

Portable Lift Installation Instructions

The Portable Lift is pre-assembled and tested in the factory before shipping. The lift is then disassembled into the components shown in Figure 1. **All fasteners required to assemble the lift are re-installed in their respective positions after disassembly.**

Assembly of the Portable Unit is as follows:

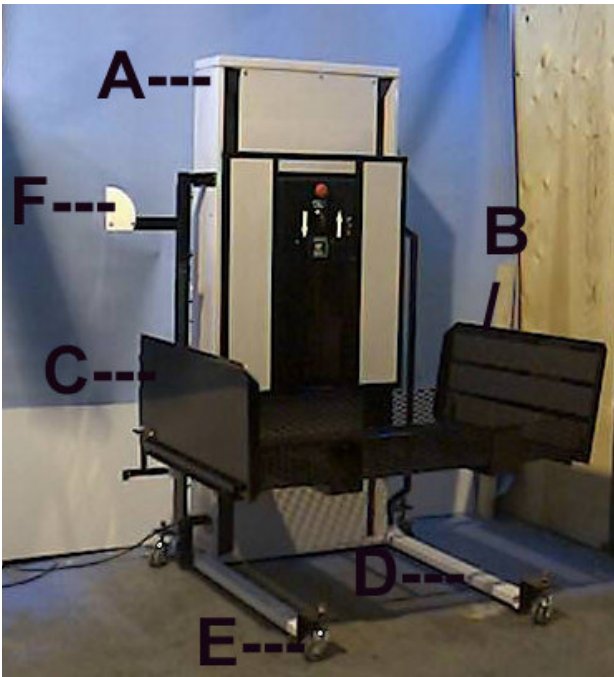


FIG.1-PARTS INCLUDED

- Carefully unpackage the Portable Lift components, confirm the following parts as shown in Figure 1 are included:

- Lift Tower Part **A**
- Carriage with Lower Toe Plate Part **B**
- Upper Toe plate Assembly Part **C**
- Base Frame Part **D**
- Castors (x4) Part **E**
- Upper Toe Plate Cam Assembly Part **F**
- Hand Rail (not shown)
- Manual Crank (3/8" drive ratchet w/6" ext.)
- 15/16" socket (to operate castor jacks)



FIG.2-MATCH LABELS

- Mount the four castors labeled A, B, C and D to the underside of the base frame matching their corresponding labels as shown in Fig. 2 and Fig. 3.
- Fasteners - (8X) 1/4-20 NC X 3/4"LG Flat Head screws located in the castor mounting holes.



FIG.3-BOLT CASTOR TO THE BASEFRAME

- Mount the Tower to the Baseframe following instructions in the Lift Installation Manual (sec. 2.3 thru 2.7). Retract castors so that Baseframe is resting directly on the floor before installing Tower.
- Mount the Carriage to the Tower following instructions in the Lift Installation Manual (sec. 2.7 thru 2.11).



FIG.4-MOUNTING PLATES AT TOP AND BOTTOM

- Attach the Upper Toe Plate Cam Assembly to the left hand side of the tower (left side when facing the tower front) as shown in Fig.4 and Fig.5
- Fasteners - (6X) 10-32 X 1/2"LG Round Head screws located in the tower mounting holes (Fig.5)



FIG.5-SCREWS ON TOP PLATE

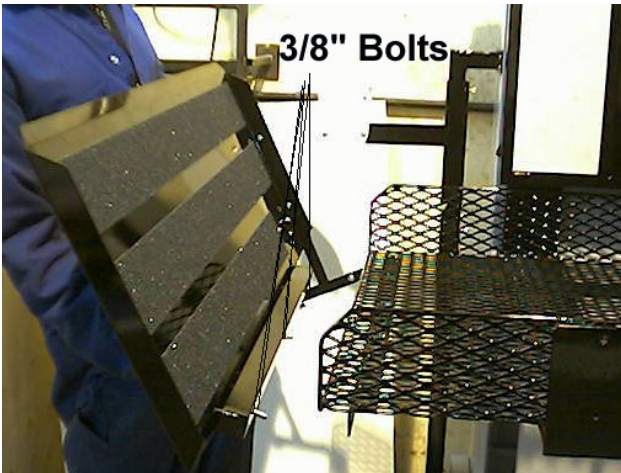


FIG.6-MOUNT UPPER TOE PLATE TO CARRIAGE

- Run the unit so it is positioned half way up the total traveling height
- Mount the Upper toe plate Assembly to the left side of the carriage (left side when facing the tower front) as shown in Fig 6.
- Fasteners - (3X) 3/8 X 1" Bolts and 3/8" Nylon Locknuts that are included with the toe plate (Fig.6)



FIG.7-PRESS CYLINDER ONTO THE BALL JOINT AND MOUNT TO CARRIAGE ARM

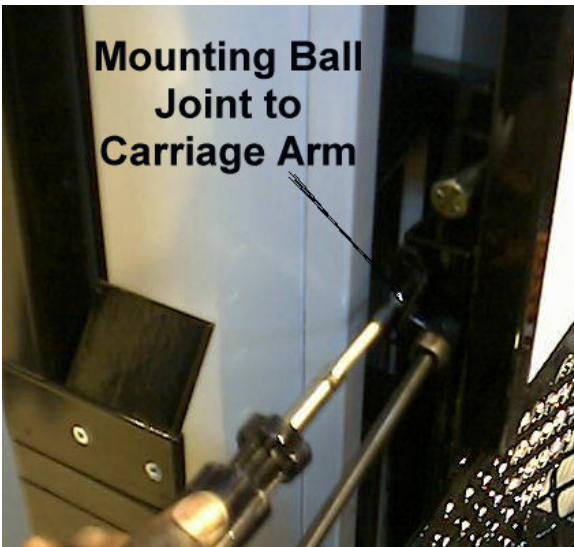


FIG.8-MOUNTING BALL JOINT TO CARRIAGE ARM

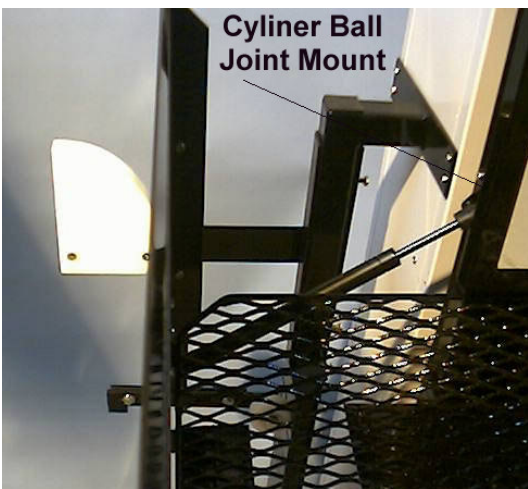


FIG.9-TOE PLATE IN VERTICAL POSITION WITH CYLINDER MOUNTED TO CARRIAGE ARM VIA CYLINDER BALL JOINT

- Attach the free end of the Upper Toe plate gas cylinder to the carriage support tube as shown in Fig.7, Fig.8, and Fig.9.
- Unscrew the ball joint angle bracket on the carriage support tube and insert it in the receiving end of the cylinder (Fig.8)
- Remount the ball joint to the carriage arm, (Fig.9) the toe plate should be in the vertical position (Fig.10), *(you may have to compress the gas cylinder located on the side of the Upper Toe plate in by hand in order to get the Toe plate in the vertical position)*
- Fasteners - (3X) 10-32 X 1/2"LG Round Head screws located in the ball joint bracket
- *At this stage the Portable unit is set up according to factory spec, it will travel a maximum distance of 28" or 52" depending on the model ordered*



FIG.11-TOE PLATE DOWN

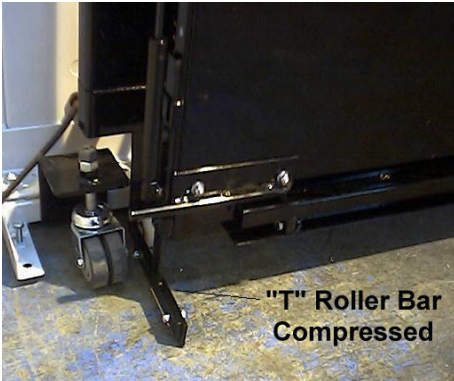


FIG.12-"T" ROLLER BAR COMPRESSED

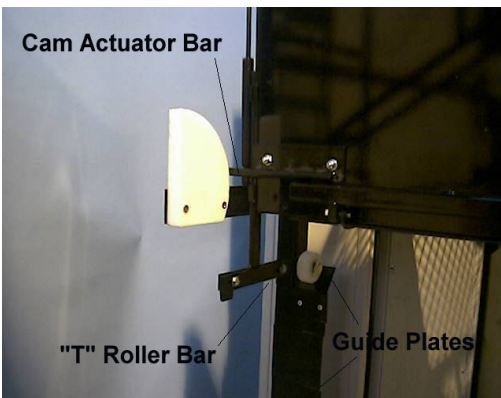


FIG.13-ACTUATOR BAR CONTACTING CAM AND "T" ROLLER BAR RISES ABOVE THE GUIDE PLATES



FIG.14-UPPER TOE PLATE UNFOLDS

- *Figure 11 through 15 help to describe how the portable unit works*
- When the lift is at the bottom the Lower Toe plate is down (Fig.11), the Upper Toe plate is up with the "T" Roller Bar on the Upper Toe plate compressed (Fig.12)
- When the lift begins to rise the "T" Roller Bar on the Upper Toe plate un-compresses and the Lower Toe plate rises to the closed position

- When the lift nears the top the Upper Toe Plate Cam Actuator Bar contacts the Cam and the "T" Roller Bar rises above the guide plates (Fig.13) allowing the Upper Toe plate to begin folding down (Fig.14)

- The lift stops electrically by activating the limit switch plate, the Upper Toe Plate folds down to the landing position (Fig.15)



FIG.15-TOE PLATE OPENED FOR EXIT

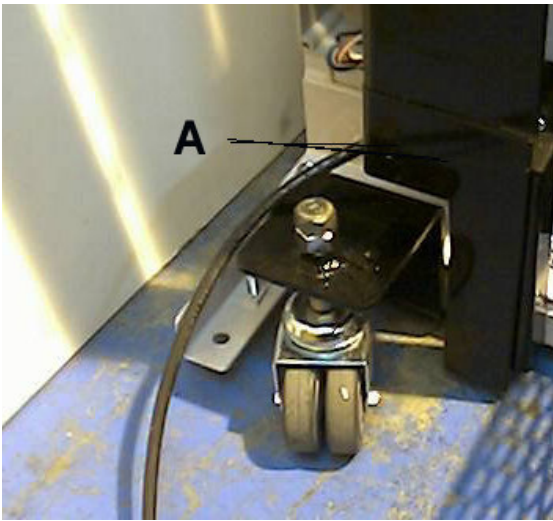


FIG.16-BOTTOM ROLLER GUIDE PLATE

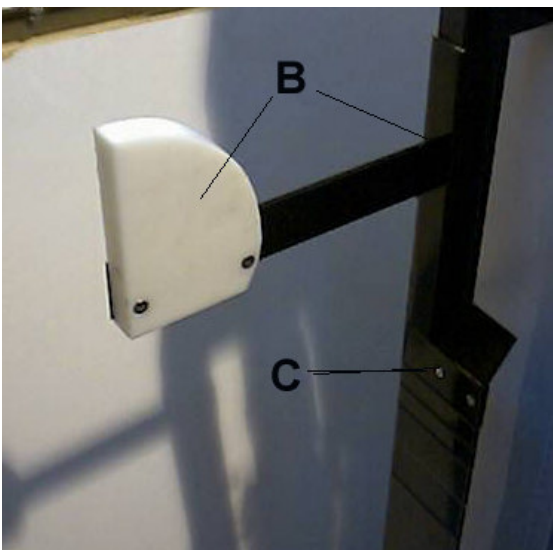


FIG.17-CAM "T" BRACKET & ROLLER GUIDE PLATE RAMP

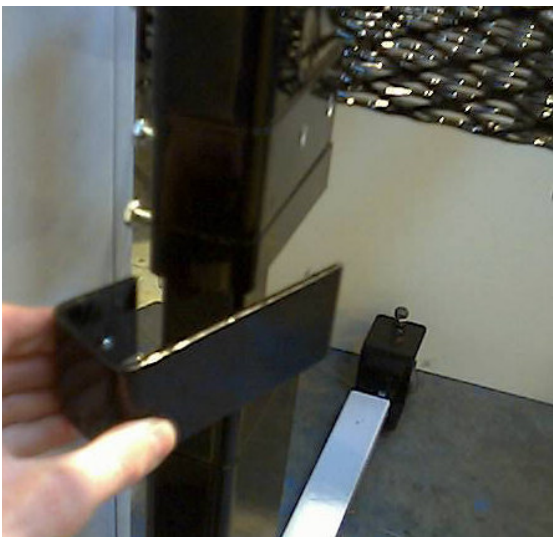


FIG.18-REMOVE ANY UNNECESSARY SPACERS

- Follow the next steps if you have to change the height requirement of your portable unit
- The electrical limit switch stop for the upper landing is controlled by adjusting the Upper Limit Adjusting Bracket as described in the Lift Installation Manual on page 2-7 Fig.17
- For the Upper Toe plate to open at the required height, the height adjustment plates must be adjusted
- The Bottom Roller Guide Plate (Fig.16 Part **A**), Cam "T" Bracket (Fig.17 Part **B**), and the Roller Guide Plate Ramp (Fig.17 Part **C**) are permanently attached to the Side Cam Assembly, the only plates to be removed are the spacer plates in-between which vary based on the size of the lift
- The Roller Guide Plates are held in place with a $\frac{1}{4}$ "X $\frac{3}{4}$ " set bolt, loosen them off to remove the unnecessary spacers (Fig.18)



FIG.19-SLIDE DOWN SPACERS

- After removing the unnecessary spacers slide down the spacers above as well as the Guide Plate Ramp and the Cam "T" Bracket (Fig.19)
- Retighten all of the set bolts to set in place
- Once the plates are adjusted properly the Upper Toe plate will open at the preset upper landing
- A 28" travel lift can be adjusted to stop at 1" increments between 23" and 28"
- A 52" travel lift can be adjusted to stop at 1" increments between 23" and 52"
- *If your needed height requirement isn't available in the ranges given above give RAM Manufacturing Ltd a call to inquire about a custom height lift*