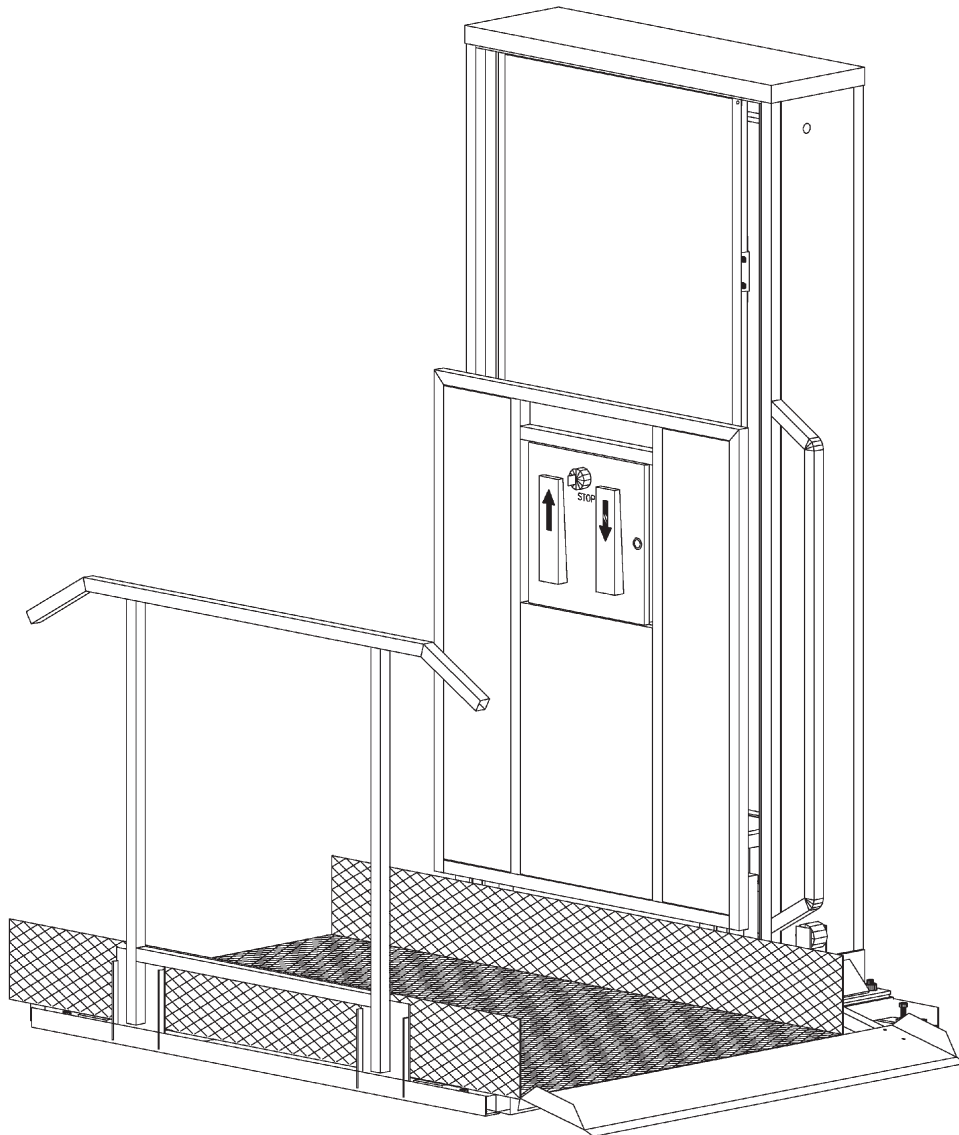




INSTALLATION MANUAL

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Revision 1 – November 2004



SECTION 1 - SITE PREPARATION

1.1

The w-chair lift elevator requires a solid, smooth, and level mounting surface with an area at least 12" larger than the lift itself (60" x 66" or 66" x 66" for an adjacent style lift).

You should also make sure that the toe plate will land on a solid surface, this will require an addition 12" to 20" on the entrance side of the lift.

The mounting surface must be solid enough to support the lift and its maximum rated load (a total of 880 lb.). A solid wood or concrete deck would be an acceptable mounting surface.

NOTE: The w-chair lift ships with four 3/8" x 2 3/4" concrete wedge anchors.

1.2

The travel wall is the wall below the upper entrance/exit point of the elevator (Fig. 1). This wall should be vertical, smooth, and free of gaps or protrusions for the entire travel distance of the elevator.

1.3

A 110 VAC 15A electrical receptacle must be provided within 6 feet of the tower side of the lift.

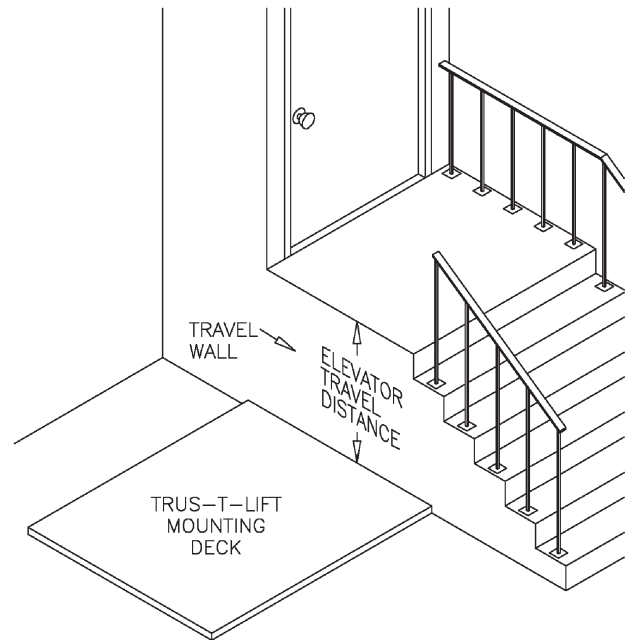


Figure 1. Typical installation site showing mounting surface and travel wall.

**** All lifts over 52" in travel should be secured to the building for additional support.**

SECTION 2 - ASSEMBLY

2.1
Position the base frame 3 1/2 inches from the travel wall and in line with the upper entrance/exit (Fig. 1).

2.2
Adjust the leveling screws to level the base frame (Fig. 2).
NOTE: Do not install the anchors at this time.

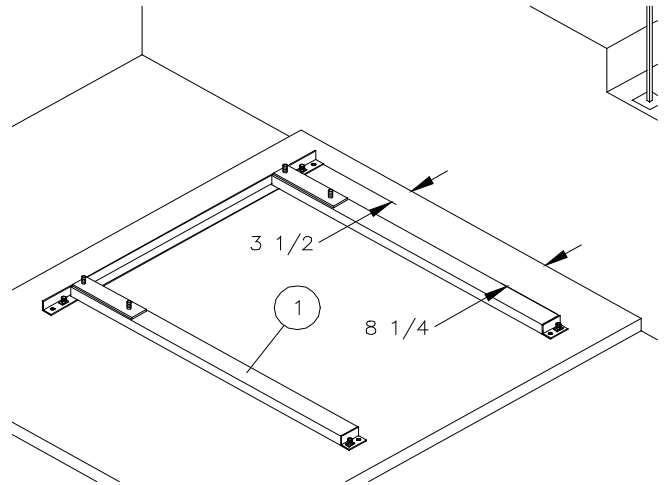


Figure 1. Positioning the base frame.

MATERIAL LIST
1. Base Frame

PART #
FFCTB001

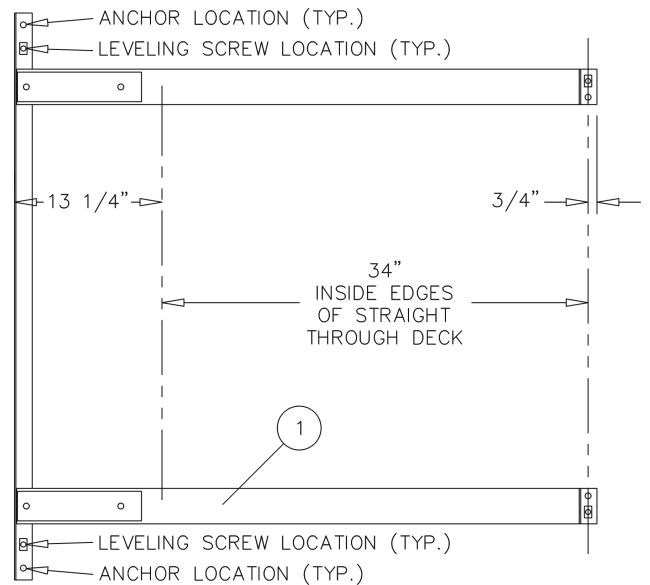


Figure 2. Leveling screw, anchor locations and deck position.

SECTION 2 - ASSEMBLY

2.3
Secure the main tower to a furniture dolly for ease of handling .

2.4
Position 2" Styrofoam packing blocks in the positions indicated in preparation for installing the main tower (Fig 4).

2.5
Using the furniture dolly, move the main tower into position over the mounting bolts. The front half of the tower base angles should be supported by the 2" Styrofoam packing blocks (Fig. 4).

2.6
Carefully remove the dolly from the main tower and lower the back half of the tower onto the mounting bolts (Fig. 5). Remove the 2" Styrofoam packing blocks and lower the front half of the tower on to the mounting bolts (Fig. 6). Install and tighten the nuts for the tower base angles. Once the tower is secure to the base frame and is in position remove the guide frame hold down strap (Fig. 3).
!!DO NOT MOVE THE LIFT FROM THE GUIDE FRAME OR CARRIAGE ONCE THE HOLD DOWN STRAP HAS BEEN REMOVED.

MATERIAL LIST

1. Base frame
2. 2" Styrofoam packing blocks
3. Main tower assembly
4. 1/2 - 13 N.C. flange nut

PART #
FFCTB001

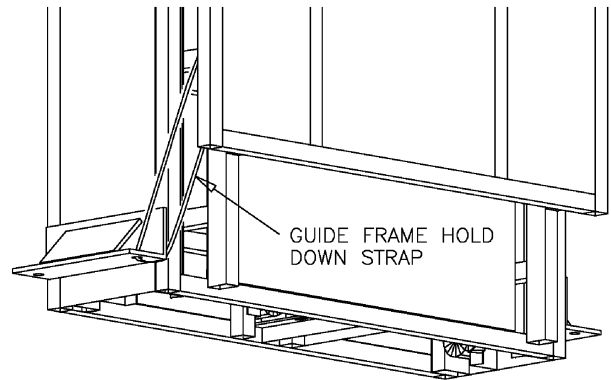


Figure 3. Location of the carriage hold down strap.

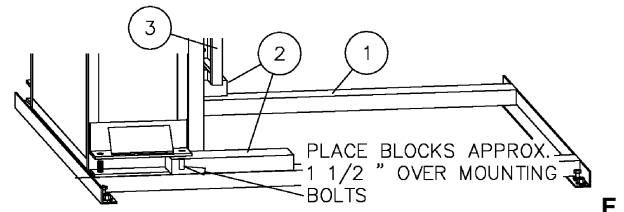


Figure 4. Supporting the front of the main tower on Styrofoam packing blocks.

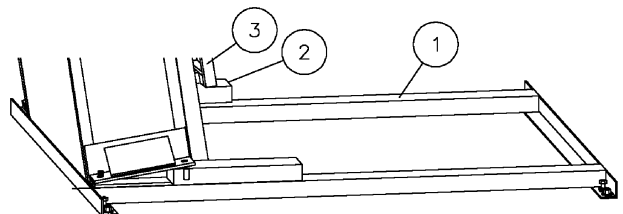


Figure 6. Lowering the rear of the main tower on to the mounting bolts.

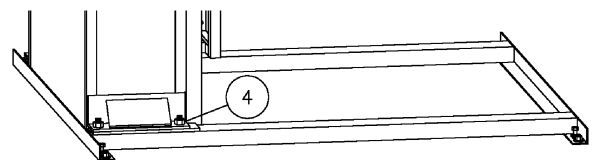


Figure 5. Installing the nuts on the main tower mounting bolts.

SECTION 2 - ASSEMBLY

2.7

Plug the main tower in to a 110 VAC electrical outlet and raise guide frame to a height of at least 14 inches (FIG. 7).

2.8

Slide the carriage in to place on the base frame (Fig. 8), be careful not to scratch the base frame.

Hint!! Use packing foam from shipping crate to protect base frame when installing carriage.

2.9

Lower the guide frame to line up bolt holes on the carriage, and install the bolts (Fig. 9).

NOTE: Do not over tighten the bolts.

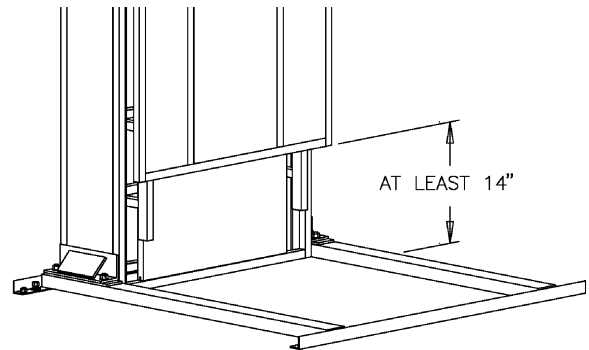


Figure 7. Raising the guide frame to allow room to install the carriage.

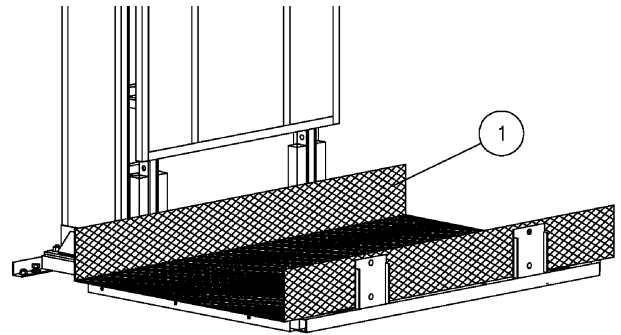


Figure 8. Sliding the carriage in to position.

MATERIAL LIST

1. Carriage
2. 1/2 - 13 x 3 bolt

PART #
FFCTC001

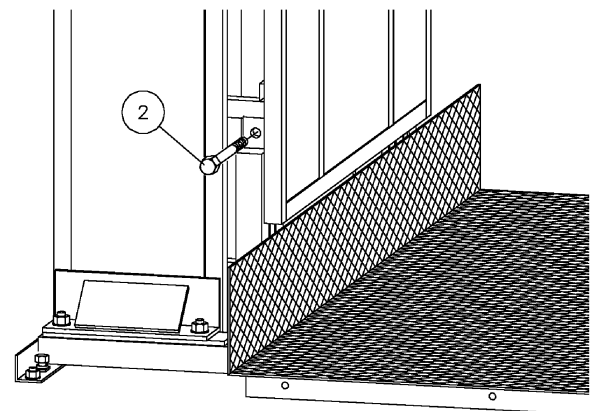


Figure 9. Bolting the carriage to the guide frame.

SECTION 2 - ASSEMBLY

2.10

Install the toe plate guide on the same side as the toe plate and tighten all the screws (Fig. 10).

2.11

Install the handrail and tighten the bolts (Fig. 11).

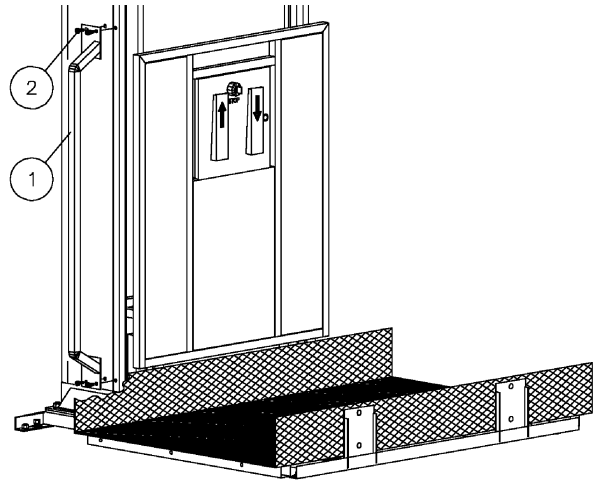


Figure 10. Installing the toe plate guide.

MATERIAL LIST

1. Toe plate guide/grab rail
2. 10-32 x 3/4 lg. pan head screw
3. Handrail
4. 5/16 N.C. x 1 3/4 lg. bolt c/w lock nut & washer

PART #
FFCTC031
FFBTC007

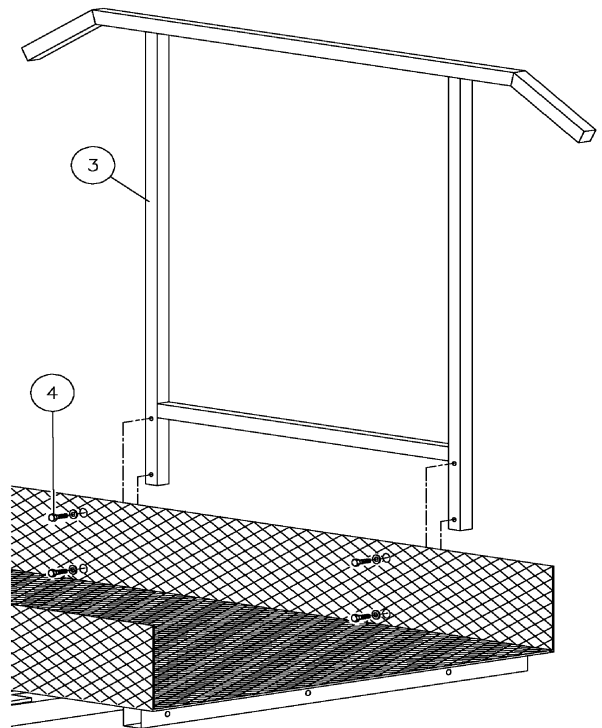


Figure 11. Installing the handrail.

SECTION 2 - ASSEMBLY

2.12

Raise the carriage to a comfortable working height, install the toe plate and tighten all the bolts (Fig. 12).

2.13

Install the toe plate roller lever on to the toe plate (Fig. 13).

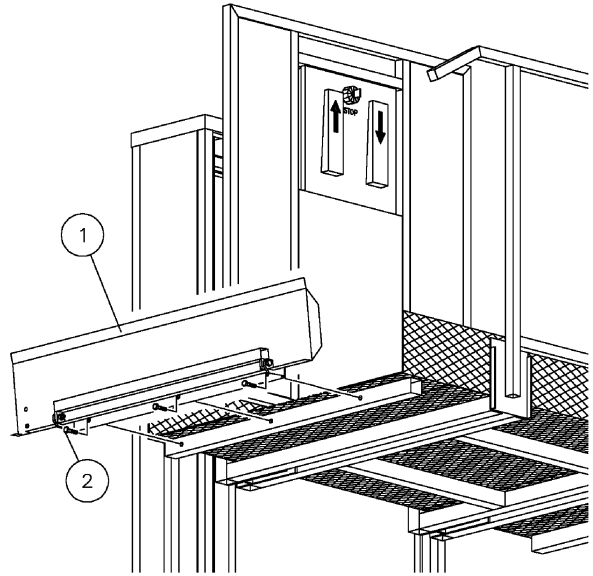


Figure 12. Installing the toe plate.

MATERIAL LIST

1. Toe plate assembly
2. 3/8 N.C. x 3/4 lg. bolt c/w lock nut
3. Toe plate roller lever
4. 10 - 32 x 3/4 lg. pan hd. mach. screw

PART

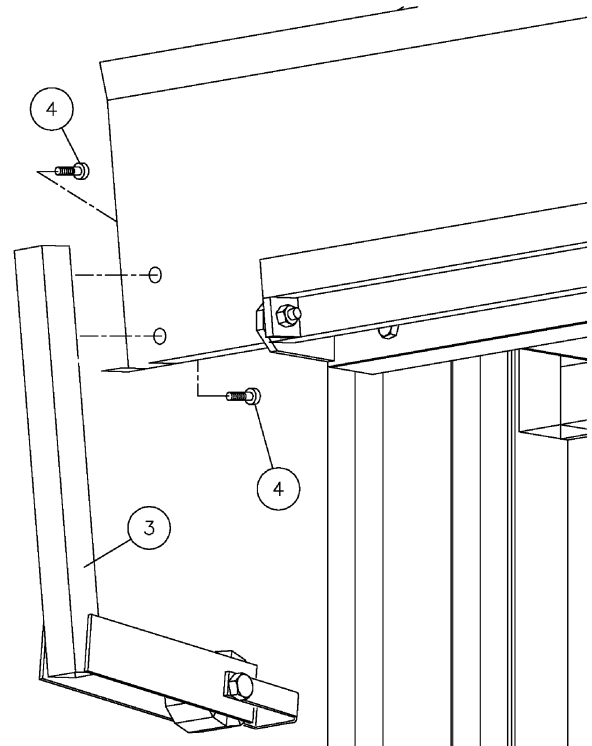


Figure 13. Installing the toe plate roller lever.

SECTION 2 - ASSEMBLY

2.14

Unfasten one side of the toe plate roller strap (Fig. 14).
Loop the strap around the toe plate guide and re-attach it
to the toe plate roller lever (Fig. 15).

NOTE: Do not over tighten the bolts.

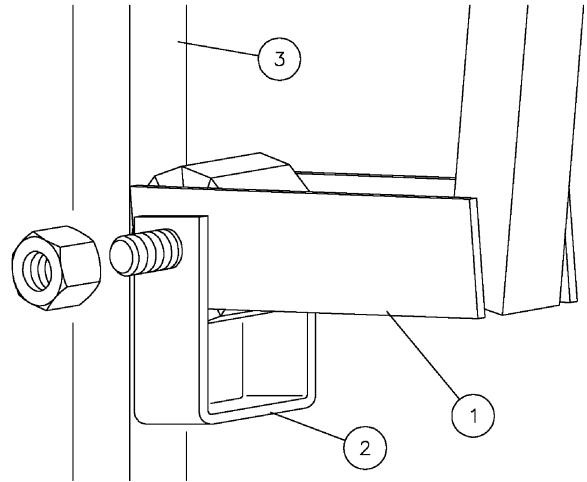


Figure 14. Installing the toe plate roller strap.

MATERIAL LIST

- 1. Toe plate roller lever
- 2. Toe plate roller strap
- 3. Toe plate guide/grab bar.

PART

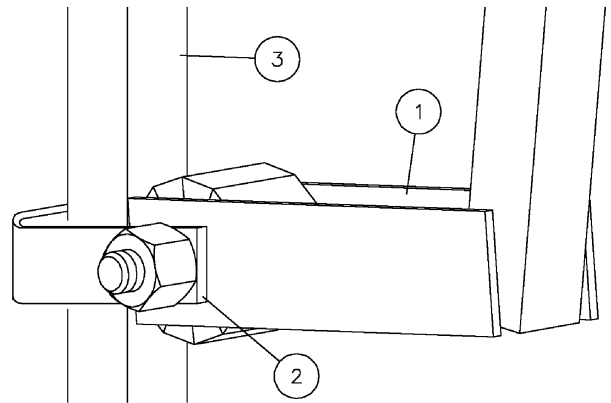


Figure 15. Re-attaching the toe plate roller strap after wrapping it around the guide bar.

SECTION 2 - ASSEMBLY

2.15

Level the deck with the two leveling screws provided (Fig. 16).

2.16

Adjust the leveling screws in the base frame so that the carriage runs evenly along the travel wall (Fig. 2).

2.17

Install and tighten the 3/8 x 2 /34 concrete wedge anchors (assuming a concrete base is used) (Fig. 2).

2.18

The upper limit adjusting bracket is located on the right side of the front cover plate of the main tower. Use a Robertson screwdriver to loosen and slide this bracket until you achieve the correct height (Fig. 17). Caution: Do not drop the upper limit adjusting bracket down the shaft, it is very difficult to retrieve.

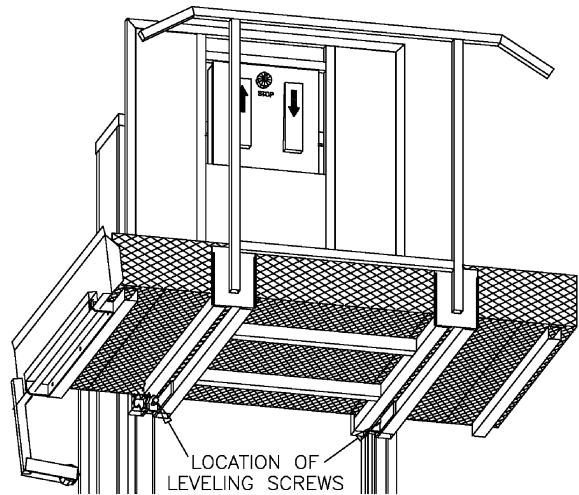


Figure 16. Partial cut-away view showing the location of the leveling screws.

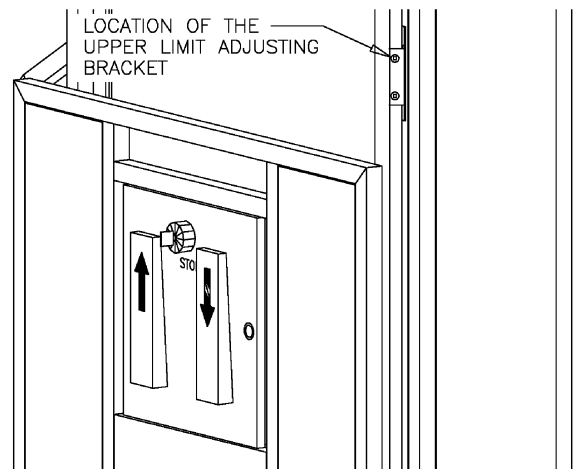


Figure 17. Locating the upper limit adjusting bracket.

IMPORTANT:

ONCE INSTALLATION IS COMPLETE – REMOVE FRONT PLASTIC COVER PANEL AND INSPECT DRIVE NUTS TO INSURE THEY ARE BOTH IN THE CHANNEL AND THE SHEAR SCREW IS NOT BROKEN

SECTION 2 - ASSEMBLY

2.19

Call stations, Upper Gates and Interlocks terminate at the outside junction box on the bottom left side of the tower (fig. 18).

Remove the cover from the junction box, inside there is a cable with individual wires labeled with numbered tags

Number tags are also on the end of the wires coming from the option to be hooked up

Mount the call station, Upper gate and/or interlocks into their respective positions

Run the wires from each option to the outside junction box through conduit.

Using the wire nuts provided match the numbers on the wires together to complete the terminations

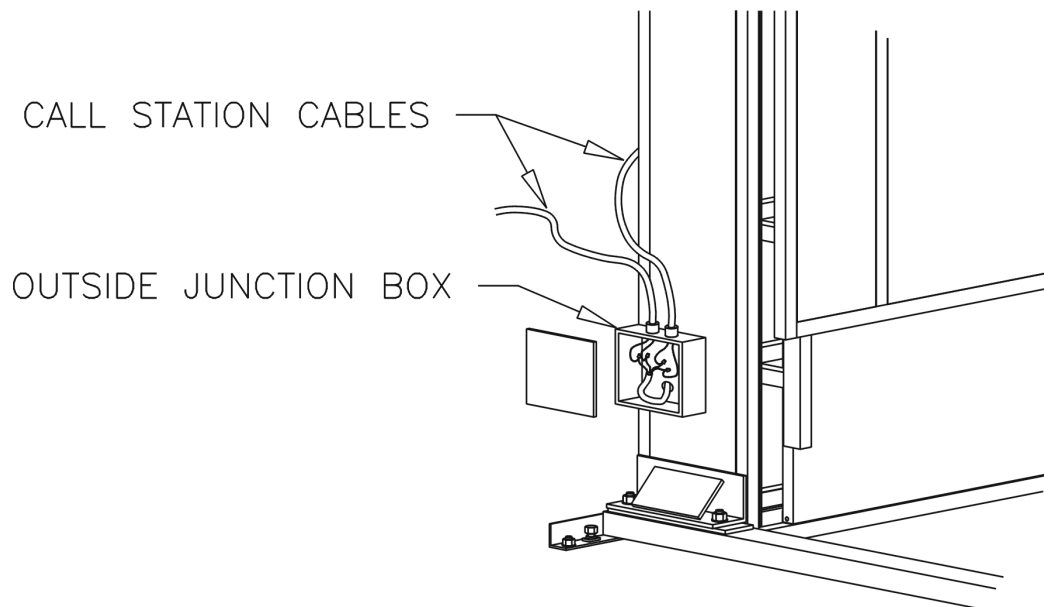


Figure 18. Wiring the call buttons into the outside junction box.

SECTION 3 - MAINTENANCE

3.1

The fuses are located in the control panel on the right hand side (Fig. 1). Replace the blown fuse with one of the spare fuses provided in the panel, if you use the last fuse be sure to replace it.

NOTE: Unplug the lift before opening the control box.

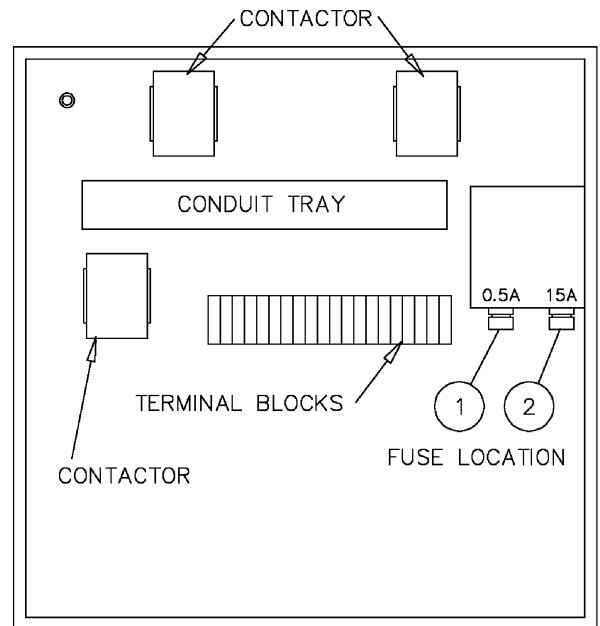


Figure 1. View inside of control panel (door removed for clarity).

MATERIAL LIST

1. 0.5 Amp fuse
2. 15 Amp fuse

PART

- BUSS AGC 1/2A*
BUSS MDA 15A

SECTION 3 - MAINTENANCE

3.2 The w-chair lift should be inspected and maintained annually. (See Drive Nut Safety Bulletin) In addition to inspecting the drive nuts, the drive screw should be cleaned and re-lubricated at least once a year. In order to access the screw drive you must remove the main front panel (Fig. 2 & 3). The gear box is oil filled and should be checked for leaks. Remove the top breather plug to check that the gear box fluid level is at least to the center of the motor-manual crank shaft.

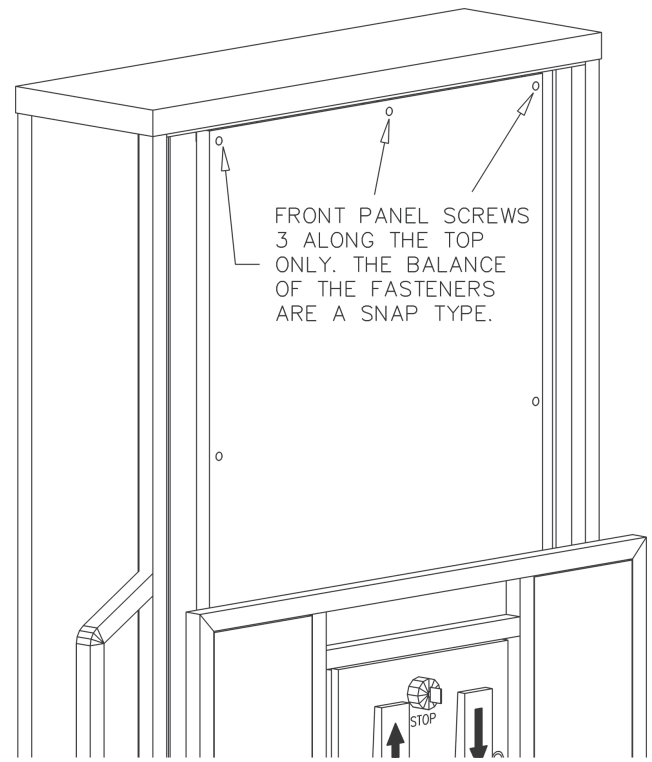


Figure 2. Locating the screws that attach the main front panel.

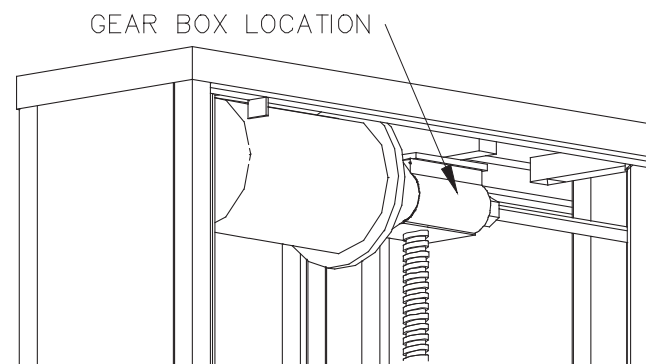


Figure 3. Gear reducer location.

SECTION 3 - MAINTENANCE

3.2

In order to lubricate the drive screw you must remove the main front panel and a carriage guide frame panel (Fig. 2 & 4). Liberally apply grease on the drive screw by hand, replace the covers and run the lift up and down a few times.

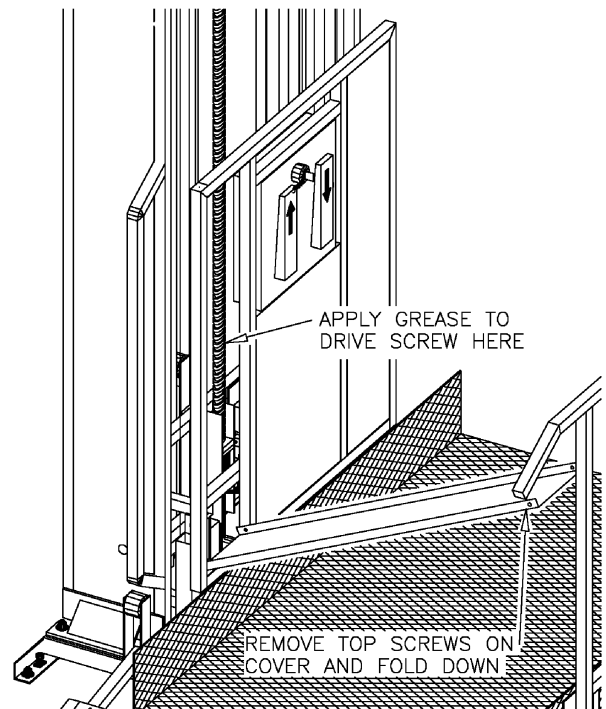


Figure 4. Applying grease to the drive screw.

SECTION 3 - MAINTENANCE

3.3

In the event that the lifting nuts move down past the lower limit switch you may hear a loud snap indicating that the shear pin has broken. Use the following procedure to put them back into place (Fig. 5):

- Remove the carriage from the guide frame (make sure to remove the toe plate roller strap).
- Remove the main front panel from the tower and the center panel from the guide frame.
- Lift the guide frame up about 12 inches and brace in place.
- Spin the lifting nuts into place as per Fig. 5, make sure that the flat sides of the lifting nuts fit between the guide frame bracket angles.
- Lower the guide frame until it is supported by the upper lifting nut.
- Make sure that the lower travel limit switch is in the relaxed position and is below the lifting nuts. **See Drive Nut Safety Bulletin for installation of the back up safety bracket.**
- Replace the broken 10-32 x 1/2 Lg. Pan Head screw shear pin.
- Replace the covers and the carriage.

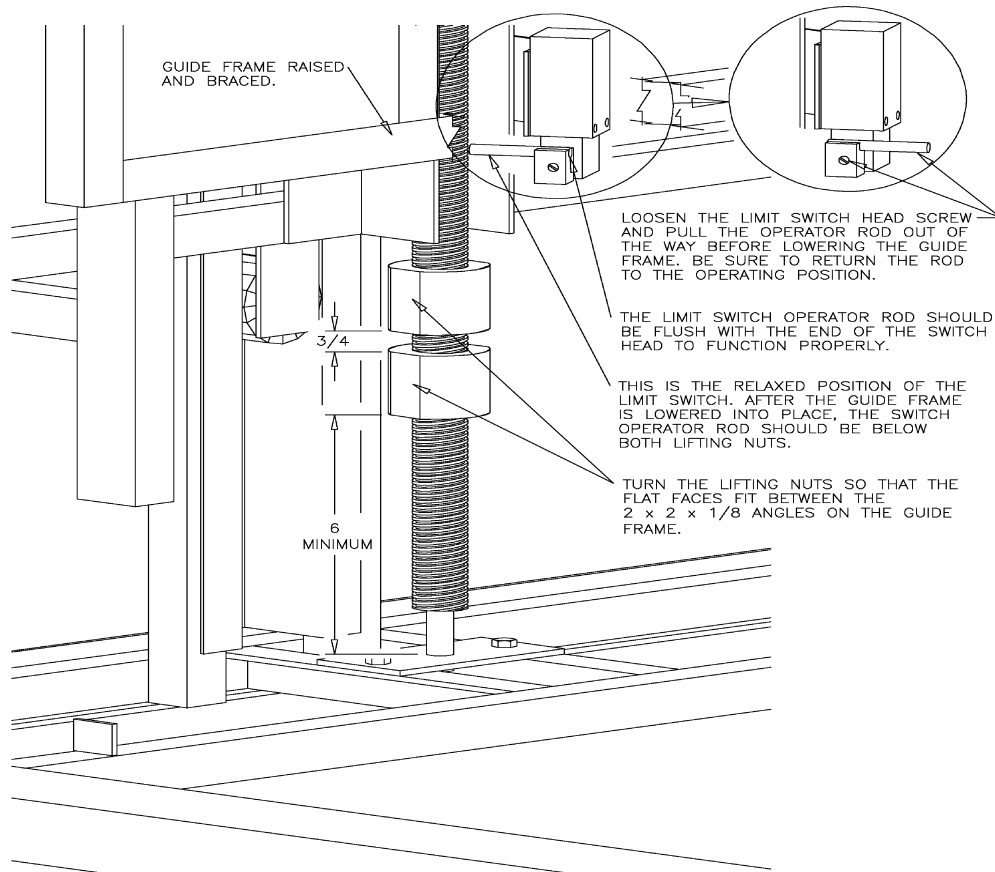


Figure 5. Adjusting the lifting nuts.

SECTION 4 – TEMPORARY INSTALLATIONS

4.1

An alternate installation method, which is ideal for temporary installations, is to provide 2 - 2" x 10" rough lumber supports that are embedded in 2" of gravel or sand. (Fig. 1 & Fig. 2).

**** All lifts over 52" in travel should be secured to the building for additional support.**

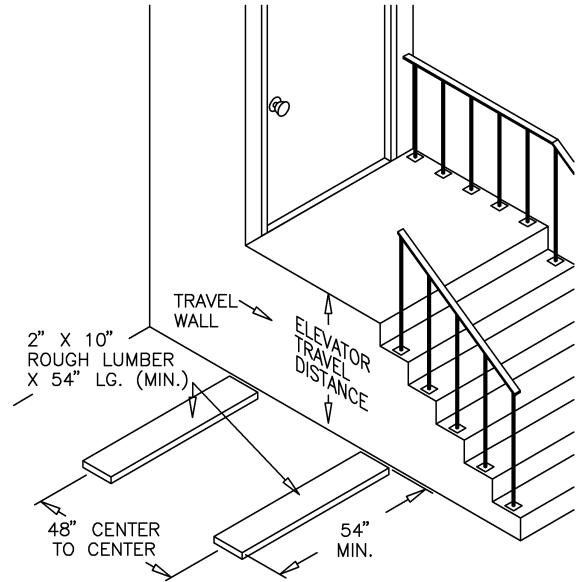


Figure 1. Alternate installation with 2 - 2" x 10" rough lumber supports.

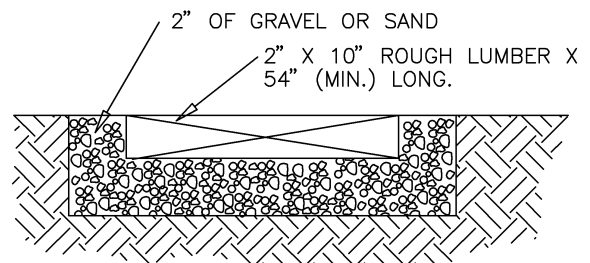


Figure 2. Placing the supports into the prepared gravel or sand bed.