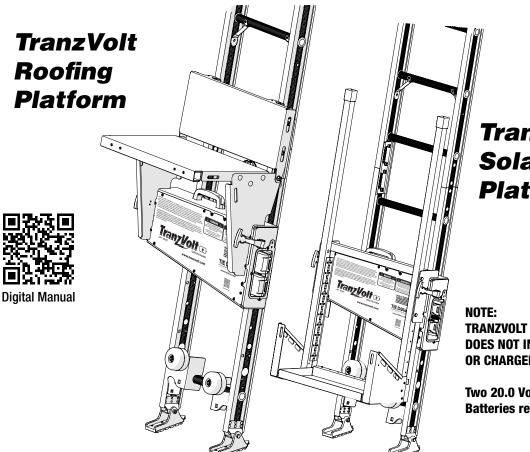




Installation and Operations Manual



TranzVolt Solar Panel Platform

NOTE: TRANZVOLT CARRIAGE KIT #40655 DOES NOT INCLUDE BATTERIES OR CHARGER

Two 20.0 Volt Li-lon 5.0Ah Batteries required

CRITICAL SAFETY INFORMATION: The greatest exposure to serious bodily injury and or death may occur when the TranzVolt track sections are located within 10 ft. (left or right or underneath) overhead electric power lines. If a minimum safe distance (10 ft.) from electrical wires cannot be maintained, contact the local utility company and have the electric wire unenergized and grounded or guarded effectively by insulating or other means.

A COMPETENT PERSON must be present during any set up, during any repositioning, and during any tear down operations of the TranzVolt track sections when the TranzVolt is to be located near electric power lines. A COMPETENT PERSON must read and understand the Owner's Manual for set up, operating instructions, and tear down instructions in order to insure that all personnel authorized to set up, operate, and tear down the TranzVolt are made aware of ALL SAFETY WARNINGS as well as the operating instructions. ALWAYS USE APPROVED ROOF TOP FALL PROTECTION when setting up, operating, and taking down the TranzVolt.

Instruction #08315 (E1646, Rev. 04/02/20)



Congratulations on your Purchase of the TranzVolt Cordless Lift Hoist.

FEATURES INCLUDE:

- Simple Tool Free, Five Minute Setup
- One Press Wireless Remote Operation Control
- Rapid Load Lift at 120 ft per Minute
- Heavy Load Capacity (250 lbs.)

- Electromagnetic / Regenerative Braking Systems
- Automatic Homing System
- Maintenance Free All Electric Power-Train System
- Load Lowering Capability

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Instruction #08315 (E1546 Rev. 04/02/20)

TRANZVOLT HOIST OWNERS MANUAL NOTES



These operating instructions are essential for the successful and safe operation of the TranzVolt Hoist. The operating instructions contain important information. Your attention is required to maintain the TranzVolt as a safe, operated properly and economically used hoist. Your attention helps avoiding dangers and the reliability and lifetime of the TranzVolt Hoist.

Installation and Operating Instructions Disclaimer

The TranzVolt Hoist operating instructions must always be available, read and applied to any person who operates the TranzVolt Hoist while:

- . Operating the Equipment.
- Troubleshooting the Equipment.
- Assisting in the Use of Equipment.
- Assembly of Equipment.
- Storage of Equipment.
- . Maintenance, care, repair and/or any operations tasked for the TranzVolt Hoist.

To better understand these instructions, extra care should be given to the following representations and safety symbols:





Warns of hazardous situations or unsafe practices with **high risk** of severe jury or death.





Warns of hazardous situations or unsafe practices with **some risk** of severe jury or death.





Warns of **potential** hazards or unsafe practices that **could** result in minor to moderate injury.

User Responsibilities:

- CHECK CABLE FOR SMOOTH OPERATION AND FOR SIGNS OF WEAR (REPLACE IMMEDIATELY)
- > CHECK FOR LOOSE BOLTS AND TIGHTEN ACCORDING TO SPECIFICATIONS
- > CHECK TRACK SECTIONS AND ALL OTHER MOVING PARTS FOR EXCESSIVE WEAR OR FATIGUE
- > CHECK GENERAL CONDITION OF EQUIPMENT
- > CHECK AND CONFIRM OPERATOR'S UNDERSTANDING OF THE PROPER OPERATION FOR THIS EQUIPMENT

OPERATOR INSTRUCTIONS DISCLAIMER

These operating instructions are as important as TranzVolt itself. The job site supervisor shall ensure that all operators have read this instruction manual and operating guideline. These instructions are to be documented and regularly updated.

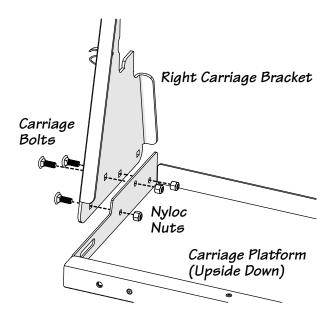
- DO NOT ALLOW ANYONE TO OPERATE THE TRANZVOLT HOIST WHO HAS NOT BEEN THOROUGHLY AND PROPERLY TRAINED IN
 THE CORRECT OPERATION AND USE OF THIS HOIST
- Transport and handle your TranzVolt Hoist with care
- DO NOT USE THE HOIST IF ANY PART IS DAMAGED OR SHOWS SIGNS OF WEAR
- Please observe all safety and warning labels attached to the hoist
- Use only replacement parts furnished by the manufacturer
- Always keep the area around the base section of the TranzVolt Hoist clear to help prevent slipping, tripping or falling against the hoist
- This hoist is manufactured to lift materials only. Never use the TranzVolt Hoist for the purpose of transporting personnel from one level to another
- · Do not climb the TranzVolt hoist or use as a personnel ladder
- DO NOT OVERLOAD: Maximum lifting capacity for the TranzVolt is 250 lbs.
- Keep hands, feet and other body parts as well as clothing away from the track sections and moving Power Carriage.
- Do not allow any persons to walk or work under or near the TranzVolt Hoist while in operation
- Do not use this hoist to transport hot asphalt or any other hot molten substance from one elevation to another
- Store all parts of the TranzVolt Hoist in such a fashion as not to damage any of the components

Assembling the Roofing Platform

If you purchased the Roofing Platform Kit - refer to your "Before You Begin" information sheet for complete parts list

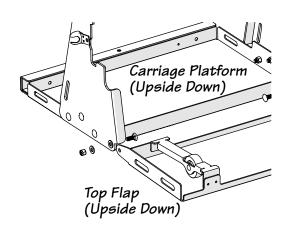
STEP 1 - SECURING CARRIAGE BRACKETS

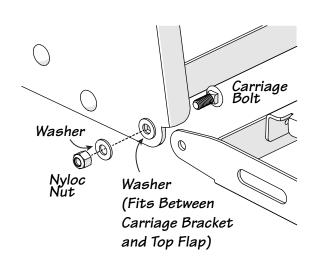
- · Lay Carriage Platform upside down
- Align Right Carriage Bracket with Guide holes on platform
- Insert (3) Provided Carriage Bolts to Platform
- Secure Carriage Bolts with provided (3) Nyloc Nuts
- . Ensure bolts and nuts are torqued to 30 ft.-lbs.
- Repeat steps for Left Carriage Bracket

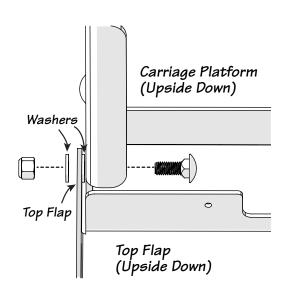


STEP 2 - ATTACH TOP FLAP TO CARRIAGE PLATFORM

- · Lay carriage platform upside down
- Place top flap next to carriage platform
- Use provided hardware to secure the carriage platform to the top cap
- Washers must be placed between carriage bracket and top flap (Shown Below)
- Place washer over the carriage bolt and attach with nyloc nut.
 Tighten the nut just enough to allow the movement for both platform and top flap.
- · Repeat this step for left carriage bracket







NOTE:

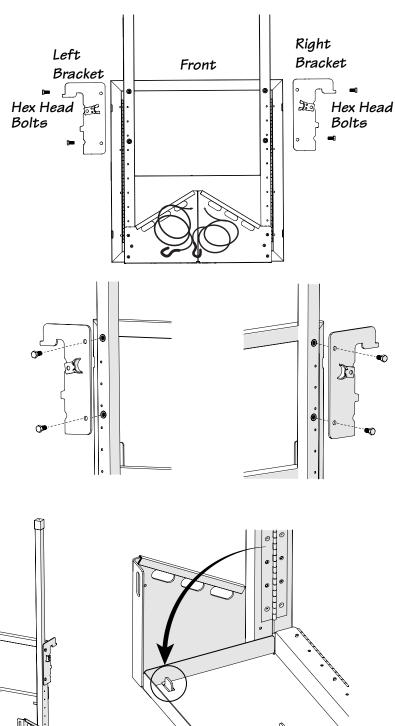
NUTS SHOULD BE TIGHTEN UNTIL SNUG AND THEN BACK OFF ONE QUARTER TURN. BACK PANEL SHOULD SWING FREELY.

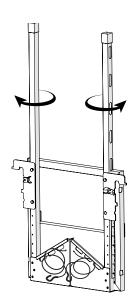
Solar Lift Panel Assembly If you purchased the Solar Platform Kit - refer to your

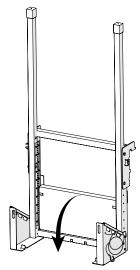
"Before You Begin" information sheet for complete parts list

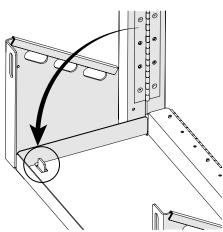
STEP 1

- Lay the Solar Assembly flat on the ground
- · Remove 2 hex head bolts from each side of the assembly
- · Position side brackets as shown right
- · Secure brackets with two hex head bolts on each side.









STEP 2

- Stand Solar Lift upright
- Rotate Solar Panel Lift Arms outward
- Rotate the Bottom Tray downward.
- . Ensure the vertical tabs in the two arms fully insert into the slots in the Bottom Tray

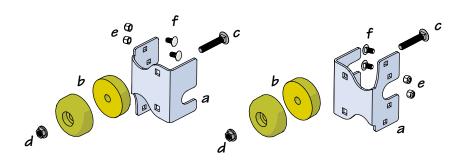
Carriage Stop Assembly

Within the TranzVolt Power Carriage Box you will find a plastic bag containing the brackets and hardware needed to complete the Carriage Stop Assembly. Please follow the instructions below.

Step 1 - Locate Carriage Stop Kit

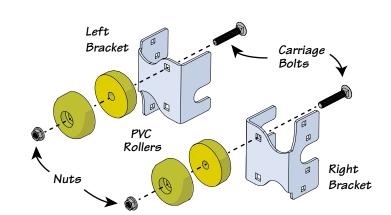
Bagged Kit Includes:

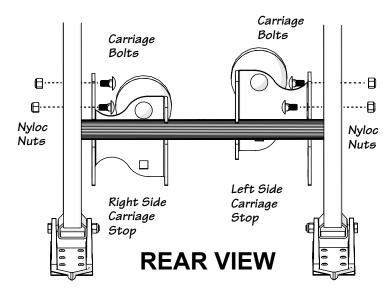
- a Carriage Stop Bracket (2)
- b PVC Carriage Stops (4)
- c 1/2" x 2-1/2" Carriage Bolts (2)
- d 1/2" Hex Locknut (2)
- e 3/8" Nyloc Nut (4)
- f 3/8" x 3/4" Carriage Bolts (4)



Step 2 - Mounting PVC Carriage Stops

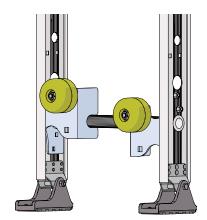
- Place 1/2"x 2-1/2" carriage bolt through the left bracket as shown left.
- Position two PVC Carriage Stops back to back and slide over the left bracket and 1/2"x 2-1/2" carriage bolt.
- Complete the assembly by attaching with the 1/2" locknut. Tighten firmly.
- · Repeat for the right bracket.





Step 3 - Mount Carriage Stop Brackets

- Position the left carriage stop on the inside of the track section, it will rest on the lowest track section rung.
- From the inside pass two 3/8"x 3/4" carriage bolts through the Stop Bracket and track section.
- Attach 3/8"nyloc nuts to both carriage bolts as shown above.
- · Repeat for the right carriage stop bracket.



NOTE:

Viewing the track section from the front: The left carriage stop will be slightly higher than the right carriage stop.

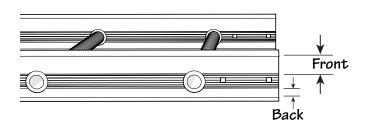
Track Section Assembly

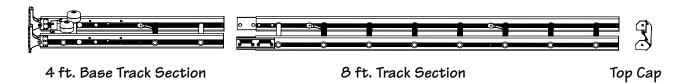


DANGER: DO NOT CLIMB ON TRACK SECTIONS. Track Sections are not designed to be used as a ladder. Serious injury may occur when track sections are not used for their original purposes.

STEP 1 Laying Track Section Out

- Lay track sections on a flat surface with the "front" side facing up.
- "Front" of track has largest space between the track cross bar and the track section edge as shown to right.
- · Determine the number of track sections required
- Track sections can be laid out in the following combinations: 12 ft., 20 ft. or 28 ft. high
- Additional Track sections can be purchased separately (36 ft. and 44 ft.)
- · Place selected track in order with 4 ft. section at the base
- 4 ft base track should be lined up parallel to the loading point for your project







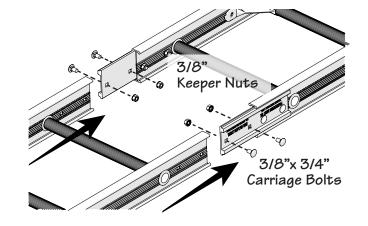
WARNING: DO NOT EXCEED 44 Ft. in height.

STEP 2 Connecting Track Sections

- Splice plates are attached to the bottom section of the tracks.
- · Splice plates are mounted on the outside track section.
- · Attach provided (2) nuts and bolts per side (shown right).
- . Ensure bolts and nuts are torqued to 30 ft. lbs.
- · Repeat this step for each track section required

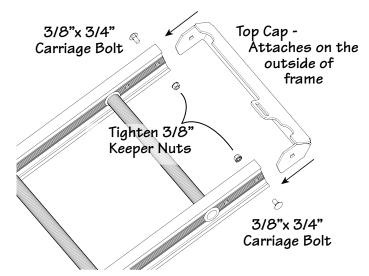
NOTE: DO NOT SUBSTITUTE NUTS AND BOLTS.

Use 3/8"x 3/4" carriage bolts and 3/8" keeper nuts (lock washer and nut combined).



STEP 3 Attaching Top Cap

- Attach the top cap to the end of the last track section you intend to use.
- Assemble with (2) provided 3/8"x 3/4" carriage bolts with keeper nuts provided.
- Make sure that the top cap end slides into the outside of the track section completely and securely (shown right).
- · Ensure bolts and nuts are torqued to 30 ft. lbs.

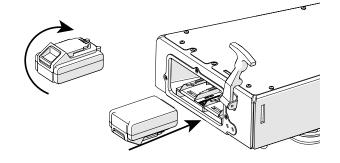


Installation of the TranzVolt Carriage

Two 20.0 Volt Li-Ion 5.0Ah Batteries required

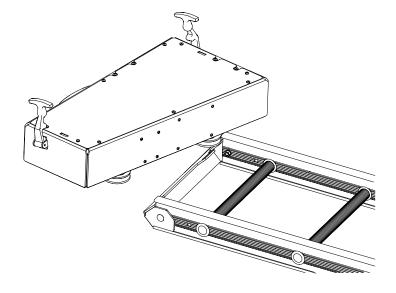
STEP 1 Installing Batteries

- Insert (2) fully charged 20-volt rechargeable batteries
- The green LED on the Power Carriage will blink twice to indicate the unit is powered up



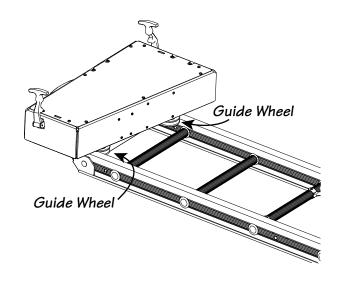
STEP 2 Positioning the Power Carriage

- Position the TranzVolt at top end of the fully assembled track section (logo side up)
- · Align the guide wheels with the track section assembly



STEP 3 Attaching the Power Carriage

- Place guide wheels onto track section
- The power carriage will slide freely along the track once inserted properly
- While laying the track flat test your TranzVolt Power Carriage is secure to track.
- Make sure guide wheels safely allow for carriage to move freely along track.



Installation of the TranzVolt

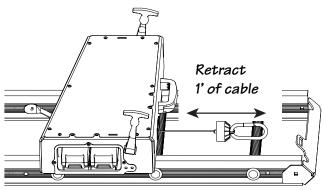
STEP 4 Securing the TranzVolt Carriage

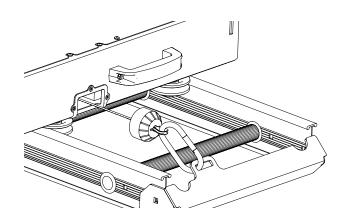
- Once carriage is secure to track
- · Press the "Start" button on your Wireless Remote
- The LED on the remote control will blink green to indicate the unit is active
- · Press and hold the "Down" button on Wireless Remote
- Hold "Down" button until 1 ft. of cable is released
- Attach Power Carriage Cable Clip to the Top Cap

2nd Press and Hold "DOWN" "START"

IMPORTANT NOTE

Always maintain positive tension on the cable going IN AND OUT of the motor carriage. Failure to maintain constant and adequate tension will result in cable bird nesting and possible damage to the cable/drum mechanisms.





STEP 5 Spooling Out the Carriage

- Stand behind the Top Cap/track section
- Lift the track section high enough to rest the Top Cap on your knee.
- While holding the lift hoist at an incline, press and hold the DOWN button on the remote control.



STEP 6 Positioning Power Carriage

- While maintaining tension on the cable, continue lowering the Power Carriage until it reaches the last rung of the track section base.
- · Release the DOWN button to stop spooling out cable.
- Press the STOP Button to safely idle the TranzVolt Power Carriage.
- The TranzVolt Hoist is ready to be raised to roof.



Release "DOWN" Then Press "STOP"

Raising and Lowering the Track Section Assembly

WARNING: KEEP TRACK SECTIONS MINIMUM 10 FT. CLEAR OF ALL ELECTRICAL WIRES AND EQUIPMENT. BE AWARE OF OVERHEAD WIRES BEFORE RAISING TRACK SECTIONS. ELECTRICITY KILLS!

The hoist assembly is extremely top heavy and must be kept under control at all times. Two alternate methods are suggested for raising the platform hoist to the operating position. **ALWAYS USE APPROVED ROOF TOP FALL PROTECTION** when setting up, operating and taking down the TranzVolt Hoist.



PROCEDURE "A"

This procedure requires two or preferably three men.

- 1. Lay the assembled track sections with the platform attached parallel to the building wall that is to support the hoist.
- 2. Tie a rope to the head bracket and have the man on roof pull up the hoist while the other man on the ground braces the shoes on the bottom base section to prevent slippage of the hoist shoes. The third man on the ground may aid in erecting by "walking" the hoist up hand over hand by the rungs.
- 3. When the hoist reaches a vertical position, carefully turn the hoist 90 degrees with the platform pointing away from the building. Move the bottom of the hoist away from the building 1/4 of the height of the building where the top of the hoist is to be supported. Make allowances for overhang.
- 4. Tie the track section to the roof with a rope fastened to a cross tie on the top bracket to prevent slippage of the track section. See below.

DO NOT TIE ROPE TO THE RAILS - THIS WILL PREVENT THE PLATFORM FROM OPERATING PROPERLY.

Make certain the shoes on the steel bottom section are firmly resting on level ground.
 This will help to prevent track section slippage or uneven loading of the track section which could cause damage or injury to personnel and/or to equipment.





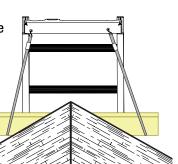


SECURE THE TOP CAP

Option 1 Low Top Cap

Attach with the Safety Pull Straps (included). Place the hooks through the holes in top cap. Attach to a mounted 2x4 on the side of the roof top.

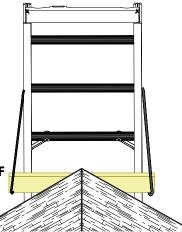
NEVER ALLOW ANYTHING TO WRAP AROUND THE FRONT OF THE TRACK SECTION



Option 2 High Top Cap

Pass rope through the track section rungs. Tie rope around the mounted 2x4 on the side of the roof top.

NEVER ALLOW ANYTHING TO WRAP AROUND THE FRONT OF THE TRACK SECTION



Raising and Lowering the Track Section Assembly

WARNING: KEEP TRACK SECTIONS MINIMUM 10 FT. CLEAR OF ALL ELECTRICAL WIRES AND EQUIPMENT. BE AWARE OF **OVERHEAD WIRES BEFORE RAISING TRACK SECTIONS. ELECTRICITY KILLS!**

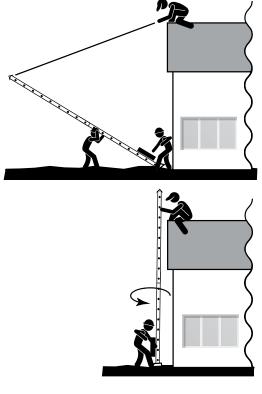
ALWAYS USE APPROVED ROOF TOP FALL PROTECTION when setting up, operating, and taking down the TranzVolt Hoist.

PROCEDURE "B"

This procedure requires two or preferably three men.

- 1. Place track section assembly perpendicular to the building with the bottom shoes of the steel bottom section resting against the building to prevent slipping.
- 2. Tie a rope to the top bracket and have the man on the roof pull up the hoist while the other man on the ground braces the shoes on the steel bottom base section to prevent slippage of the hoist shoes. The third man on the ground may aid in erecting by "walking" the hoist up hand over hand by the rungs.
- 3. When the hoist reaches a vertical position, carefully turn the hoist 180 degrees with the platform pointing away from the building.
- 4. Move the bottom of the hoist away from the building 1/4 of the height of the building where the top of the hoist is to be supported. Angle of track sections from building should be between 18 and 20 degrees. Make allowances for an overhang.
- 5. Tie the track section to the roof with a rope fastened to a cross tie on the top bracket to prevent slippage of the track section. See below. DO NOT TIE ROPE TO THE RAILS - THIS WILL PREVENT THE PLATFORM FROM OPERATING PROPERLY.
- 6. Make certain the shoes on the steel bottom section are firmly resting on level ground. This will help to prevent track section slippage or uneven loading of the track section which could cause damage or injury to personnel and/or to equipment.





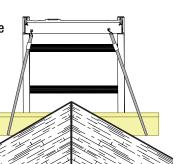


SECURE THE TOP CAP

Option 1 Low Top Cap

Attach with the Safety Pull Straps (included). Place the hooks through the holes in top cap. Attach to a mounted 2x4 on the side of the roof top.

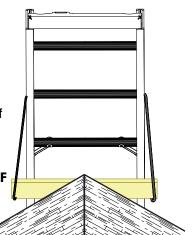
NEVER ALLOW ANYTHING TO WRAP AROUND THE FRONT OF THE TRACK SECTION



Option 2 High Top Cap

Pass rope through the track section rungs. Tie rope around the mounted 2x4 on the side of the roof top.

NEVER ALLOW ANYTHING TO WRAP AROUND THE FRONT OF THE TRACK SECTION

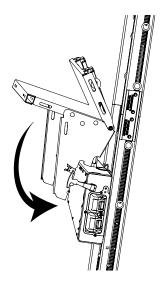


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Mounting The Roofing Platform Assembly

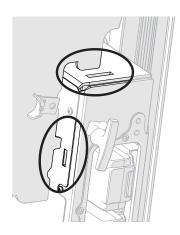
STEP 1

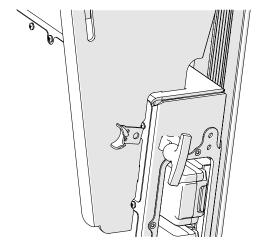
- Place assembled Roofing Platform assembly above power carriage
- Carriage brackets should point toward ground (Shown Right)

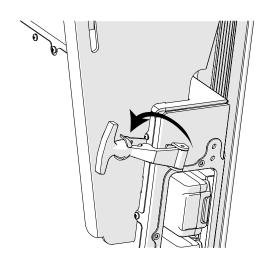


STEP 2

- Insert carriage bracket tabs into the mounting holes on power carriage
- · Carriage brackets must sit flush on the power carriage







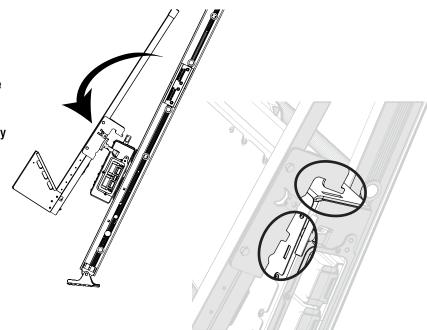
STEP 3

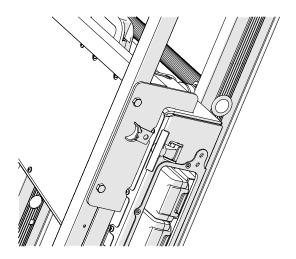
- Use pull clamps to secure carriage assembly
- · Make sure clamps are fully seated before proceeding

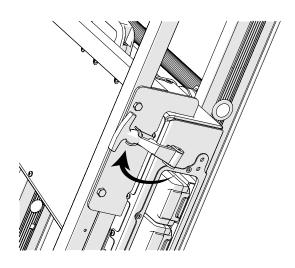
Mounting the Solar Panel Platform Assembly

STEP 1

- Lift the assembled Solar Panel Platform just above the Power Carriage
- Insert side bracket tabs into the mounting holes on Power Carriage. Ensure the mount tabs are fully inserted into the slots in the Power Carriage.
- The Solar Panel Platform must sit flush on the Power Carriage







STEP 2

- Use Pull Clamps to secure the Solar Lift Assembly
- Make sure clamps are fully seated before proceeding

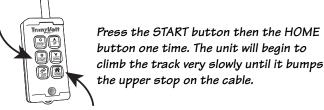
STANDARD HOME SETTING OPERATION

The smart **HOME** routine feature learns the load height of your project so the TranzVolt safely stops automatically at the top.

- 1. Set up the TranzVolt/Track Sections upright at the work site location. Attach a platform (roofing or solar) and secure the rubber pull straps.
- 2. Press and release the **START** button then press and briefly hold the **HOME** button one time. The power carriage will climb the tracks slowly until it reaches the upper cable stop.
- Once the power carriage reaches the cable stop, the power carriage will pause for a moment, then it will begin moving back down the track sections.
 Option: To have the power carriage stop at a specific position below the cable stop, the HOME button can be pressed at any time during the initial climb.
- 4. Press and release the **HOME** button to stop the power carriage at your desired height and above the carriage stop assembly brackets. Always set the **HOME** position above the carriage stop brackets. The power carriage must always have tension on the cable/spool.
- 5. Once top and bottom "Home" locations are set, the TranzVolt is ready for use.

NOTE: Pressing the **STOP** button temporarily disarms the Tranz**V**olt. This allows for safe loading and prevents accidental movement of the power carriage.

- 6. Load the materials onto the platform and secure with bungee cords.
- Press and release the START button to re-activate the system.
 Press and release the UP button a single time to send the unit to the top position. In case of emergency, press the STOP button.
- 8. The power carriage will stop at the top position set during homing. Unload the materials carefully.
- 9. Press and release the **DOWN** button to send the unit to the bottom.







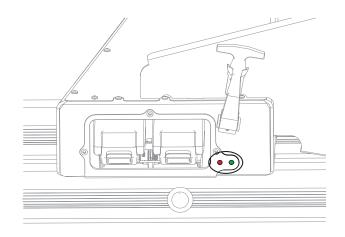


SPECIALTY OPERATIONS

- JOGGING After the homing cycle, the unit can be jogged manually up or down. Press and hold the JOG button while pressing the
 UP or DOWN button. The unit will move up or down slowly until you release the UP or DOWN button.
- MODIFYING THE TOP/BOTTOM HOME You do this by Jogging the power carriage to your new home top or bottom. Once your power
 carriage is in the new working position hold the HOME+DOWN buttons. This re-sets the lower part of the travel. In order to set the
 top; Jog to where you want the new home top to be, hold HOME+UP and that re-sets the top of the travel.
- RESET Removing a battery will always reset the power carriage homing locations.

LED INDICATORS

- The Red LED indicator (closest to the batteries) blinks twice to indicate the system is operating with no errors. Any other count of blinks signifies a specific error.
- The Green LED indicator is off when the batteries are charged. It blinks when the battery is running low and glows solid when the batteries need to be replaced.

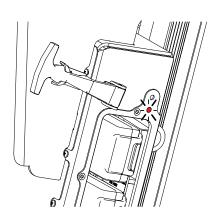


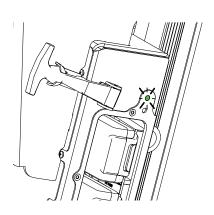
FAULT CONDITIONS

- Dead battery If the batteries reach too low a charge, the Red LED will glow solid. When the UP button is pressed the machine will beep and refuse to ascend. Replace the battery.
- Other issues if the unit refuses to climb, observe the Green LED.
 If it is blinking in sets of 2, the machine has not reported an error.

If the Green LED blinks in sets of 3, 4, 5, or 6, there is an error.

- 3 blinks = Battery Unsafe Low replace battery
- 4 blinks = Battery Unsafe High replace battery
- 5 blinks = Internal Communication Fault contact Tie Down
- 6 blinks = Feed Stall remove obstruction preventing cable from winding – replace battery to reset unit





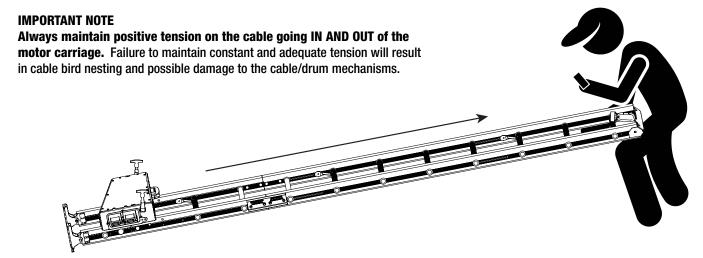
NEVER TRANSPORT THE LIFT HOIST WITH THE POWER CARRIAGE STILL ATTACHED TO THE TRACK SECTIONS!

STEP 1

- Lower the TranzVolt Power Carriage
- Remove the Roofing/Solar Platform
- Follow the take down instructions on pages 12 & 13 lower the entire lift hoist

STEP 2

- · Stand behind Top Cap/track section.
- · Lift the hoist high enough to rest on your knee.
- While holding the lift hoist at an incline, press the UP button on the remote control.



STEP 3

- Press and hold the "Jog" button plus the "Up" or "Down" buttons to bring the Power Carriage about 1 ft. from the top cap.
- · Disconnect the safety clip from the top cap
- · Press and hold JOG plus UP on the remote control to take up any remaining cable slack.
- . Roll the Power Carriage to the end of the track section
- Lift off the Power Carriage as the guide wheels clear the track.

NEVER TRANSPORT THE LIFT HOIST WITH THE POWER CARRIAGE STILL ATTACHED TO THE TRACK SECTIONS!

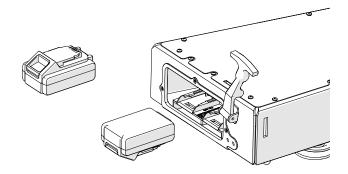
STEP 4

REMOVE AND STORE BOTH BATTERIES



WARNING:

Batteries must be removed when not in use. Leaving the batteries in the Power Carriage will result in a continuous slow power drain. This can result in permanent damage to the batteries



Loose Cable in the Power Carriage

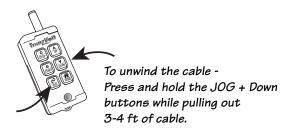
Proper gloves and PPE equipment must be used when using the TranzVolt. Prior to re-tensioning the cable, be sure to inspect the cable for any broken fibers or wires. If any of the cable wires are found to be broken, stop use immediately and replace the cable. Quality work gloves are a must when working with wire cable. Cables are known to have burs and can cut your hand!

Always maintain positive tension on the cable going IN and OUT of the power carriage. Failure to maintain constant and adequate tension will result in cable bird nesting and possible damage to the cable/drum mechanisms. In the event the power carriage bottoms out or rests on the carriage stop assembly brackets tension on the cable spool will be released.

DO NOT RAISE THE POWER CARRIAGE WITH LOOSE CABLE.

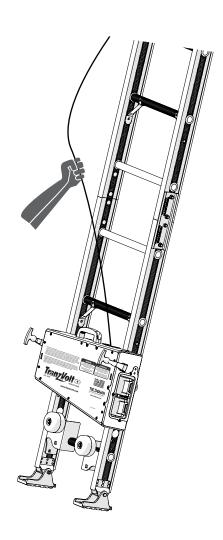
If the cable becomes loose, follow the instructions below before raising the Power Carriage and Platforms

- 1 The hoist should be set up in the vertical position with the power carriage near the bottom on the track.
- 2 Remove the Solar Panel Platform or Roofing platform.
- 3 Press and hold the JOG + DOWN buttons while pulling out 3-4 ft of cable.
- 4 With a gloved hand carefully hold the cable from about 4 ft. out from the power carriage. Apply tension to cable.
- 5 DO NOT WRAP THE CABLE AROUND YOUR GLOVED HAND OR GET YOUR GLOVED HAND TANGLED AROUND THE CABLE.
- 6 While applying tension to the cable, press and hold **JOG + UP**
- 7 As the power carriage retracts the cable, maintain cable tension at all times up to the point when the power carriage starts moving up the track section.
- 8 Once the power carriage starts moving up the track you can release the cable.
 DANGER DO NOT ALLOW YOUR GLOVED HAND OR CLOTHING TO GET TANGLED WITH THE CABLE AS IT IS REWINDING.
- 9 Allow the power carriage to reach the top of the full track section.
- 10 Press the **DOWN** button bringing the carriage to the bottom. It is recommended to reset the **HOME**.
- Always set HOME above the stop brackets. The power carriage must always have tension on the cable/spool.





To rewind the cable -While applying tension to the cable, press and hold JOG + UP



CRITICAL SAFETY INFORMATION

The greatest exposure to serious bodily injury and or death may occur when the TranzVolt track sections are located within 10 ft. (left or right or underneath) overhead electric power lines. If a minimum safe distance (10 ft.) from electrical wires cannot be maintained, contact the local utility company and have the electric wire unenergized and grounded or guarded effectively by insulating or other means. The top of the track section must be secured against the building before TranzVolt is loaded or operated. Serious injury can occur by the track sections overturning away from the building. Ratchet straps must be employed to secure the track section against overturning.

A COMPETENT PERSON must be present during any set up, during any repositioning, and during any tear down operations of the TranzVolt track sections when the TranzVolt is to be located near electric power lines. A COMPETENT PERSON must read and understand the Owner's Manual for set up, operating, and tear down. The operator of the TranzVolt must be aware of ALL SAFETY WARNINGS as well as the operating instructions. ALWAYS USE APPROVED ROOF TOP fall protection when setting up, operating, and taking down the TranzVolt Hoist.



WARNING



ELECTRICAL OVERHEAD WIRES KILL! Look for and locate all overhead electrical wires before handling or moving track sections during assembly and tear down.

Always maintain a minimum of 10 feet safe distance, front to back, left to right, and underneath electric wires.

ADVERTENCIA



LOS CABLES ELECTRICOS AEREOS MATAN! Busque y ubique todos los cables elétricos aéreos antes de manipular on mover tramos durante el montaje y el desmontaje.

Mantenga siempre una distancia mínima de seguridad de 10 pies de la parte frontal a la porte trasera, y debajo de los cables eléctricos.



WARNING



WARNING



KEEP TRACK SECTIONS MINIMUM 10 FT. CLEAR OF ALL ELECTRICAL WIRES AND EQUIPMENT. BE AWARE OF OVERHEAD WIRES BEFORE **RAISING TRACK SECTIONS, ELECTRICITY KILLS!** TRACK SECTION MUST BE SECURED TO THE TOP OF THE ROOF!



USE PULL CLAMPS TO SECURE CARRIAGE TO THE POWER UNIT. CARRIAGE MUST BE SECURED TO THE POWER UNIT PRIOR TO **OPERATING!**



WARNING



BATTERIES MUST BE REMOVED WHEN NOT IN USE.

Leaving the batteries in the lift hoist will result in permanently dead batteries.



ALWAYS MAINTAIN POSITIVE TENSION ON THE CABLE GOING IN AND OUT OF THE MOTOR CARRIAGE. Failure to maintain constant and adequate tension will result in cable bird nesting and possible damage to the cable/drum mechanisms.

DVERTENCIA



Mantenga Siempre Suficiente Fuerza en el Cable que ENTRA Y SALE del Carro del Motor.

Si no se Mantiene una Fuerza Suficiente, Constante Y Adecuada el Cable se anidará y se dañaran los mecanismos del Cable/Motor.





TRANZVOLT PRODUCT LINE LIMITED WARRANTY

Tie Down will repair or replace, free of charge, any part, or parts of the TranzVolt Lift Hoist that are defective in material or workmanship or both. The limited warranty is in effect for Six (6) months from date of purchase. Return the defective unit to the dealer or contact Tie Down direct at 800-241-1806, (404) 344-0000.

This warranty does not apply to damage or loss caused by any or all of the following circumstances or conditions:

- Damage caused during assembly or installation.
- Parts, accessories, materials or components used with or replacing any TIE DOWN lift hoist part not obtained from or approved in writing by TIE DOWN.
- Misapplication, misuse and failure to follow the directions or observe cautions and warnings on installation, operation, application, inspection or maintenance specified in any TIE DOWN quotation, acknowledgment, sales literature, specification sheet or installation instruction and service manual ("applicable literature").
- Use of product in any other application other than those described in TIE DOWN's product information materials.

If any TIE DOWN products are found upon TIE DOWN's examination to have been defective when supplied, TIE DOWN will either: credit the purchaser's account for the purchase price of the TIE DOWN product; replace the TIE DOWN product; or repair the product. TIE DOWN has sole discretion in choosing which option to provide. For this LIMITED WARRANTY to apply, TIE DOWN must receive notice of the alleged defect within 30 days of either the discovery of the alleged defect or the expiration of the warranty period, whichever is earlier. Any claim not made within this period shall conclusively be deemed waived.

If requested by TIE DOWN, purchaser shall return the alleged defective product to TIE DOWN for examination at purchasers' expense. TIE DOWN will not pay for expenses incurred in returning a product to TIE DOWN without TIE DOWN's prior written authority. TIE DOWN shall not be liable for any other expenses thecpurchaser incurs to remedy any defect. Purchasers waive subrogation on all claims under any insurance.

Limitation of Liability: It is expressly agreed that the liability of TIE DOWN is limited. TIE DOWN does not function as an insurer. The remedies set forth in this warranty shall constitute the exclusive remedies available to the purchaser or user and are in lieu of all other remedies, express or implied. The liability of tie down, whether in contract, in tort, under any warranty or otherwise, shall not exceed the purchase price of the particular product manufactured, sold or supplied by tie down.

To Obtain Technical Assistance: To enable TIE DOWN to respond to a request for assistance or evaluation of customer or user operating difficulty, please provide at a minimum the following information by calling 404-344-0000:

- Model number, serial number and all other data on the specific component which appears to be involved in the difficulty.
- The date and from whom you purchased your TIE DOWN product.
- State your difficulty, being sure to mention at least the following: Application, Nature of load involved, and Weight of the load.

THIS WARRANTY DOES NOT COVER NOR EXTEND TO INCIDENTAL OR CONSEQUENTIAL DAMAGE. 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. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

No representative has authority to make any representation, promise or agreement except as stated in this Limited Warranty. TIE DOWN reserves the right to make design and other changes upon its products without any obligation to install the same on any previously sold or delivered products.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE DESCRIBED ABOVE. EFFECTIVE JANUARY 2019 THIS WARRANTY SUPERSEDES ALL PRIOR WARRANTIES, WRITTEN OR IMPLIED.

E1682 - Rev. 10/4/19



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REMOTE CONTROL QUICK REFERENCE GUIDE

The TranzVolt Hoist Wireless Control Systems is a Safe Remote-Control System (SRCS) designed for up to 150 ft. range. The simple ergonomic design allows operators to stand from a safe location during long loads. A simple one press control feature allows operators to send the hoist to the roof while preparing the next load. The smart homing routine feature learns the load height of your project so the TranzVolt safely stops automatically at the top. It provides a rugged, ergonomic, and easy to understand controller to ensure both consistent and reliable control.

STOP

Press RED "Stop" Button to cancel movement of hoist.

The STOP button also functions as a safety lockout. The UP and DOWN buttons will remain deactivated until the START button is pressed.

START

Press the GREEN "START" button to activate the system. The LED light on the remote will blink GREEN to indicate the UP, DOWN, JOG, and HOME buttons are active.

JOG

After the homing position has been set, press and hold the "JOG" button in addition to the "UP" or "DOWN" button to manually move the unit up or down.



UP

Press the "UP" Button to move the hoist up.

When the unit is first powered up, pressing and holding the "UP" button spools IN the cable. After the homing routine is completed, a single press of the "UP" button sends the unit to the top position.

DOWN

Press the "DOWN" button to lower the hoist.

When the unit is first powered up, pressing and holding the "DOWN" button spools OUT the cable. After the homing routine is completed, a single press of the "DOWN" button sends the unit to the bottom position.

HOME

Press the HOME button a single time to begin the homing process. The unit will begin to climb the ladder very slowly until it bumps the upper stop on the cable. If it is desired to have the unit stop at an upper position below the cable stop, the HOME button can be pressed again at any time during the slow climb.



Digital Manual

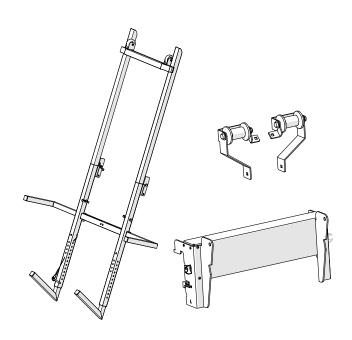


Roofing Products Division
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Instruction #08315 (E1546 Rev. 04/02/20)





Installation and Operations Manual Solar Panel Tilting Platform





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WARNING: This product can expose you to chemicals including Nickel, which is known to the State of California to cause cancer. For more information go to: www.P65Warnings.ca.gov

Attention:

Capacity of the lift is 3 solar panels or 200 lbs max. load witch ever is lower.

Digital Manual

CRITICAL SAFETY INFORMATION: The greatest exposure to serious bodily injury and or death may occur when the TranzVolt track sections are located within 10 ft. (left or right or underneath) overhead electric power lines. If a minimum safe distance (10 ft.) from electrical wires cannot be maintained, contact the local utility company and have the electric wire unenergized and grounded or guarded effectively by insulating or other means.

A COMPETENT PERSON must be present during any set up, during any repositioning, and during any tear down operations of the TranzVolt track sections when the TranzVolt is to be located near electric power lines. A COMPETENT PERSON must read and understand the Owner's Manual for set up, operating instructions, and tear down instructions in order to insure that all personnel authorized to set up, operate, and tear down the TranzVolt are made aware of ALL SAFETY WARNINGS as well as the operating instructions. ALWAYS USE APPROVED ROOF TOP FALL PROTECTION when setting up, operating, and taking down the TranzVolt.

Instruction #08360 (E1804, Rev. 8/25/21)

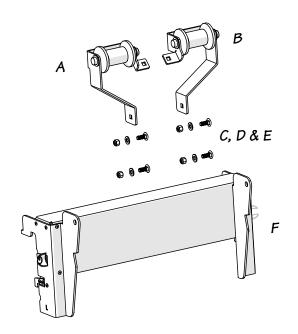


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Unpacking the Solar Panel Tilting Platform

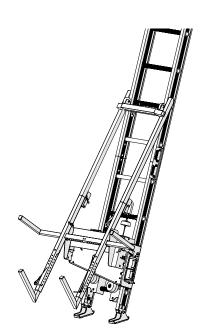
Box 1 Part List - Tilt Solar Panel Tilt Back Mount

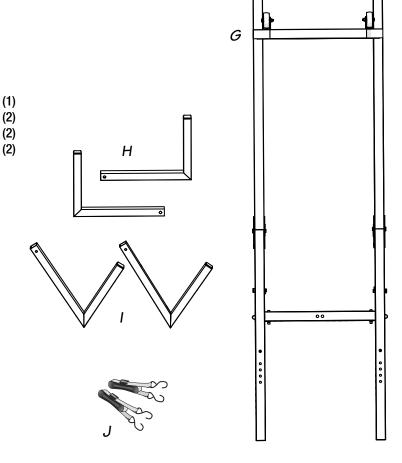
Α	Roller Bracket Assembly (Left Side)	(1)
В	Roller Bracket Assembly (Right Side)	(1)
C	Hex Head Bolt	(2)
D	Washer	(2)
Ε	Nylock Nut	(2)
F	Solar Tilt-Back Mount	(1)



Box 2 Part List - Tilt Solar Panel Frame

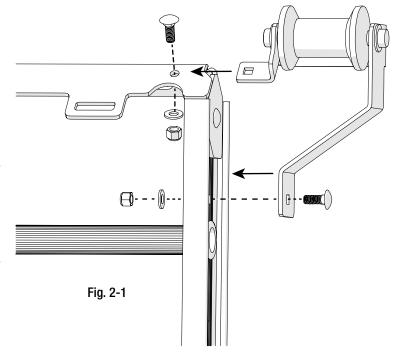
G	Solar Tilt Back Frame	(
Н	Solar Tilt Back Side Arm	(2
I	Solar Tilt Back Lower Arm	(2
J	Safety Straps	(

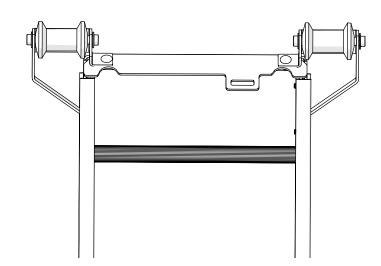




Securing Roller Bracket to Track Section

- 1. The top cap must be mounted prior to installing the roller bracket.
- 2. Position the roller bracket so the square mounting holes align with the mounting holes on the track section and top cap.
- 3. Place screw through bracket and track section.
- 4. Place washer and nylock nut over the carriage bolt. Secure with 1/4 in. socket.
- 5. Place the second screw through bracket and top cap.
- 6. Place washer and nylock nut over the carriage bolt. Secure with 1/4 in. socket.
- 7. Repeat the same process for opposite side roller bracket.





Securing The Tilt Back Mount

- Using the remote control, move the TranzVolt carriage about 3 feet from the ground.
 See Fig. 4-1.
 Remove batteries from TranzVolt before beginning installation.
- Holding the base mount at a slight angle, align the upper taps with the slots on top of the TranzVolt Carriage. Insert top taps into TranzVolt Carriage. See Fig. 4-2.
- Lower the base mount then align the lower mounting taps with the matching slots on the TranzVolt Carriage.
- 4. The lower mounting tab moves in and out as the pull hook mounting socket is pulled out. Pull the pull hook mounting socket outward (Fig. 4-3). Tilt the base mount downward so that the lower tabs insert into the carriage slots.
- Push the pull hook mount inward, locking the base mount securely with the carriage.
 NOTE: Make sure base mount is flush with the TranzVolt Carriage with no open gaps between the two. See Fig. 4-4.
- Pull the rubber handle and secure it to the base by locking the handle in the pull hook mount.

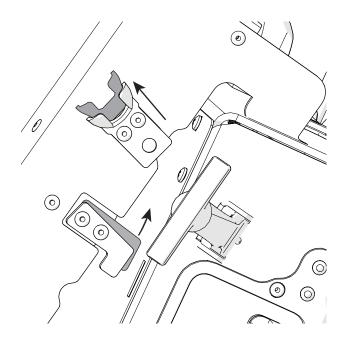
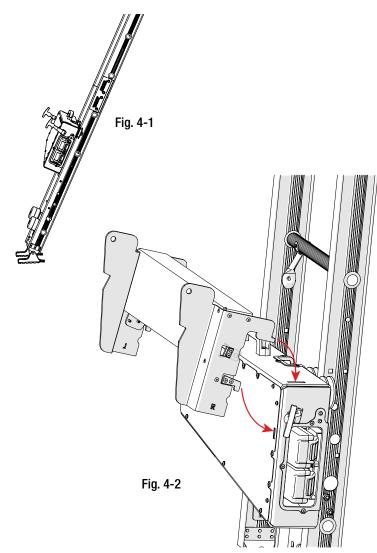


Fig. 4-3



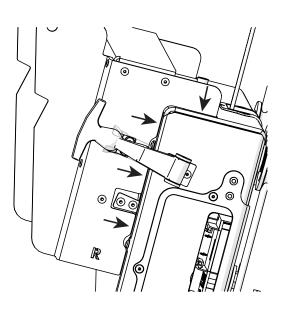
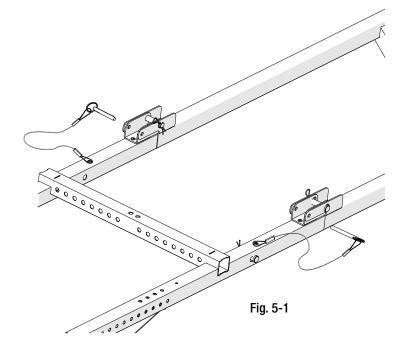
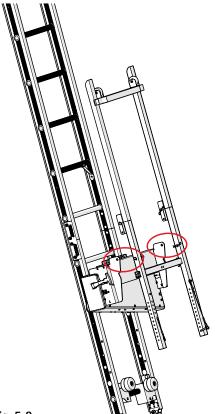


Fig. 4-4

Securing The Tilt Back Frame

- After removing the folded frame from the box, lay it on a flat surface. Unfold the frame.
- 2. Insert safety pins into corresponding holes in bracket. See Fig. 5-1.
- 3. Lift the frame into place by matching the mounting holes on the frame with those on the tilt back mount. See Fig. 5-2.
- Insert the clevice pin into the pivot point hole though the frame and tilt back mount.
 Secure the pin by attaching the safety pin.
 Repeat for opposite side. See Fig. 5-3







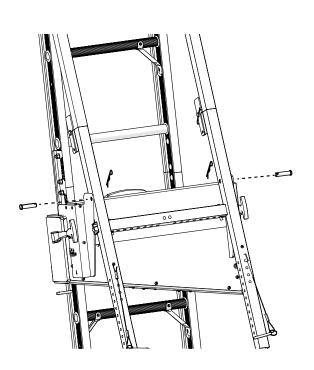
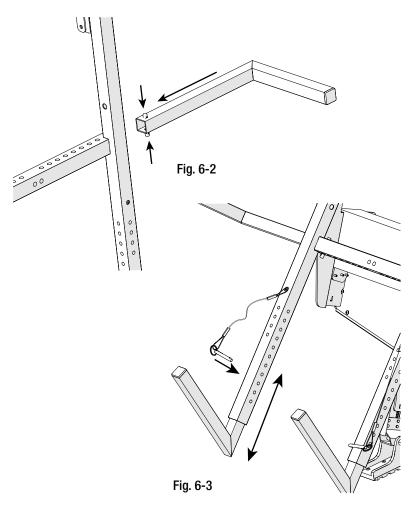


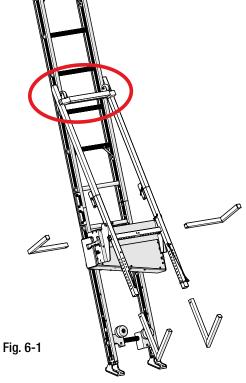
Fig. 5-3

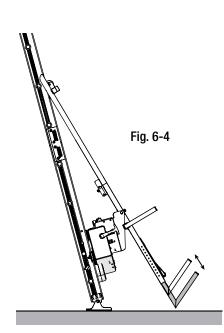
Installing Side and Lower Arms

- When the tilt frame and base are mounted together, make sure the wheels on the panel frame align with the track. See Fig. 6-1.
- Using the spring button located on the end of the side arm, slide the side arm into the side of the solar panel frame. Adjust to desired position. See Fig. 6-2. Repeat on the opposite side.
- Slide lower arm into the bottom of the frame all the way to the top. Secure with safety pin. See Fig. 6-3.
- 4. Final adjustment of the lower arms should take place at the job site.

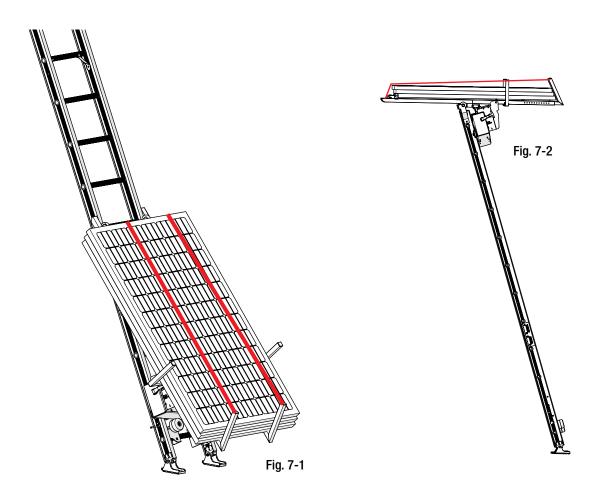
WARNING: If the lower arms are too close to the ground, the solar panel frame risks jamming and/or not tilting back onto the aluminum base. See Fig. 6-4







How to Use the Tilting Solar Panel Platform



- 1. Using a single solar panel as a guide, adjust the left and right side arms, for a secure fit. Capacity of the lift is 3 solar panels or 200 lbs max. load whatever is lower.
- 2. Attach safety straps to the lower arms. Place strap vertically over the top of the panels and attach the strap to the top of the tilt back frame. See Fig 7-1.
- 3. Refer to your Remote Control Instructions to raise the tilt back carriage.
- Once the carriage reaches the roller brackets at the top of the track, it will tilt back laterally.
- 5. Remove the safety strap then the panels.
- Do not lower the tilt back carriage with loose strap. Re-hook the safety strap to the top of the frame.

WARNING: If the lower arms are too close to the ground, the solar panel frame risks jamming and/or not tilting back onto the aluminum base.

Safety Warnings for the Tilting Solar Panel Platform



FAILURE TO READ AND UNDERSTAND THE OPERATING INSTRUCTIONS CAN RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR **EVEN DEATH TO USER OR OTHERS**



DO NOT USE IN WINDY CONDITIONS!

THE PROPER ANGLE DISTANCE FROM THE HOIST BASE TO THE WALL MUST BE 1/4 THE **WORKING LENGTH OF THE FULL HOIST LENGTH** OR 75.5° MAX.

AT ALL TIMES, THE LOAD MUST BE SECURED WITH STRAPS PRIOR TO LIFTING.

- Keep track section a minimum 10 ft, clear of all electrical wires and equipment. Be aware of overhead wires before raising track sections. **ELECTRICITY KILLS! HOIST MUST BE SECURED TO THE TOP** OF THE ROOF!
- Use the proper tie-down equipment. If you do not secure your cargo with the proper safety straps, the straps could become loose during lifting, resulting in injury or death.
- · Attach your safety straps to slotted tie-down points. Do not hook your tie-down straps to the solar panels, straps must pass over the top. Secure your safety straps to the carriage top flaps slotted holes.
- Check all tie-down connections. Safety straps may become loose during transport. Always check straps for damage or wear. Replace when damaged or worn.
- Track MUST ALWAYS BE secured at the top prior to use.
- Refer to the Owners Manual for more information.

#15960 Rev. 8/21

Contact Tie Down if you have questions regarding the installation, use, maintenance, and/or application of this product. Customer service: (404) 344-0000 or sales@tiedown.com

