

### **SAFETY GUIDELINES - DEFINITIONS:**

It is important to read and understand this manual. The information it contains relates to protecting your safety and preventing problems. The symbols below are used to help you recognize safety information.

sult in death or serious injury. dicates a potentially hazardous tuation which, if not avoided, will

CAUTION Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury.

### **READ THIS INSTALLATION GUIDE AND** FOLLOW THE INSTRUCTIONS EXACTLY WHILE INSTALLING THIS PRODUCT.

DANGER **NEVER ALLOW PERSONS ON OR** IN THE LIFT! ABSOLUTELY NO RIDERS! No person under 18 year of age should be allowed to operate this product. Children should be kept away from the lift when it is in operation. This product can cause serious injury or death to a child who attempts to ride the lift or to lift others! When not in use, ALWAYS raise the lifting platform to the highest position, then unplug the power cord, lock the remote (standard models) and store the keys or wireless remote safely away where children cannot get to them!

A WARNING When working with power tools, follow all of the manufacturers safety guidelines and wear approved safety glasses and hearing protection.

A WARNING When you work in the attic, stay on decked areas. If you must be in non-decked areas. step only on the joists. The materials between the joists will not support your weight and will collapse if you stand or sit on them. Be alert to any overhead hazards, such as exposed nails. Beware of and avoid openings, such as the ladder or lift openings when working or moving around in the attic.

MWARNING Do not work alone in the attic, always work with another person to help you. Do not work in the attic in the heat of the day. You can quickly be overcome by heat exhaustion in a hot attic. Morning hours are the coolest time to work in the attic after it has had all night to cool off.

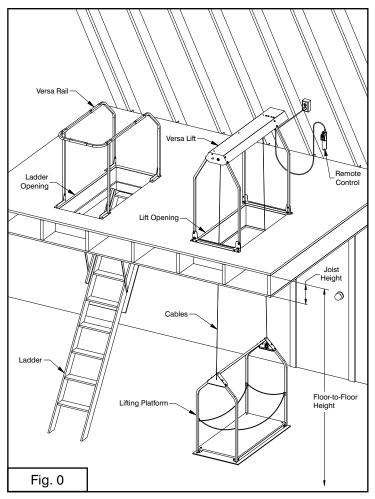
### **IMPORTANT NOTICE:**

DO NOT OPERATE THE MOTOR UNTIL YOU ARE **INSTRUCTED TO IN STEP 9 OF THIS GUIDE!** The Versa Lift Housing and Motor are pre-assembled at the factory and the winch shaft is pre-positioned for correct installation. If you run the motor before you are instructed to, you will cause the lift to malfunction and require recalibration by factory or authorized dealer. This repair is not covered by the warranty.

A WARNING The ladder opening and lift opening present falling hazards to any person who enters the attic. When you are in the attic space, be alert at all times to these openings. We highly recommend you install a safety railing around your ladder opening, such as the Versa Rail by BPG\* (see Fig. 0).

**M** WARNING If you install this lift product inside the living space of a home, or in a closet, or a walk-in attic accessible to children, then you must also install the Auto-Shutter\* from BPG that automatically closes the lift opening as the platform goes down to help prevent children, pets, etc. from falling through the opening (the Auto-Shutter is not illustrated in this manual).

\*For information on the Versa-Rail, Auto-Shutter, and other Versa Lift accessories visit www.bpghome.com or call BPG.



# **READ THIS BEFORE YOU GET STARTED**

## **BEFORE INSTALLING THIS LIFT:**

Verify that this product and its installation does not violate local building codes. You can find out this information from a local building inspector, architect, structural engineer, or your building contractor.

Find out if there are any code restrictions on what types of things you can store in your attic.

Get professional advice and estimates on framing, decking and assembly if you are not qualified or physically able to do these tasks. You can find building contractors, remodeling contractors, architects, engineers and inspectors in the Yellow Pages.

You are responsible for determining the suitability of this product for your individual purposes, as well as installing it in a way that meets local building and safety codes.

A WARNING Two persons are required to perform certain tasks in this guide for safer and easier installation. Performing these tasks alone is not recommended.

#### **VERSA LIFT SPECIFICATIONS:**

General Specifications		(All Models 32)
Dimensions		34W x 69L x 60H
Vertical Attic Space Req'd.		60" Min.
Max. Joist Height		18"
Lift Opening Size		30.5 x 58.5"
Motor		0.6 hp
Voltage		110 VAC
Power		4.5 amps
Lift Capacity Max.		250 lbs.
Lifting Speed		8 in/sec
Duty Cycle (minutes)		2 on / 4 off
Lifting Cables (2)		.093 (7x19)
Shipping Wt. (approx)		195 lbs.
Remote Control		Model
15' Corded Remote		32, 32H, 32HX
Wireless Remote		32W, 32WH, 32WHX
Model	Ceiling Heig	ht Floor-to Floor
32, 32W	10 ft. Max	8-11 ft.
32H, 32WH	13 ft. Max	11-14 ft.
32HX, 32WHX	19 ft. Max	14-20 ft.

# Versa Lift INSTALLATION OVERVIEW:

#### 1. FRAME THE OPENING:

The first step to installing your new Versa Lift is preparing an opening in the ceiling where the lift will be located.

Tools/Materials Required: Saws, Drill, Hammer, Nails or Screws, Framing Square, Tape Measure, Header & Joist Lumber to match Existing Joists.

Skill Level: Professional - Do not attempt this part of the installation yourself unless you have professional skill in construction framing. Hire a building contractor or a remodeling contractor to do this job correctly. It will be well worth the cost to have this part done right. Before cutting any ceiling joist, consult a structural engineer to determine the best location for your lift and construction appropriate for your ceiling type. Also, get some advice on the best areas to deck your attic for storage, if your attic is not decked. For example, areas over walls will hold more weight than areas over large rooms.

#### 2. DECK AN ATTIC SPACE:

If your attic is not already decked in the area where your Versa Lift will be installed, then decking material such as plywood must be added on top of the ceiling joists to make a floor that you can walk on and store items on.

Tools/Materials Required: Skill Saw, Hammer and Nails or Screws and Power Driver, Square, Tape Measure, Deckina.

Skill Level: Handyman - If you have skill with general carpentry tools (sawing, measuring, nailing or screwing) and the physical strength to move large pieces of wood, then you can do this part yourself with a helper. (You can get 2 x 4-ft pre-cut plywood at most lumber stores. It is much easier to handle than 4 x 8-ft sheets.)

#### 3. ASSEMBLE AND INSTALL THE LIFT:

The Versa Lift comes partially assembled. The cartons contain all of the parts and fastening hardware, along with detailed instructions in this guide for assembly.

Tools/Materials Required: Drill, 5/32" Drill Bit, Square, Tape Measure, Level, Phillips Screwdriver, Wrenches and/or Sockets and Ratchet.

Skill Level: Handyman - If you have the skill for general repair and maintenance using hand tools and can read and follow instructions, then you can do this part yourself with a helper.

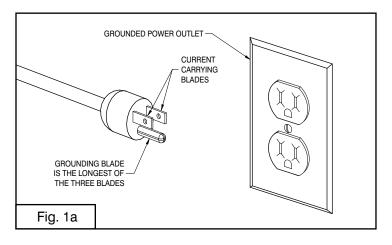
# **ELECTRICAL REQUIREMENTS:**

#### ELECTRICAL OUTLET:

You will need a single 110 volt AC grounded electrical outlet to plug in the Versa Lift power cord. It is highly recommended that the outlet be on the same switched circuit as the lighting in your attic so that when the attic lights are turned off, the power to the Versa Lift is also turned off. This arrangement will be more convenient for you and will prevent unintended operation of the lift.

The power cord provided with this product has three blades. The longest blade is the grounding blade (Fig. 1a). The shorter flat blades are the current carrying blades. You will need a grounded power outlet (receptacle) as shown below (Fig. 1a). If your outlet does not have a grounded receptacle for a three blade plug or if you are unsure if your outlet is correctly grounded, have a qualified electrician check the outlet (receptacle) to make sure it meets local codes. Incorrect grounding puts you at risk of electrical shock. **Never modify the equipment plug to fit a two blade outlet** (receptacle)!

If you use an extension cord, it must be a heavy duty threewire type with a three blade grounding plug and matching grounded outlet (receptacle) like those shown in Fig. 1a and rated for at least twice the load (10 amps minimum).



A WARNING To prevent unintended lift operation, you must turn the power switch off, unplug the power cord, or disconnect the power when not in use! The wireless model radio is active if the lift has power and is turned on and can operate the lift whenever a coded signal is received, either from the Versa Lift remote control transmitter or from another transmitter in your area! Unintended operation could cause the lifting platform to move downwards unexpectedly, possibly causing injury to persons or damage to property located directly under the lift.

# LIFT OPENING REQUIREMENTS:

#### VERTICAL ATTIC SPACE:

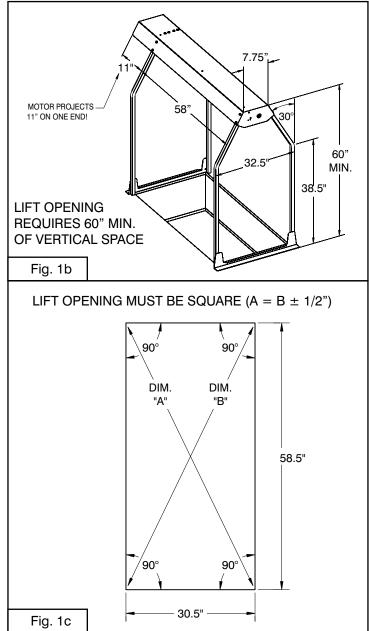
The Versa Lift requires a minimum of 60" of vertical space directly over the lift opening (Fig. 1b).

#### **OPENING DIMENSION & TOLERANCES:**

The final opening size is  $30\frac{1}{2}$ " x  $58\frac{1}{2}$ " with a tolerance of +1/2" and -0" (the opening can be up to 1/2" larger, but no smaller.) The lift opening must be square as shown below (Fig. 1c). Diagonal A should equal B within 1/2".

#### LIFT OPENING FINISH:

The lift opening must have smooth, perpendicular side walls. No nail heads, brackets, sheet rock or decking can protrude or extend into the opening, as this will cause the lifting platform to become caught on those edges and the lift will malfunction. (See Figs. 2a, 2b, & 2c).

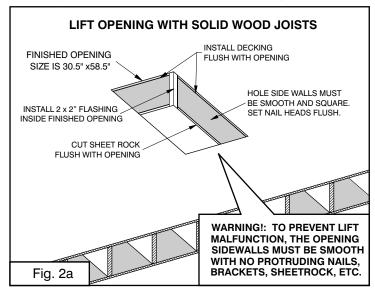


# LIFT OPENING REQUIREMENTS (Cont):

### **OPENINGS IN SOLID WOOD JOISTS:**

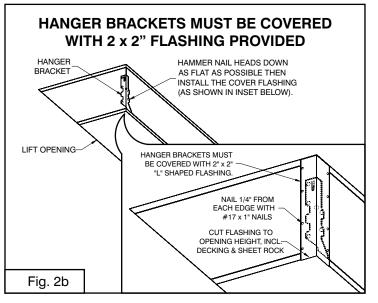
When ceiling joists are solid wood, the finished opening must be  $30\frac{1}{2}$ " x  $58\frac{1}{2}$ " with smooth side walls. The side walls must be square (perpendicular) so that the opening does not get smaller at the bottom. The sheet rock and decking must be cut flush to walls (see Fig. 2a).

There must be no protrusions inside the opening: All nail heads must be set flush or below the surface. If joist hanger brackets are used, the 2"x2" L-flashing (provided) must be installed in the corners of the opening to cover the hanger brackets and nail heads (see Fig. 2b below).



### INSTALL 2 x 2" "L" FLASHING IN ALL OPENINGS:

2" x 2" "L" flashing is provided and should be installed into the corners of **all openings**, especially those having exposed joist hangers. **Any hanger brackets must be covered over as shown below.** Cut the flashing to the finished opening height (including sheet rock and decking). Align it to the bottom and nail both edges with

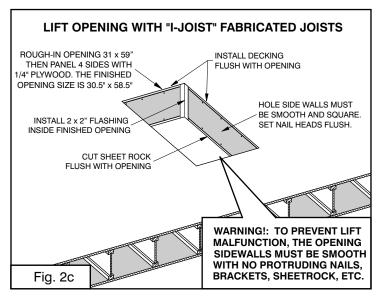


#17 x 1" nails, placing nails within 1/4" from each edge(Fig. 2b & Inset). The flashing strips are strongly recommended to finish all openings, even I-Joist openings that are paneled with 1/4" plywood. The flashing strips not only cover nail head and brackets, they also provide a slippery protective surface to guide the lifting platform through the opening and will reduce paint wear on the lifting frame.

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#### **OPENINGS IN FABRICATED JOISTS:**

When ceiling joists are "I-Joists" instead of solid wood, the rough opening size should be  $31 \times 59$ ", ½" larger in each dimension, to allow space to panel the joists with 1/4" thick plywood (Fig. 2c). **The 1/4" paneling will provide the required smooth walls and cover any joist hanger brackets.** When paneled, the finished opening size will be  $30\frac{1}{2}$ "x  $58\frac{1}{2}$ ". The side walls must be square (perpendicular) and all nail heads must be set flush or below the surface. Cut all sheet rock and decking flush with the edges of the opening. (See pgs. 8-10 on I-joists.) Install the 2"x2" L-flashing (provided) in the corners of the opening to cover nail heads and provide a smooth nonabrasive guide-way for the lifting platform (see Fig. 2b).



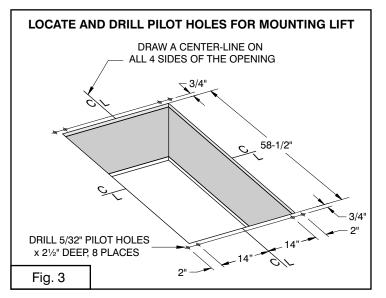
# **IMPORTANT NOTICE**

A WARNING THE LIFT OPENING MUST HAVE SMOOTH PERPENDICULAR SIDE WALLS. <u>NO</u> nail heads, hanger brackets, sheet rock or decking can protrude or extend into the opening, as this will cause the lifting platform to become caught on those edges, causing the lift to malfunction, resulting in possible damage or personal injury! <u>The product warranty is</u> void if this product is installed on an opening that does not meet the exact requirements <u>detailed on</u> <u>these pages.</u> Carefully read the instructions detailed and illustrated in "Lift Opening Requirements" and "Framing Techniques" (Fig. 1a thru Fig. 19, pgs. 4-10).

#### PILOT HOLES FOR MOUNTING THE LIFT:

Before assembling the Versa Lift, mark the location of the mounting holes on the floor deck at either end of the lift opening. These will be pilot holes for the lag screws that have been provided to secure the lift to the attic floor.

Find and mark the center on each side of the rectangular opening, then use a straight edge or square to draw a center line (Fig. 3). Next draw a line parallel to each of the narrow ends and spaced 3/4" away from the opening. Measure along the parallel lines 14" each way from the center line and mark 2 hole centers (Fig. 3). Then measure outward 2" more on each side for a total of 4 hole centers on each end of the opening (Fig 3). Find the "Mounting Rails" in the Versa Lift carton and place them over the hole centers should match the four slotted holes on the Mounting Rails. If so, drill 8 pilot holes with a 5/32" bit on the hole centers you have marked to a depth of about 2-1/2" (Fig. 3).



#### **IMPORTANT NOTICE ABOUT FRAMING:**

The Optional Framing Techniques and Illustrations provided on pages 6 thru 10 are strictly for illustrative purposes and are not intended as specific recommendations or directions for you to follow in your individual installation. These are provided only as visual aids that may help you plan your installation with a professional, such as a structural engineer, architect, or contractor, according to local codes or building practices. BPG does not warrant this product to be suitable for your purpose, location, structure, installation or use. Each user is responsible for determining the suitability, appropriate location and method of installation for this product.

Please consult a professional to evaluate your ceiling construction and the desired location and whether the remaining joists should be doubled to compensate for the joist(s) that will be cut. This will depend on a various factors, including the size and span of the existing joists.

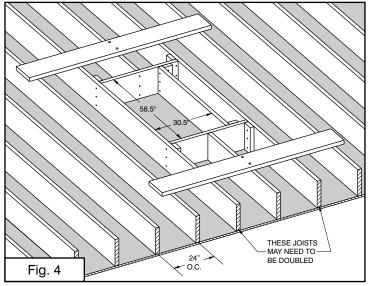
### LIFT OPENING ORIENTATION

The following illustrations (pages 7-10) show lift openings in solid 2x (1½") lumber and I-joists spaced 16" or 24" on-center. All openings shown are **aligned with the joists** meaning the long dimension of the opening is oriented parallel to the joists so the fewest number of joists need to be cut. When the opening is **aligned** with solid wood joists on 16" or 24" centers or I-joists on 24" centers, only one ceiling joist has to be cut to frame the opening (see Fig. 4). For I-Joists on 16" centers, 2 joists may need to be cut (see page 8, for additional details).

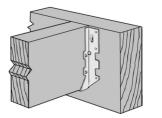
In contrast, a *transverse* opening will require either two joists (24" centers) or three joists (16" centers) to be cut.

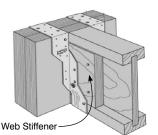
**Important:** For the above reasons, only *aligned* opening types are recommended for the Versa Lift Model 32. It is not recommended to orient the opening *transverse* (across) to the joist direction with the Versa Lift Model 32 because more joists will have to be cut which will weaken the ceiling structure more than an aligned opening.

ALIGNED OPENING IN SOLID WOOD JOISTS 24" O.C.



**Note:** The framing technique illustrations (pg. 6-10) show blocking used to join joists and headers. Joist hanger brackets can be substituted for the blocking as desired. Depending on location and code requirements, web stiffeners may be required for I-Joist when using hanger brackets. Typical joist hangers are illustrated below:





Solid Wood Joist Hanger

I-Joist Hanger

# **Versa Lift** Installation - Optional Framing Techniques<sup>7</sup>

### Optional Framing Technique #1

For Homes with SOLID WOOD JOISTS 16 or 24" OC: If your attic is decked, you will need to remove some decking to expose the joists in the area of the opening. If your attic is not decked, nail down some plywood on either side for a temporary work surface.

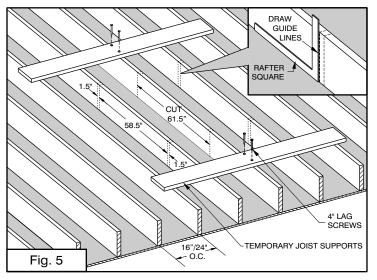
You will need temporary supports for any joist that will be cut. One technique is shown below using two  $2 \times 8$ " (minimum size) planks to span the adjacent joists. Each plank is secured with 2 lag screws to the joist(s) to be cut (Fig. 5). A framing square is used to mark guide lines for headers and cut lines (Fig. 5 inset). After cutting the joist, 2x4" or 2x6" blocking is installed (Fig. 6 & inset).

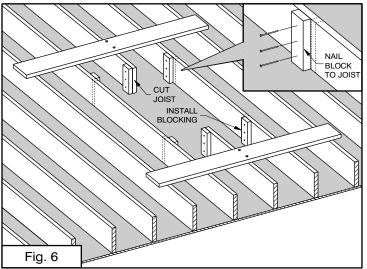
Note: Joist hangers can be used instead of blocking.

#### Mark, cut, and install headers:

For joists on 16" centers: Cut the headers 30.5" long (Fig. 7 & inset) and install them as shown.

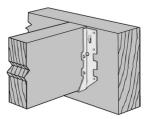
**For joists on 24" centers:** Cut the headers 46.5" long and install blocking (Fig.8 & inset). Install the headers. Trim the joist section (removed in Fig. 5) to 58.5" long and install it to finish the framed opening (Fig. 8).



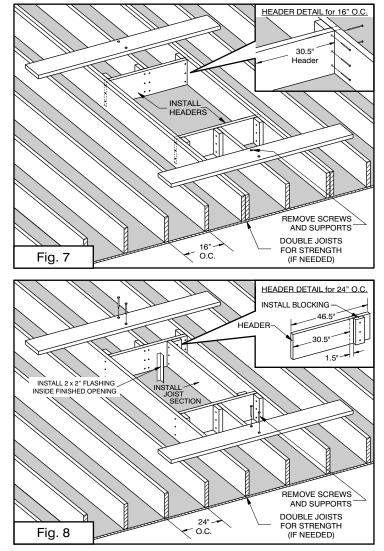


Depending on the size and span of your joists, you may need to double the joists on either side of the opening for added strength as shown in Fig. 7. The sheet rock can now be cut flush with the opening. Install decking flush to the inside edge of the opening (not illustrated). Note that decking and sheet rock must not extend into the opening (see Figs. 2a & 2c on pg. 5).

Note: Joist hangers can be used instead of blocking. Joist hangers must be covered with  $2 \times 2^{\circ}$  "L" flashing (provided) to prevent the lift platform from hanging in the opening, causing lift malfunction or damage (see Fig. 2b, pg. 5 for details).



Solid Wood Joist Hanger



#### Optional Framing Technique #2 FOR I-JOISTS ON 16" CENTERS:

(This technique requires that you have additional I-Joist of the same size as that used in your ceiling. If you do not have additional I-Joist, see the technique on page 10.)

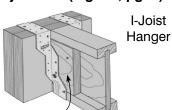
I-Joists differ from solid lumber in that the "I" shape beam is too narrow for "end nailing" when attaching one I-Joist perpendicular to the face of another. Furthermore, the face of an I-Joist is inset, making it less than an ideal surface to join something to. One way to address both problems is to install blocking on the ends of I-Joist sections and headers. For details about using blocking, see Figs. 14 & 17 on pages 9 & 10.

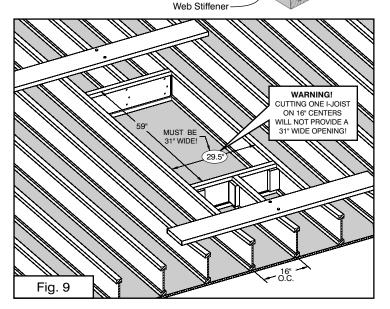
#### **OPTIONS FOR FRAMING THE OPENING**

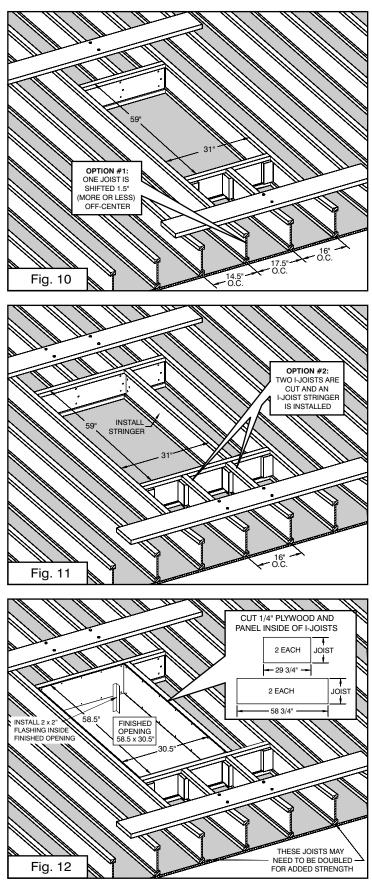
Because I-Joists are typically 2.5" wide (solid wood joists are 1.5"), cutting one I-Joist only creates a rough opening of 29.5" when 31" is required (see Fig. 9). To resolve this problem, you must either set one joist off-center by 1.5" (see Fig. 10) -OR- you will need to cut two joists and install a stringer in order to get the required opening width of 31" (see Fig. 11). Note the rough opening must be 31" x 59" ( $\frac{1}{2}$ "oversize) so that it can be paneled with 1/4" plywood (see Fig. 12). After paneling the finished opening will be 58.5" x 30.5" with smooth sidewalls.

Note: I-Joist hangers can be used instead of blocking. Finish opening with 1/4" paneling to cover hangers and create a smooth-sided opening (Fig. 12), then install 2 x 2" flashing in every corner (Fig. 2b, pg. 5).

Depending on location and code requirements, web stiffeners may be required for I-Joist when using hanger brackets.







# Versa Lift Installation - Optional Framing Techniques<sup>9</sup>

#### Optional Framing Technique #3 FOR NEW HOME CONSTRUCTION USING I-JOISTS ON 24" CENTERS:

(This technique requires that you have additional I-Joist of the same size as that used in your ceiling. If you do not have additional I-Joist, see the technique on page 10.)

I-Joists differ from solid lumber in that the "I" shape beam is too narrow for "end nailing" when attaching one I-Joist perpendicular to the face of another. Furthermore, the face of an I-Joist is inset, making it less than an ideal surface to join something to.

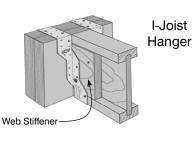
One way to address both problems is to install blocking on the ends of I-Joist sections and headers (Fig. 14): First, the block provides a thickness to the end of the I-Joist that can be nailed into. Second, the block is offset so that it fits into the inset in the face of the perpendicular I-Joist. The blocking should be attached securely (Fig. 14 inset) and placed on the side opposite the opening (the opening must not have anything projecting inward).

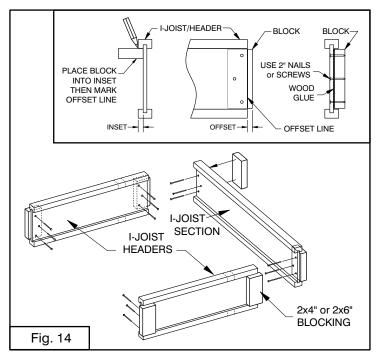
Another problem with I-Joists is that the recessed face forms ledges that can hang-up on the lifting platform as it travels downward from the attic. To resolve this problem, the opening must be framed  $\frac{1}{2}$  oversized in each dimension to 59" x 31" (Fig. 15) so that  $\frac{1}{4}$ " thick plywood can be cut (Fig. 16 inset) and used to panel all four I-Joist faces inside the opening to produce the final size opening of 58  $\frac{1}{2}$ " x 30  $\frac{1}{2}$ " (Fig. 16). Please note that any nail heads in the opening must be set flush or below the surface and decking and sheet rock must not extend into the opening (Fig. 2a & 2c on page 5).

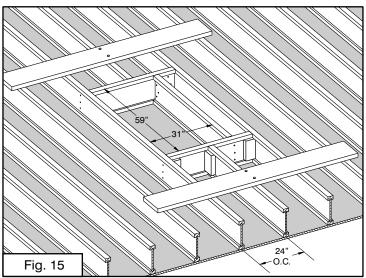
NOTE: These illustrations show I-Joist on 24" centers, but this framing procedure can also be used for 16" centers (page 8). As with solid wood joists, I-Joists that need to be cut must be supported by some means until they are connected to headers that tie them to adjacent I-Joists.

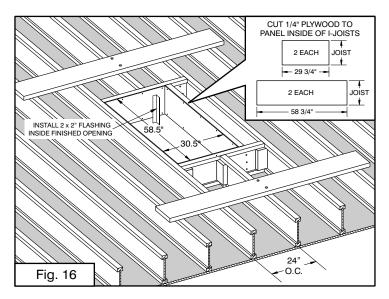
Note: I-Joist hangers can be used instead of blocking. Finish opening with 1/4" paneling to cover hangers and create a smooth-sided opening (Fig. 16), then install 2 x 2" flashing in every corner (Fig. 2b, pg. 5).

Depending on location and code requirements, web stiffeners may be required for I-Joist when using hanger brackets.









# <sup>10</sup> Versa Lift Installation - Optional Framing Techniques

#### Optional Framing Technique #4 FOR EXISTING HOMES WITH I-JOISTS: (How to Fabricate Headers for I-Joists)

The procedure is generally the same as with I-Joists on the prior page, but when the home is a finished construction (already built and owned) you may not have extra I-Joist pieces from which to construct headers. First you should check with local building supplies, but if you can't find the same size I-Joists used to build your home you may need a way to **construct headers from other available material.** 

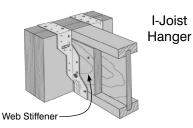
One way to address this problem is to construct headers from 3/4" plywood and 2 x 2" rails (Fig. 17). Join the rails to the plywood with wood glue and nails or screws. Then attach offset blocking (Fig. 17) as previously explained on page 9. Headers constructed this way will have good strength and have the advantage of a smooth face toward the opening. NOTE: The blocking is attached **flush with the ends** of the I-Joist Section when using constructed headers with a flat inside surface (Fig. 17).

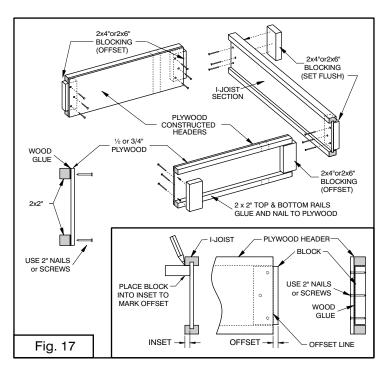
The opening must be framed  $\frac{1}{2}$  oversized in only one dimension (58  $\frac{1}{2}$  x 31") (Fig. 18), so that 1/4" thick plywood can be cut (Fig. 19 inset) and used to panel the two I-Joist faces inside the opening (Fig. 19) to produce a final opening size of 58  $\frac{1}{2}$ " x 30  $\frac{1}{2}$ " (Fig. 19). Please note that any nail heads in the opening must be set flush or below the surface and decking and sheet rock must not extend into the opening (Fig. 3).

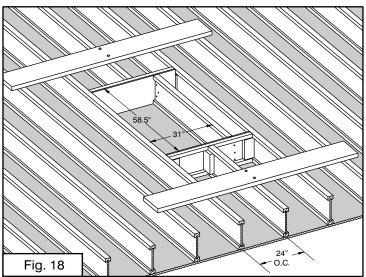
NOTE: These illustrations show I-Joist on 24" centers, but this framing procedure can also be used for 16" centers (page 8). As with solid wood joists, I-Joists that need to be cut must be supported by some means until they are connected to headers that tie them to adjacent I-Joists.

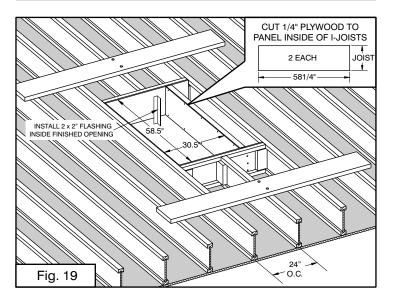
Note: Joist hangers can be used instead of blocking. Finish opening with 1/4" paneling to cover hangers and create a smooth-sided opening (Fig. 19, then install 2 x 2" flashing in every corner (Fig. 2b, pg. 5).

Depending on location and code requirements, web stiffeners may be required for I-Joist when using hanger brackets.



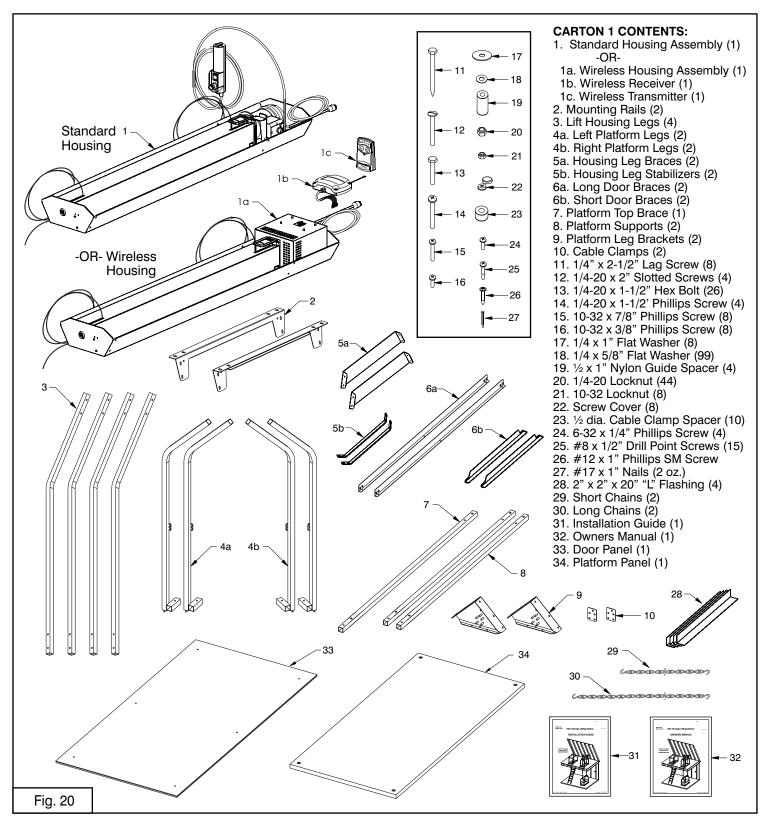






# Versa Lift Installation - Carton Contents (All Models)

**1. UNPACKING:** Save Your Lift Housing Carton! (You will need the carton for warranty repairs, save it!) The Versa Lift 32 is packed in three cartons. Open the cartons and check the contents to locate all of the items in Fig. 20. Check all of the components for any damage. If any components are missing or damaged, do not proceed with assembly. Instead, contact BPG about a replacement for any missing or damaged items. NOTE: Fig. 20 shows the Standard Housing (Item 1) AND the Wireless Housing, Radio and Transmitter (Items 1a, 1b, and 1c). You will get only the Standard or Wireless Housing, depending on what you ordered.



#### 2a. RECEIVER INSTALLATION - (WIRELESS ONLY)

This step requires two persons. This assembly step should be done in the attic. Locate the parts shown below and move them up to the attic. The lift housing is heavy and requires two able persons to move it up to the attic. Place the lift housing on a rug or piece of cardboard open-side-up as show below in Fig. 21.

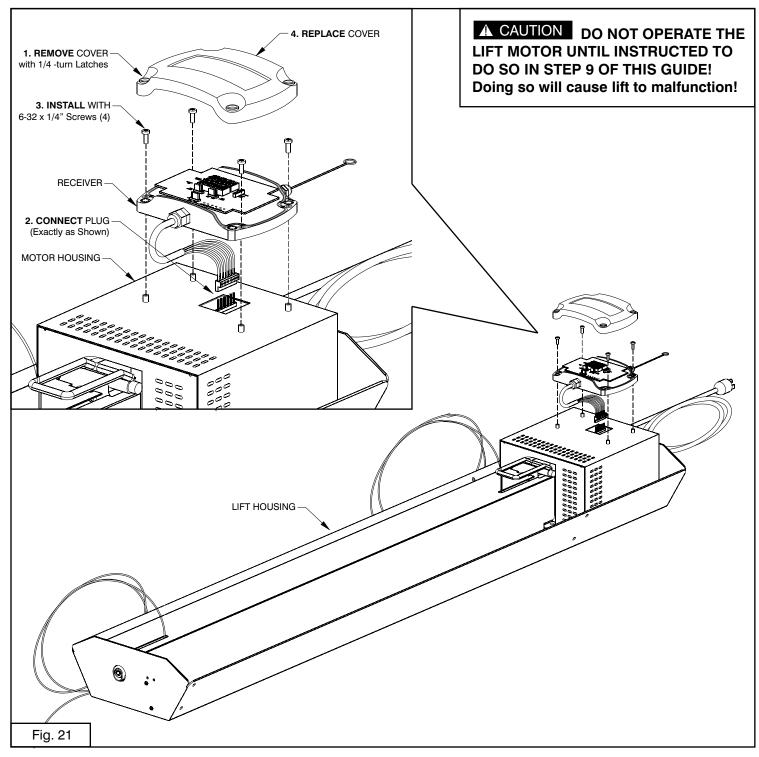
Follow these steps:

**2a-1.** Remove the cover from the receiver by gently rotating the latches 1/4-turn counter-clockwise using a

flat-tip screwdriver (Fig. 21 inset).

**2a-2.** Connect the plug onto the 6-pin header visible thru the square hole in the motor housing. Orient the plug exactly as show below making sure to insert all six pins into the plug.

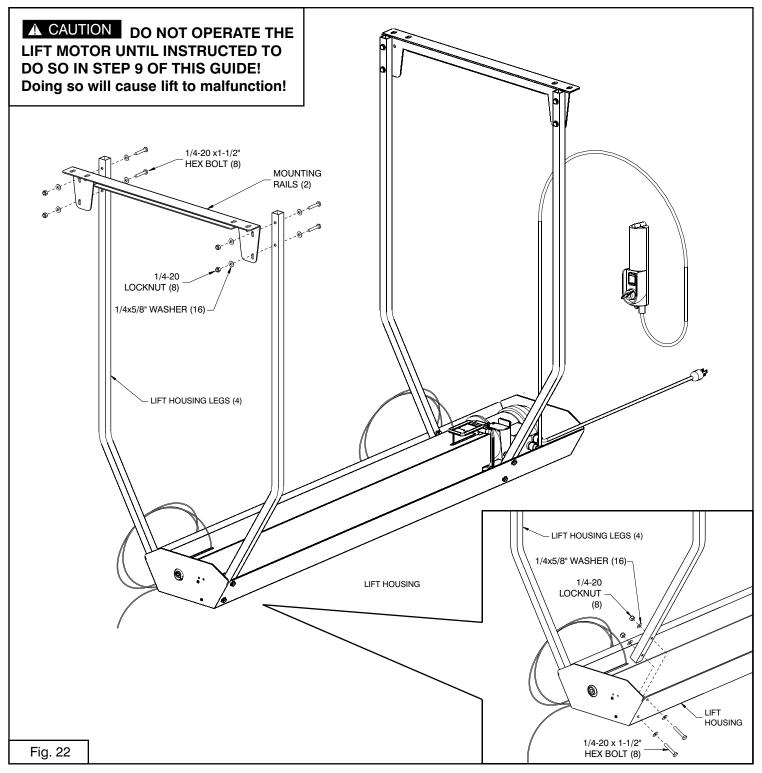
2a-3. Install the receiver to the motor housing using (4) 6-32 x 1/4" long screws as shown. (Note the antennae must extend off the rear of the motor housing.)
2a-4. Replace the cover onto the receiver by turning the latches 1/4-turn clockwise.



#### 2b. LIFT HEAD ASSEMBLY - ALL MODELS

This step requires two persons. This assembly step should be done in the attic. Locate the parts shown below and move them up to the attic. The lift housing is heavy and requires 2 able persons to move it up to the attic. Place the lift housing on a rug or piece of cardboard open-side-up as show below. Assemble the four lift housing legs to the lift housing (Fig. 22 Inset). **The locknuts provided will not work loose, so tighten the bolts and nuts firmly, but do not over-tighten or you will collapse the square tubing.** Assemble the mounting rails to the lift housing legs (Fig. 22) with bolts, washers and locknuts but do not tighten them yet. Leave them slightly loose for Step 4.

#### Note: The legs fit on the INSIDE of the lift housing.



#### 3. INSTALLING THE LIFT HEAD

This step requires two persons. Turn the lift head assembly upright and position it in front of the opening (Fig. 23). With one person on each end, lift slightly and move the assembly over the opening (Fig. 23) and align the slots in the mounting rails with the pilot holes in the decking. Install the 8 lag screws and 1" diameter washers into the pilot holes and screw them down untill they almost contact the mounting rail, but leave them loose so the mounting rails can be adjusted later (Fig. 23 inset).

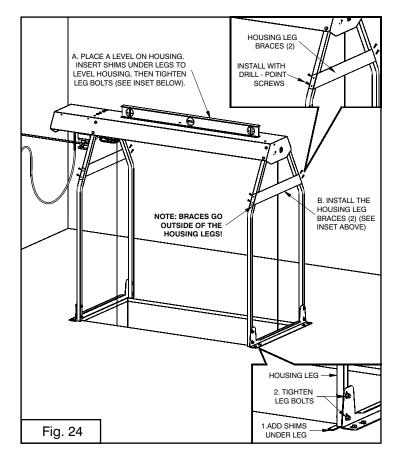
#### 4A. LEVEL THE LIFT HEAD

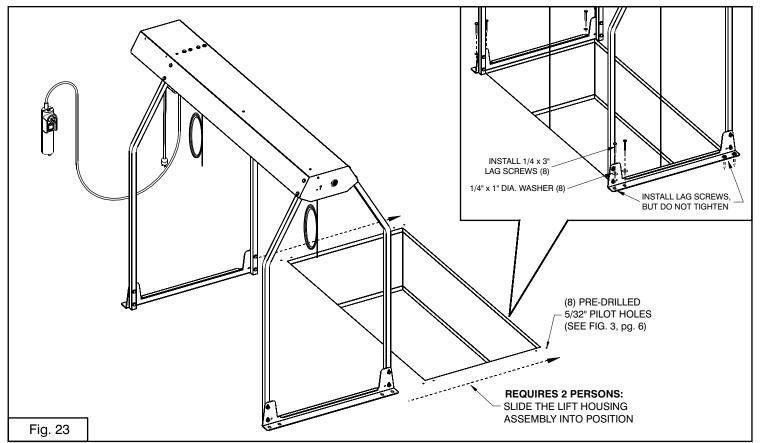
The bolts that hold the legs to the mounting rail must be loose for this step. Place a bubble level lengthwise on the housing and see if head is level (Fig. 24). Place shims under both legs on the low end (Fig. 24 bottom inset). Adjust the shims until the head is level and then tighten all 8 leg bolts (Fig. 24 bottom inset).

#### **4B. INSTALL THE HOUSING LEG BRACES**

Install the housing leg braces (2) using the self-drilling drill-point screws (8) as illustrated (Fig. 24 and top inset).

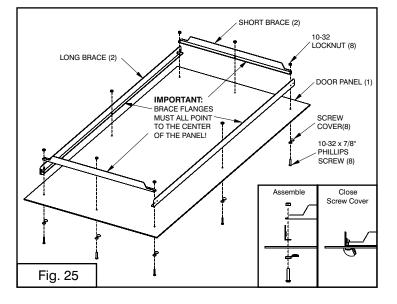
CAUTION: Install the braces on the OUTSIDE of the housing legs, NOT on the inside! If the braces are installed on the wrong side, the lifting platform will become jammed and cable damage may occur.

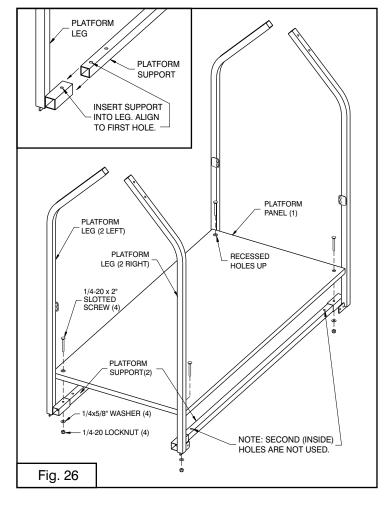




#### 5. DOOR ASSEMBLY

The door must be assembled down-stairs. Locate the door, door braces, and fasteners shown in Fig. 25. Insert each screw through a screw cover then through the panel, then through the door braces (Fig. 25 and inset). **IMPORTANT: All door braces must be oriented exactly as shown in Fig. 25 with the horizontal flanges all** 



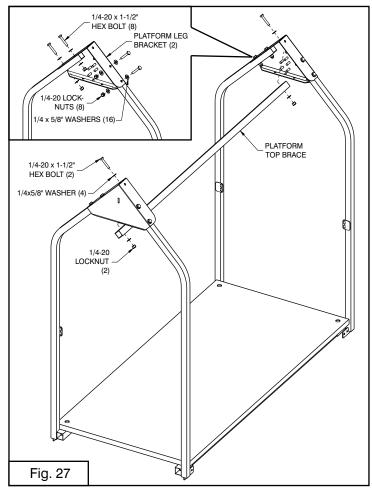


**pointing toward the center of the panel.** Fasten each screw with a locknut. Tighten all 8 screws, then close the screw covers, Make sure they snap completely shut (Fig. 25 inset).

#### 6. PLATFORM ASSEMBLY

The platform must be assembled down-stairs. Locate the platform, 2 platform supports, 4 platform legs, 1/4-20 x 2" slotted screws, washers, and locknuts (Fig. 26). Note the top side of the platform has recessed holes. Insert the platform support into one of the left legs as shown (Fig. 26 inset). Align the hole in the leg with the hole in the outer end of the support. Next insert a 1/4-20 screw down through the platform, leg and support (Fig. 26). Secure with a washer and locknut, but do not tighten until all four bolts are installed. When all legs are assembled as shown in Fig. 26, tighten all of the screws and locknuts, but do not over-tighten or you will collapse the tubing.

Locate the platform leg brackets, platform top brace, and fasteners (Fig. 27). Install each of the brackets with 4 bolts, washers, and locknuts (Fig. 27 inset). Tighten as above. Install the platform top brace with 2 bolts, washers and locknuts (Fig. 27) and tighten fasteners as above.



#### 7. DOOR AND PLATFORM ASSEMBLY

**7-1.** Locate the (8)  $10-32 \times 3/8$ " screws. Lift the platform assembly onto the door assembly (Fig. 28).

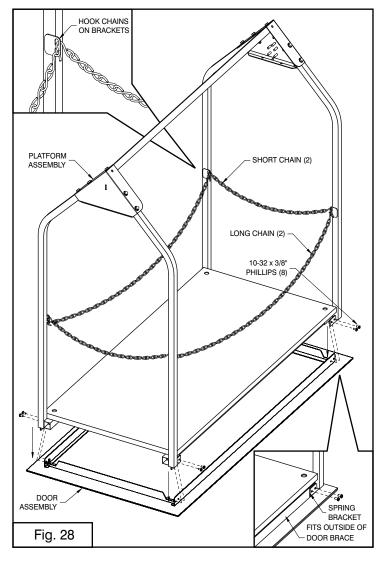
# Note: The spring brackets on the end of the platform legs fit outside of the door braces (Fig. 28 inset).

**7-2.** Install and tighten the screws through the spring brackets and into the door braces.

**7-3.** Locate the short and long chains. The last link on each end of each chain is open to form a hook. Hook the end of each chain onto the chain brackets on each platform leg (Fig. 28 and inset). You can open the hook further with pliers, if needed, to make it easier to hook.

**7-4.** Close the hooks on both ends of the short chains so the chain is secured to the chain brackets. Close one hook on each long chain, leaving the other ends open for loading the platform.

#### Read the Owners Manual for complete information about using the chains and safety guidelines about loading the platform.



### 8. CONNECT THE LIFT HEAD TO THE PLATFORM

**8-1.** Release the cables and let them hang down through the lift opening.

**8-2.** Position the lifting platform assembly on the floor directly below the lift opening (Fig. 29). (You can hang a plumb line from the corners of the lift opening to mark the garage floor below where the corners of the platform assembly should sit.)

**8-3.** Pass the ends of the cables through the slots in the platform leg brackets as shown in Fig. 30.

**8-4.** Pull the cable tight and wind it tightly around the threaded studs exactly as shown in the illustration. Wrap it as tightly as possible. Pinch the last loop around the last stud, then pass the end of the cable through the center hole in the bottom of the leg bracket (Fig. 30).

**8-5a.** Draw the cable tight by pulling firmly on the end of the cable (Fig. 30).

#### IMPORTANT: DO NOT USE A POWER TOOL TO INSTALL THE CABLE CLAMP NUTS. USE ONLY A WRENCH OR A SOCKET AND RATCHET!

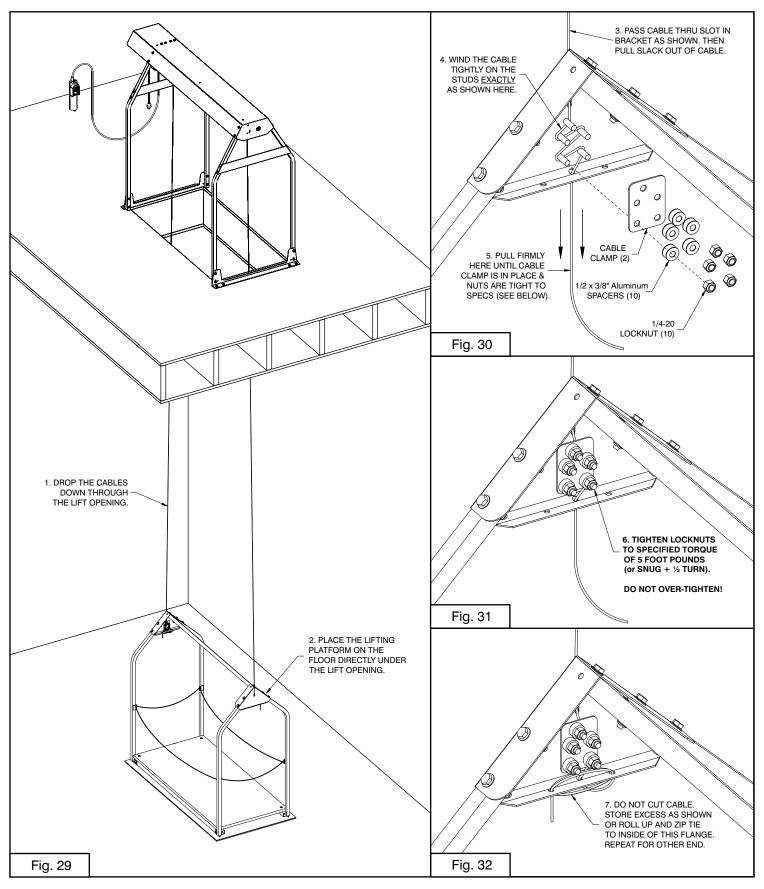
**8-5b.** While holding tension on the cable, install the cable clamp first, then install a  $\frac{1}{2} \times \frac{3}{8}$  aluminum spacer and locknut on the last stud and snug it down to hold the cable, but don't tighten it yet (Fig. 30). Then install the rest of the aluminum spacers and locknuts and snug them down (*you can tell when the locknut is getting snug when it begins to turn a little harder and the aluminum spacer can't be turned with your fingers.*) Repeat this procedure for the second cable and apply the same tension (or slight slack) as with the first cable.

8-6. Torque all 10 locknuts to 5 foot pounds (60 inch pounds). If you do not have a torque wrench, then snug all 10 locknuts as explained above, then turn each nut one-half turn (180 degrees) beyond snug (see Fig. 31). Do not over-tighten or you may break the studs off!

**8-7.** You don't need to cut the excess cable, you can thread it through the two holes in the bottom of the leg bracket (Fig. 32) or you can wind it into a coil and zip tie it inside the bracket. If you do cut off the excess cable, you must leave at least a foot so that you can re-adjust the cable if it becomes necessary.

NOTE: It is important that the excess cable is secured where it can't get caught in the lift opening when the platform goes up or down.

# IMPORTANT: DO NOT USE A POWER TOOL TO INSTALL THE CABLE CLAMP NUTS. USE ONLY A WRENCH OR A SOCKET AND RATCHET! THESE NUTS MUST BE TIGHTENED TO THE SPECIFIED TORQUE ONLY!



#### 9. RAISE THE LIFTING PLATFORM

Before proceeding, review the first 8 steps to make sure you haven't missed any assembly steps. All of the bolts must be tight **except the lag screws** that hold the mounting rails to the deck. These must be loose enough that the rails can move freely the distance that the slotted holes allow. After reviewing steps 1-8, proceed as follows:

**9-1.** Make sure the corded remote and power cord hang freely from the rear of the lift motor and are not wrapped around the housing, the legs or the motor (Fig. 33).

**9-2.** Make sure the key switch (Standard) or the power switch (Wireless) is in the "OFF" position, then plug in the power cord (Fig. 33).

**9-3.** Stand clear of the lift mechanism and keep your hands clear too. Turn the key or power switch to "ON." Jog the "UP" direction switch (Fig. 33 insets) and watch as the platform comes up. When the platform nears the opening, jog (bump) the "UP" direction switch to move the platform in small increments, watching to make sure that it does not catch or bind on the opening. (If it hangs or binds, turn the key or power switch to off and unplug the power cord, then look to see what the problem is. Correct any problems before continuing the operation.)

**9-4.** When the platform reaches its upper limit, the upper limit switch will stop the motor and stop the platform. **Turn off the key or power switch and unplug the power cord before proceeding to the next step.** 

#### **10. INSTALL THE PLATFORM GUIDE SPACERS**

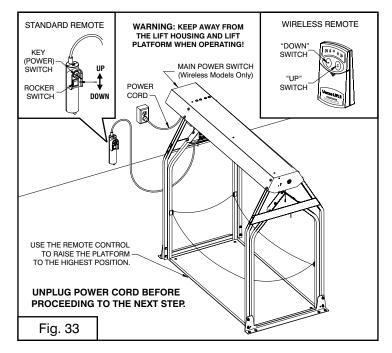
Locate the 4 screws, spacers, washers and locknuts shown in Fig. 34 inset. Install the spacer into the hole in the mounting rail between the housing legs and the platform legs. Tighten each screw firmly. These spacers guide the platform to the center of the opening in one direction, the mounting rails will guide the platform in the other direction.

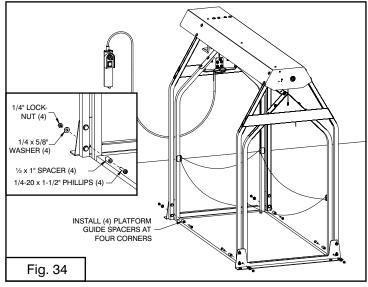
#### **11. ADJUST THE MOUNTING RAILS**

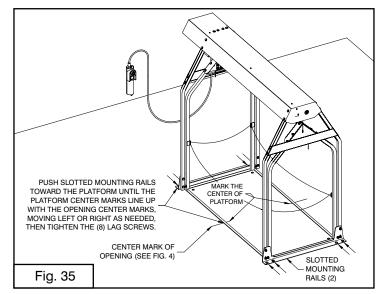
Carefully measure 28" in from either end of the lifting platform and make a small mark perpendicular to the edge (Fig. 35). This is the center of the platform. The mounting rails are slotted so that they can be adjusted to guide the platform to the center of the opening where you made a center mark earlier, when preparing the opening (Fig. 3, Pg. 6). Push the mounting rails towards the center, moving the platform left or right until the center marks are aligned. **First**, tighten the lag screws firmly on the first mounting rail, but do not over-tighten them and strip the threads in the floor. **Second**, tighten the second mounting rail lag screws as above, but leave a little space between the mounting rail and the platform legs (note: a business card folded double makes a good space gage).

#### Congratulations! Your installation is now complete!

Please read and understand the *Owners Manual* <u>completely</u> to learn important safety rules you need to know before operating this lift system!







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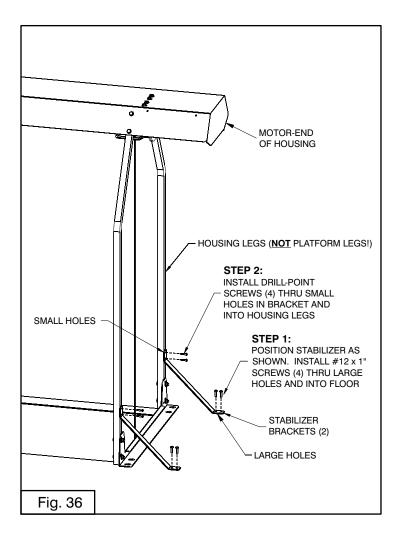
#### **12. INSTALLING THE STABILIZER BRACKETS:**

**Note:** The stabilizer brackets have larger holes on one end and smaller holes on the other end. Position the stabilizer bracket with the small-hole end at the top and the large-hole end on the floor. The bracket should form a 45 degree brace with the ends in flush contact with both the floor and the housing leg (Fig. 36).

**Step 1:** Position the stabilizer bracket as detailed above under the motor-end of the lifting head (Fig. 36). Install the  $#12 \times 1$ " screws through the larger holes and into the floor decking. Tighten screws snug, but don't strip them out.

**Step 2:** Using a power driver or drill, install the drill-point screws through the smaller holes in the upper end of the bracket and into the housing leg (Fig. 36). Take care not to drive these screws too fast because when they become tight the screw stops instantly. If you are driving it too fast the screw can break or strip out!

IMPORTANT: For safety reasons, the stabilizer brackets should be installed under the motor-end (over-hang) of the lifting head so the brackets do not project into your walking pathway! (See Fig. 36.)



#### **13. WIRELESS REMOTE SETTINGS & OPERATION**

The wireless receiver and remote transmitter are pre-set at the factory to the codes and configurations shown below. A 9-volt battery will also be installed in the transmitter at the factory. If your transmitter fails to operate the lift, first make sure the lift power cord is plugged in and the power switch on the rear of the motor housing is turned ON and lighted. The indicator will light at the top of the transmitter when either the up or down button is pushed and a signal is being transmitted. If the indicator does not light and the transmitter fails to operate the lift, replace the battery with a fresh 9-volt battery. When opening the battery compartment, the dip switches can be accidentally moved out of place. See the Owners Manual, page 13 for complete details about operation and settings of the remote transmitter.

#### **14. CHANGING CODES & CONFIGURATION SETTINGS**

Normally you will not need to change the factory settings unless someone within a block of you is operating a Versa Lift wireless model too or you are getting interference from some other radio frequency device, tower, or broadcasting station nearby. If you are having interference problems, see the Owners Manual, page 13 for complete details about operation and settings of the remote transmitter.

#### Congratulations! Your installation is now complete!

Please read and understand the Owners Manual <u>completely</u> to learn important safety rules you need to know before operating this lift system!



(405) 516 2412

A WARNING Read and understand the Owners Manual completely before operating this lift! The Owners Manual provides many IMPORTANT SAFETY FACTS THAT YOU MUST KNOW BEFORE USING THIS PRODUCT!