTS

## SEAT HEIGHT ADJUSTMENT

1. Remove the front seat post cover (A) and the seat swivel cover (B).



2. Remove (4) silver zinc plated M10 bolts (C) from the seat post.
3. Remove (2) gold zinc plated M10 bolts (D) BETWEEN the silver zinc plated bolts.

***DO NOT REMOVE OR LOOSEN THE CENTER GOLD ZINC M10 BOLT DURING SEAT HEIGHT ADJUSTMENT!***

4. At this point the seat and seat post are loose and ready to be moved to the new height.
5. Raise (or lower, as appropriate) the seat/seat post unit.
6. Reinsert the (6) M10 bolts: (2) silver on top, (2) gold in the middle and (2) silver on the bottom.
7. Tighten to the appropriate torque (see chart to left).
8. Remount the swivel and front covers.

### Torque Specifications

<i>GRADE 10.9 (Metric)</i> (Roughly equivalent to US Grade 8)		
M8	Grade 10.9	25 lb.-ft
M10	Grade 10.9	47 lb.-ft
M12	Grade 10.9	83 lb.-ft
M14	Grade 10.9	133 lb.-ft

## **SEAT COVER GAP ADJUSTMENT**

Installing the seat post in its highest position (A) will cause a gap (B) between the seat post and footrest covers.



**A**



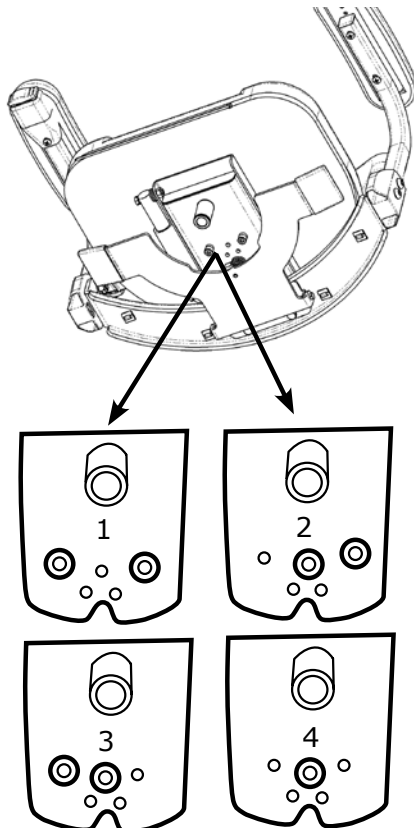
**B**



**B**  
(close up)

To eliminate the gap, lower the seat post height as allowed by the installation and customer preferences (see Seat Height Adjustment instructions on the previous page).

## **SEAT SWIVEL ADJUSTMENT**



***VIEWED FROM BOTTOM OF SEAT***

You may set the seat for any one of (4) possible swivel configurations. To change from the standard, factory-set configuration (no. 1), change the position of the M8 socket head cap screws on the bottom seat channel, as shown to the left. For Configuration (4), you will discard one M8 screw.

- Configuration (1):
  - ◇ standard, factory setting
  - ◇ swivel of 67 degrees to the right and to the left.
- Configuration (2):
  - ◇ swivel of 90 degrees to the left (*when sitting in seat*)
- Configuration (3):
  - ◇ swivel of 90 degrees to the right (*when sitting in seat*)
- Configuration (4):
  - ◇ swivel of 90 degrees to the right and to the left.

## RIGHT-HAND INSTALLATION: REVERSING OPERATION

As shipped from the factory, the Electra-Ride™ LT is set up for left-side installation (*as viewed from the bottom of the stairs*).

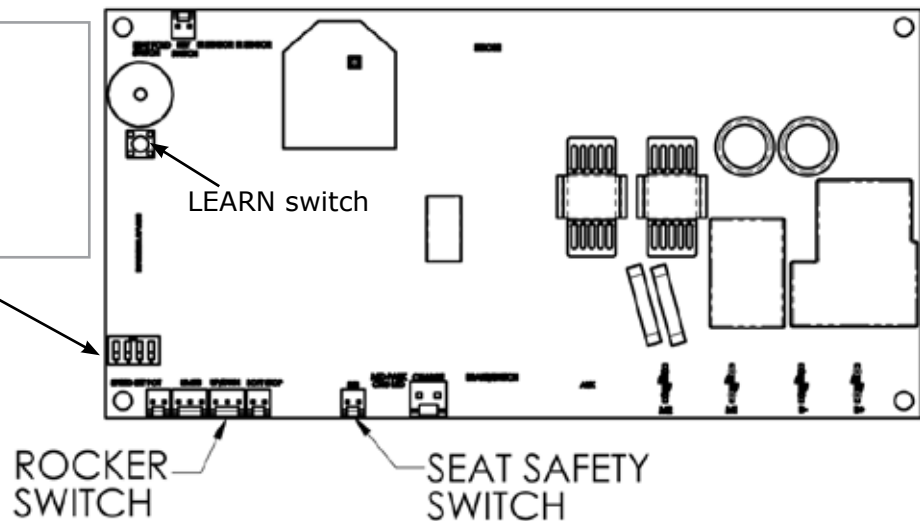
### **To convert the unit for right-side installation:**

1. Make sure the circuit breaker switch on the rear of the carriage is in the OFF position.
2. Remove the back carriage cover and the left side cover.
3. Set the No. 3 DIP Switch on the 4-ganged dip switch to the **ON** position.

***It is imperative that the circuit breaker be turned OFF while changing from left-hand to right-hand installation.***

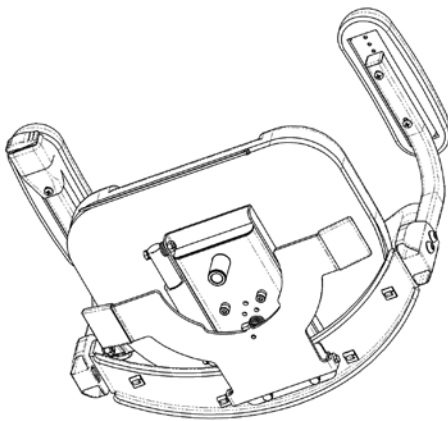
#### 4-ganged DIP switch

- switch 1 = diagnostic
- switch 2 = diagnostic
- switch 3 = right-hand install
- switch 4 = coast delay



### **MOVING THE ROCKER SWITCH TO THE LEFT ARMREST**

1. Remove 1/4" Phillips screw securing the rocker switch bracket to the right-hand armrest tube.
2. **NOTE WIRE COLOR LOCATIONS AND SWITCH ORIENTATION.**
3. Disconnect the (3) wires from the rocker switch.
4. From the bottom of this arm, gently pull the cable out of the arm.
5. Reinsert and tighten the 1/4" Phillips screw into the right arm pad.
6. Unclip the wire harness from the right side and reclip the harness on the left side.
7. Remove the front 1/4" Phillips screw from the left arm pad.
8. Place the wire harness connectors one behind the other (in line).  
*Use masking tape to hold the connectors in this in-line position.*
9. Push the taped end of the wire harness through the arm cover slot, and up through the left arm tube.
10. Untape the wire harness connectors and connect, ***in the correct orientation as noted above***, to the rocker switch.
11. Carefully screw the rocker switch cover onto the left arm (1/4" Phillips screw).
12. Press the rocker switch to verify that the unit moves in the correct direction.





### **TURNING THE UNIT OFF**

When the Elevator will not be in use for an extended period of time:

1. move the seat/carriage 10" (25 cm) away from the lower charge contacts,
2. turn off the circuit breaker, then
3. unplug the battery charger from the wall outlet.

**DO NOT** *unplug the battery charger from the wall outlet without first turning off the circuit breaker.*

*Failure to first turn off the circuit breaker will result in battery discharge or premature battery failure.*

### **TURNING THE UNIT BACK ON**

To turn the Elevator back on:

1. turn on the circuit breaker, then
2. plug the battery charger back into the wall outlet.

**NOTE:** *The batteries may require recharging before normal use if the Elevator has remained in the 'off' position for an extended period of time.*

***To do so, simply move the unit to the LOWER charge contacts, and reconnect the battery charger to the wall outlet (circuit breaker `on').***

## TROUBLESHOOTING

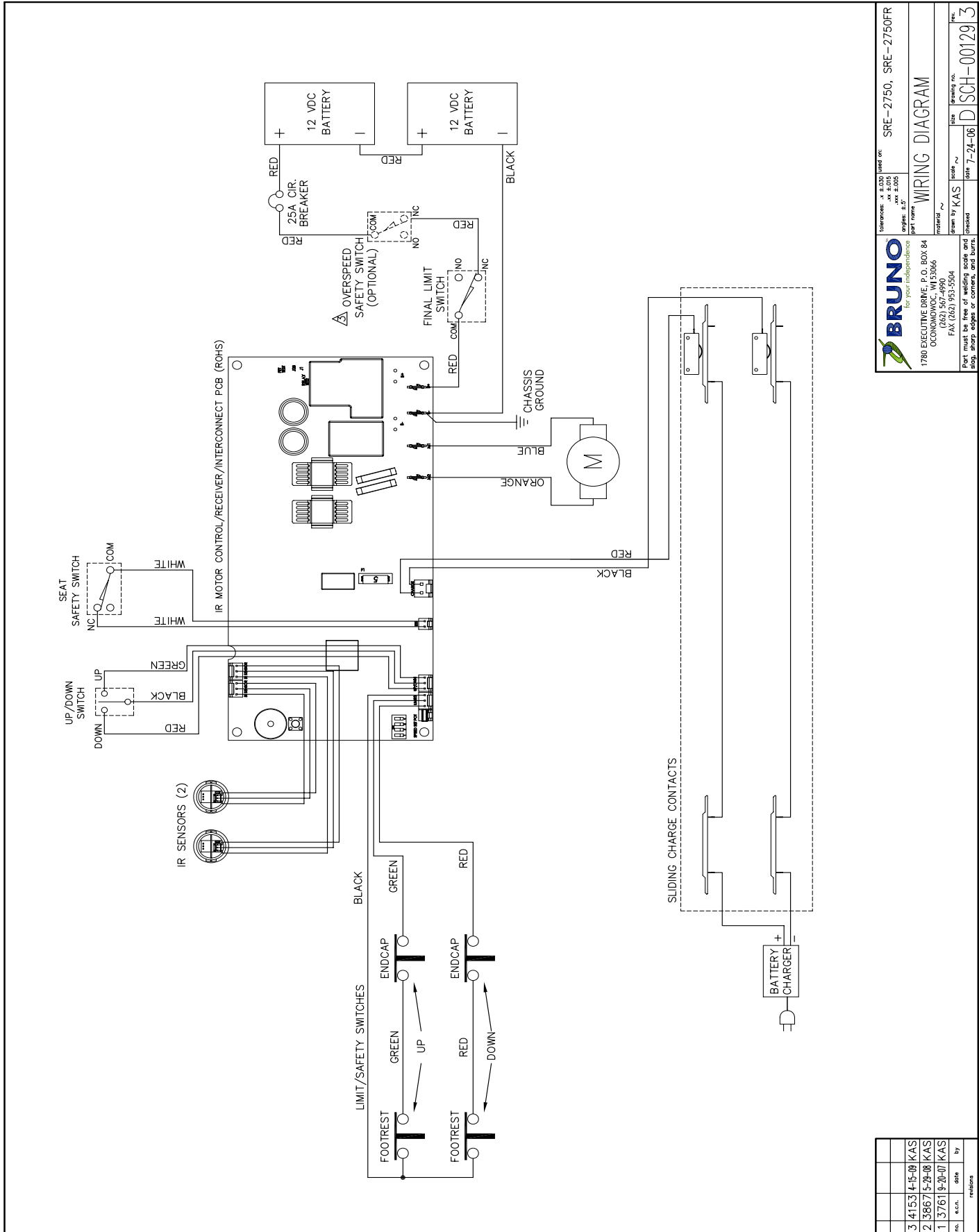
<p><b>Unit fails to operate</b></p>	<p>Check circuit breaker. Reset if necessary.</p> <p>Check battery connections.</p> <p>Check footrest safety switches to see if one of these limit switches is depressed. The safety tray below the footrest should slide freely and not stick in a position which would depress one of the safety switches.</p> <p>Check for discharged batteries. Battery voltage should be in a range of 21-29 VDC. Unit will "cut out" at 16.5V and will require 21V to restart.</p>
<p><b>Unit operates slowly, lacks power</b></p>	<p>Check for discharged batteries.</p> <p>Check for loose connections.</p> <p>Check to make sure battery charger is plugged in and working.</p>
<p><b>Controls operate backwards and unit goes "up" slowly and "down" fast</b></p>	<p>Unit is not set up for correct stair side operation. Make correct connections according to instructions appearing earlier in this manual.</p>
<p><b>Unit operates erratically or intermittently with a rider using the armrest-mounted control switch</b></p>	<p>Check to see that the footrest safety tray is not dragging on the stair nosing or hitting debris on the stairs. Clear debris and, if necessary, reposition the stair rail mounting brackets to correct the problem.</p>
<p><b>Unit will not operate unless the seat is positioned so that it faces the open side of the stairs</b></p>	<p>This is correct operation. A safety switch in the seat swivel prevents the unit from operating with the seat "out of position".</p>
<p><b>Unit will not operate with remote transmitter</b></p>	<p>Check batteries in remote call / send unit.</p> <p>Check IR receiver.</p> <p>Check for loose connection.</p> <p>Check that transmitters are `learned' to the same switch position (see Learning the Transmitter).</p>
<p><b>Unit does not shut off when it hits the bumper at the end of the rail</b></p>	<p>Check limit switch in carriage assembly for proper operation.</p>


## YEARLY MAINTENANCE OPERATIONS

### STAIRWAY ELEVATORS

- Clean rail, rack, and guide pads.
- Apply a small dab of grease to the gear rack **TEETH ONLY**.
- Check rail wear. There should be no groove.
- Clean charging contacts (both carriage and rail ends) with Scotch Brite®.
- Check battery voltage (load test).
- Check safety switches (footrest, carriage, seat).
- Check armrest switch and keyswitch (if applicable).
- Check battery charger output:
  - Load test using remote controls: check voltage while carriage is traveling up.
  - Test with carriage against contacts.
  - Test with carriage away from contacts.
  - Check contacts.
- Check speed.
- Check seat belt for wear and proper operation.
- Examine exposed wiring. Are there any cuts or abrasions?
- Verify operation of seat swivel mechanism. Does it move easily and lock in place correctly?
- Check that all hardware is properly tightened.

# WIRING SCHEMATIC




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 for your independence  
 1780 EXECUTIVE DRIVE, P.O. BOX 84  
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 USA (262) 953-2504  
 FAX (262) 953-2504

tolerances: x ±.030 listed on: SRE-2750, SRE-2750FR  
 y ±.015  
 z ±.010  
 angles: ±.5°  
 part name: WIRING DIAGRAM  
 material: ~  
 drawn by: KAS  
 date: 7-24-06  
 size: inches: 11  
 sheet: 3  
 revision: SCH-00129

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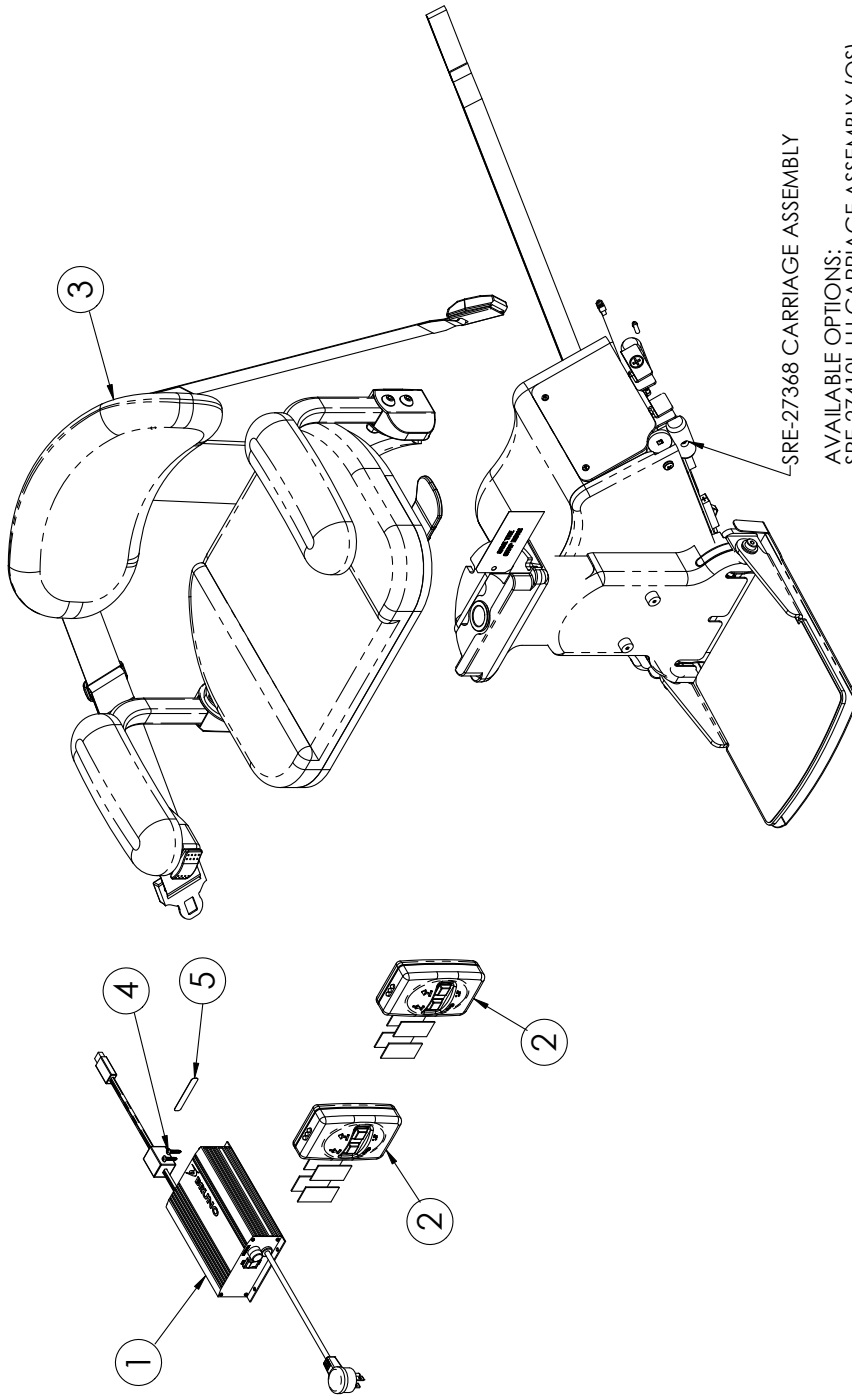
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# 'ELECTRA-RIDE' LT

## EXPLODED VIEW AND BILL OF MATERIALS

ITEM NO.	Default/QTY.	PART NO.	DESCRIPTION
1	1	BCR-24018	24VDC 2A CLIPLIGHT SWITCHMODE BATTERY CHARGER
2	2	SRE-00945	RF TRANSMITTER w/VELCRO (SID)(ROHS)
3	1	SRE-27313	SEAT ASSEMBLY (2750)
4	1	SRE-K-1518	CHARGER MOUNTING SCREWS
5	1	~	SERIAL NO. LABEL (SMALL)



SRE-27368 CARRIAGE ASSEMBLY

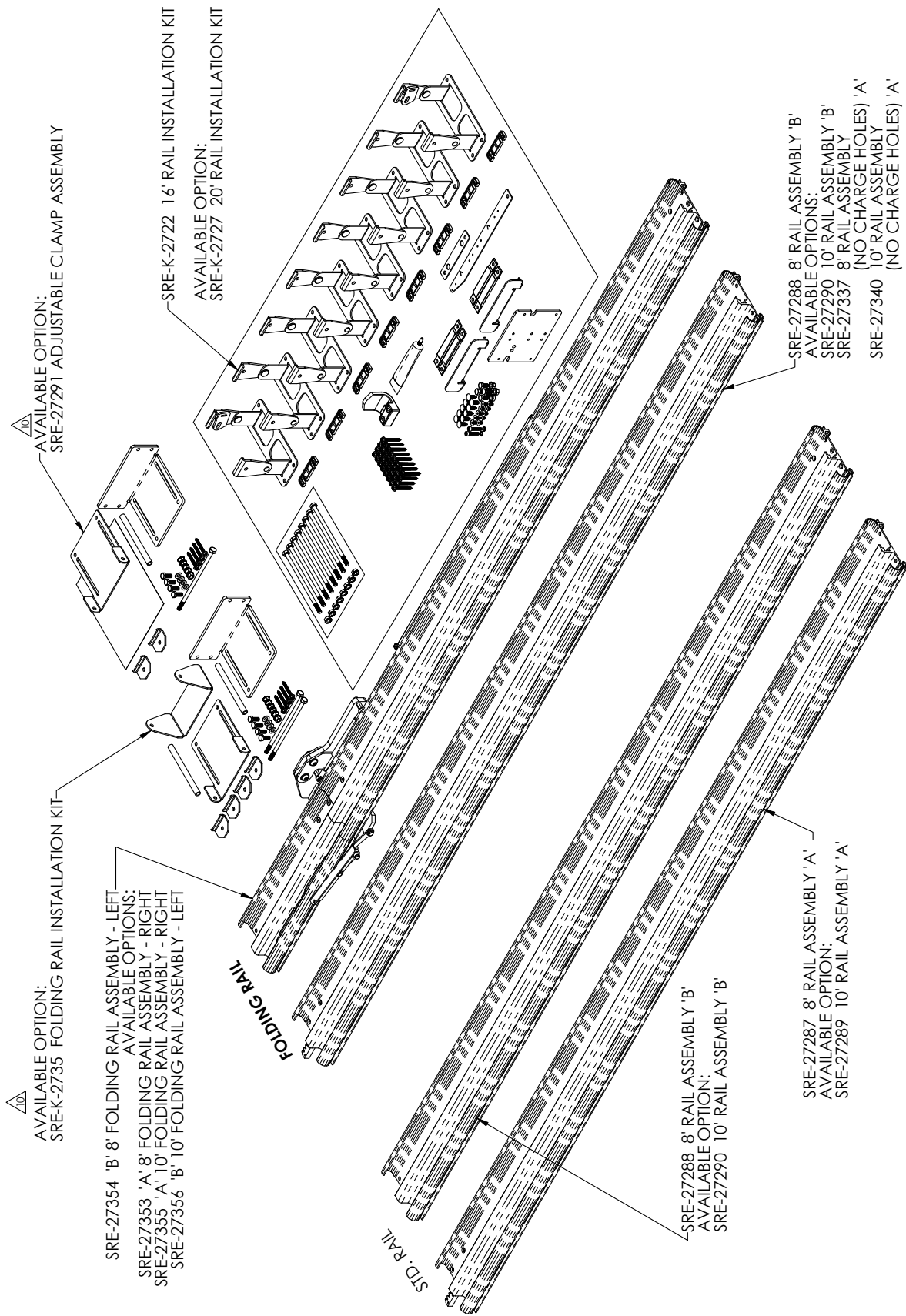
AVAILABLE OPTIONS:  
 SRE-27410L LH CARRIAGE ASSEMBLY (OS)  
 SRE-27410R RH CARRIAGE ASSEMBLY (OS)

**SRE-2750**  
**SHEET 1 OF 2**  
**REV. 10 (4430)(4/20/10)(DPG)**

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# EXPLODED VIEW AND BILL OF MATERIALS

## 'ELECTRA-RIDE' LT



**SRE-2750**  
**SHEET 2 OF 2**  
**REV. 10 (4430)(4/20/10)(DPG)**

# EXPLODED VIEW AND BILL OF MATERIALS



Bruno Technical Service  
1-800-656-0552  
service@bruno.com

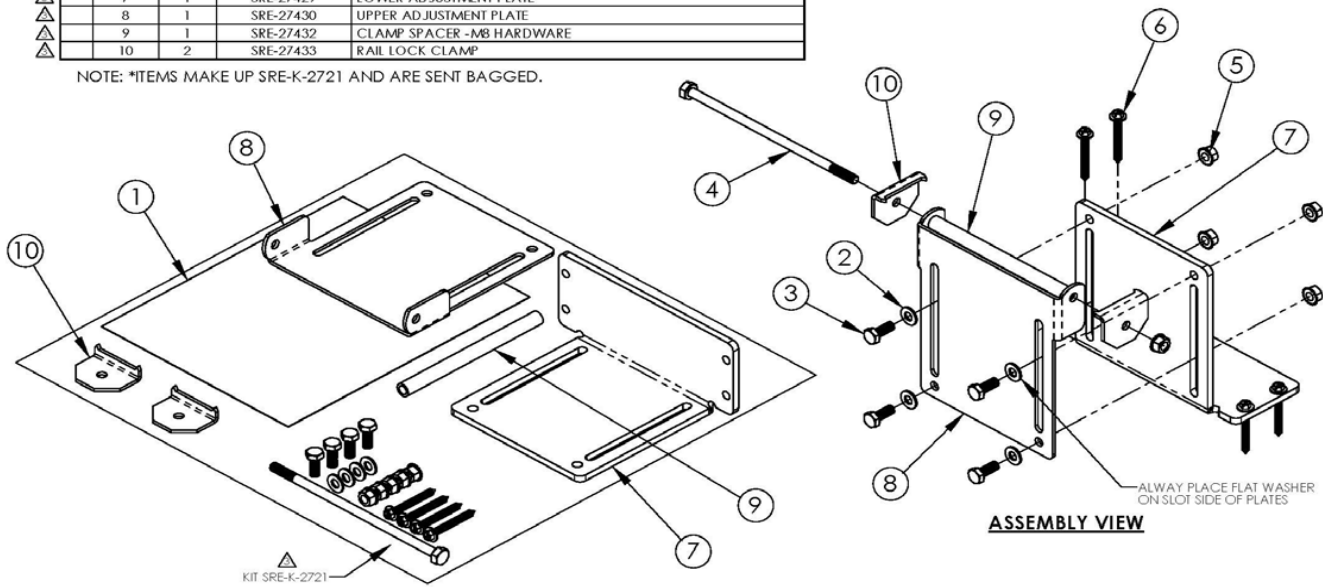
Created By: SBK  
Approved By:  
Date: 1-23-06

**ILS-00655**  
Rev. 3  
Page 1 of 1

## ADJUSTABLE CLAMP SET ASSEMBLY

ITEM NO.	Default /QTY.	PART NO.	DESCRIPTION
1	1	ILS-00655	ILLUSTRATION
* 2	4	MFSW-08001	MB FLAT WASHER (HARDENED)
* 3	4	MHCS-08002	MB X 1.25 X 20mm LG HEX HEAD CAP SCREW
* 4	1	MHCS-08018	MB X 1.25 X 190MM LG HEX HEAD CAP SCREW (GRADE 8.8) ZINC
* 5	5	MKEP-08125	MB X 1.25 KEPS NUT
* 6	4	MSSM-63001	M6.3 X 50mm LG SLOTTED HEX HEAD SHEET METAL SCREW
7	1	SRE-27429	LOWER ADJUSTMENT PLATE
8	1	SRE-27430	UPPER ADJUSTMENT PLATE
9	1	SRE-27432	CLAMP SPACER -MB HARDWARE
10	2	SRE-27433	RAIL LOCK CLAMP

NOTE: \*ITEMS MAKE UP SRE-K-2721 AND ARE SENT BAGGED.



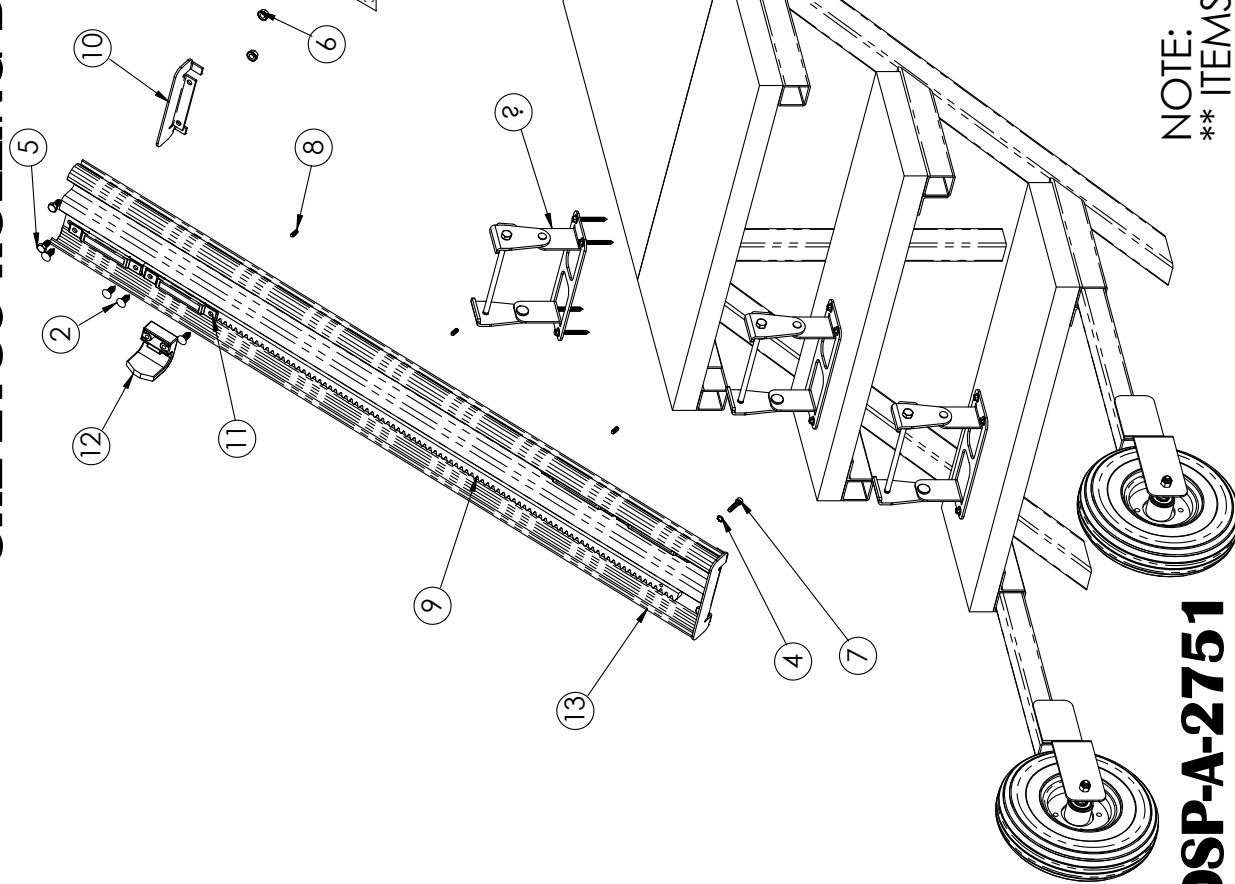
**SRE-27291**  
SHEET 1 OF 1  
REV. 3 (4430)(4/20/10)(DPG)



# EXPLODED VIEW AND BILL OF MATERIALS

## SRE-2750 ROLLING DISPLAY W/44" RAIL

ITEM NO.	Rail Assembly/QTY.	PART NO.	DESCRIPTION
1	1	DSP-00150	SRE DISPLAY ASSEMBLY
**	8	FNF-28101	.281" HOLE X .92" LG FINNED FASTENER (NATURAL)
3	1	LUB-00102	LUBRI-PLATE 1.75 OZ. TUBE
4	1	METW-06001	M6 EXTERNAL TOOTH WASHER
**	5	MHCS-08007	M8 X 1.25 X 16mm LG HEX HEAD CAP SCREW
**	6	MKEP-08125	M8 X 1.25 KEPS NUT
7	1	MSHS-06008	M6 X 1 X 25MM LG METRIC SOCKET HEAD CAP SCREW
8	3	MSSSA-05002	M5 X .08 X 16MM SET SCREW (CONE POINT WITH ANTI-SEIZE)
9	1	SRE-20311	DISPLAY GEAR RACK (40')
10	2	SRE-27206	END CAP
**	4	SRE-27255	CONTACT STRIP BLOCK
12	1	SRE-27286	FINAL LIMIT RAMP ASSEMBLY
13	1	SRE-27292	48" DISPLAY RAIL
14	3	SRE-27417	CLAMP ASSEMBLY
15	1	SRE-K-2732	4' RAIL ELECTRICAL PARTS KIT



NOTE:  
\*\* ITEMS ARE PART OF SRE-K-2726

**DSP-A-2751**  
**SHEET 1 OF 1**  
**REV. 3 (4303)(12-1-09)(JJP)**





**FIVE YEAR MAJOR COMPONENTS WARRANTY**  
**TWO YEAR LIMITED WARRANTY**  
**for**  
**Bruno Stairlifts**

Bruno Independent Living Aids, Inc. ("Bruno"), warrants to the original purchaser of a Bruno Stairlift that the Bruno Stairlift is free from defects in material and workmanship for a period of two years from date of purchase. In addition, Bruno warrants that the motor, gear box and rail (the "Major Components") will be free from defects in materials and workmanship for a period of five years from the date of purchase.

The exclusive remedy for a defect in a Bruno Stairlift shall be the repair or replacement, at the option of Bruno, of the defective part or component. After the first 30 days of this warranty, only parts and components are covered. This warranty does not cover labor and other services after the initial 30 days. If repair or replacement of a Bruno Stairlift is not commercially practical or cannot be timely made, Bruno may elect to refund the purchase price of the Bruno Stairlift instead of repairing or replacing the Bruno Stairlift.

**IN NO EVENT SHALL BRUNO BE RESPONSIBLE FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER SUCH DAMAGES ARISE FROM CLAIMS BASED ON CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR PRODUCT LIABILITY.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**ALL IMPLIED WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN THEIR DURATION TO THE LENGTH OF THE WARRANTY STATED ABOVE FOR THE AFFECTED COMPONENT.** Some states do not allow limitations on how long an implied warranty lasts so the above limitation may not apply to you.

To obtain warranty service, you must follow these procedures:

1. Obtain return authorization by calling your local Bruno dealer;
2. Return the Bruno Stairlift, freight prepaid, to the address provided by your Bruno dealer or Bruno with proof of purchase indicating the date purchased.

Bruno will pay for shipping back to the purchaser within the continental United States and Canada if a defect in material or workmanship is discovered. Return freight and repair charges will be the responsibility of the purchaser if the problem is not covered by warranty.

This warranty does not cover damage or failure caused by misuse, abuse, accidents, physical damage, modifications not made by Bruno, damage in shipment, or repairs undertaken by anyone other than Bruno factory employees or authorized distributors. The "original purchaser" of a Bruno Stairlift that is leased or rented shall be the person or entity acting as the lessee or rental provider.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Bruno specifically does not authorize any person to extend the time or scope of this warranty.

For further information regarding this limited warranty, please contact Bruno by calling 1-800-882-8183 or writing to Bruno at the following address:

Bruno Independent Living Aids, Inc.®  
Attention: Service Department  
1780 Executive Drive, P. O. Box 84  
Oconomowoc, WI 53066 USA

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