LANGE ORIGINALS
HOIST-A-TOP JT CRANK

Call toll free 1866 284 7428
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Safety Requirements Please Read!

Please thoroughly read and understand these instructions before installing your Hoist-A-Top® and before lifting your top.

When installing the Hoist-A-Top® remember safety first! Make sure you use proper safety equipment when installing this product. Use gloves and eye protection. Be careful on ladders. If you are unsure about installing this product consult a professional or call us at the factory.

Cautions:

- **Make sure your garage or structure is capable of supporting the weight of your top. If there is any question about your structure's integrity, consult a professional.**
- **Before lifting your top make sure that all hardware is properly fastened to the center of your studs in your wall and ceiling. Wire clamps must be checked and tightened regularly.**
- **Do a dead weight lift to initially test your installation.**
- **Upon lifting your top for the first time and subsequent times thereafter visually and check that all hardware including but not limited to wire clamps , elevator bolts, hooks , wire cable, crank hoist, and lifting strap. Make sure all are tight and in good working order.**
- **Lange Originals is not responsible for damage or personal injury due to improper installation, custom installation that doesn't follow the instructions, or neglect to inspect equipment prior to using equipment.**

If you need help for any reason DO NOT CALL YOUR DEALER Please contact us direct at the factory. We can help with missing parts or for help with installation.

Call toll free 1-866-284-7428 or email at contact1@langeoriginals.com

HOIST A TOP®

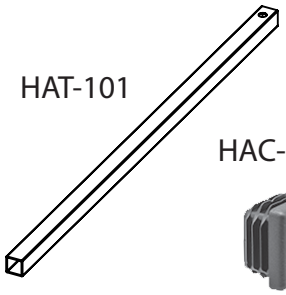
PLEASE READ ALL INSTRUCTION BEFORE INSTALLATION

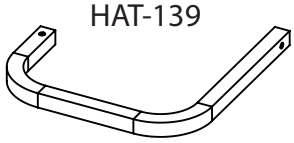
Parts List

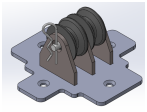
Parts are listed by part number, description, and quantity. The part number may be referenced in the instructions designated by parenthesis () for your convenience. ***Parts are updated periodically and may vary in color or shape***.

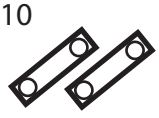
014-JTC Hoist-A-Top Crank for Gladiator

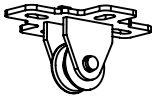
Part Number	Description	Qt
Frame		
HAT-101	Support Arms	2
HAT-100	"T" Section with Lifting Blade	1
HAT-018A	Black Round Foam 2"	4
HAT-003	"J" Hooks	2
HAT-139	C-Shaped Rear Support Adapter	1
HAT-140	Rear Stabilization Arm	1
HAT-018C	Black Round Foam 4"	2
HAT-142	Zip Ties for Foam	2
HAT-135	Foam arms	1
HAT-134	T-Foam	1
HAT-019	Bungee cord	2
Hardware Parts Bag		
HAC-028	Small Plastic End Caps	3
HAC-015	Nylon Insert Lock Nut	2
HAT-050	Zinc Plated 3.5" Screws	14
HAT-125	1.5" Wood Screws	14
HAC-043	Wire Rope Clamps	6
HAT-054	3" Lag Screw	2
HAC-023	3/8 Flat washer	2
HDW-091	Lock Pin	2
HAT-110	Grommet Straps	2
HDW-031	Thimble	2
Power Unit & Mounting Components		
HAC-010	Crank Unit	1
HAT-116	Single Flush Mount Pulley	2
HAT-118	Double Flush Mount Pulley	1

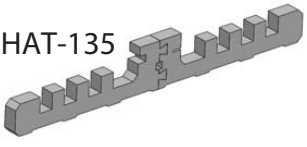










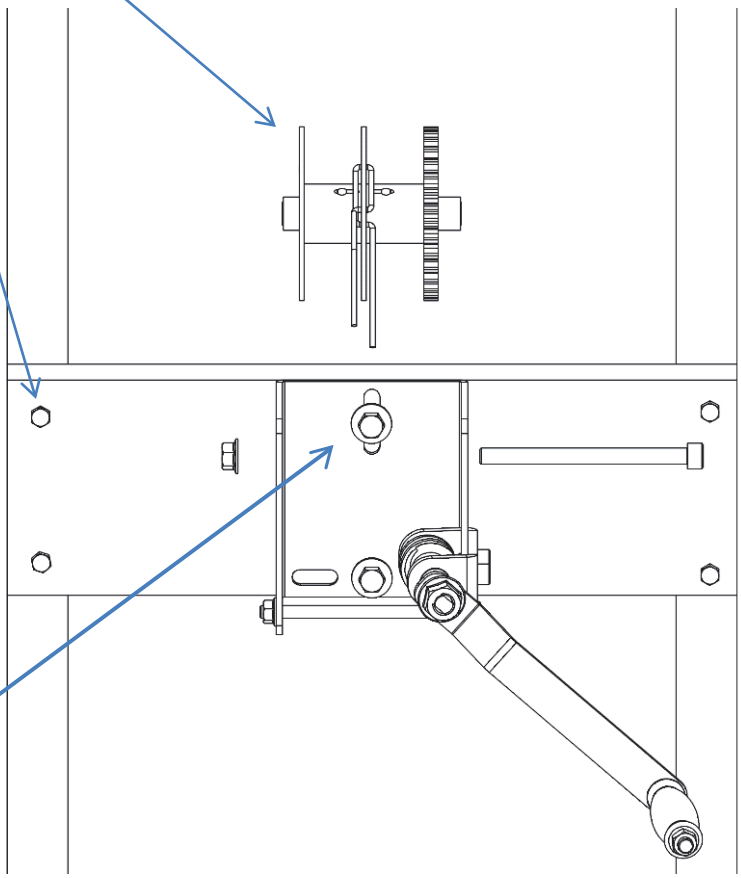


Installation of the crank unit

1. Remove the spool from the crank unit using 11/16 and 9/16 sockets.

2. Cut one section of 2x6 to roughly 20 inches. Mount it to your back wall using at least 4 screws (HAT-050). You will want this at comfortable working height, approximately 50-inches above the floor.

3. Mount your crank unit to the 2x6, centered with your hardtop, using both 3" lag screws and washers (HAT-054 & HAC-023) provided.

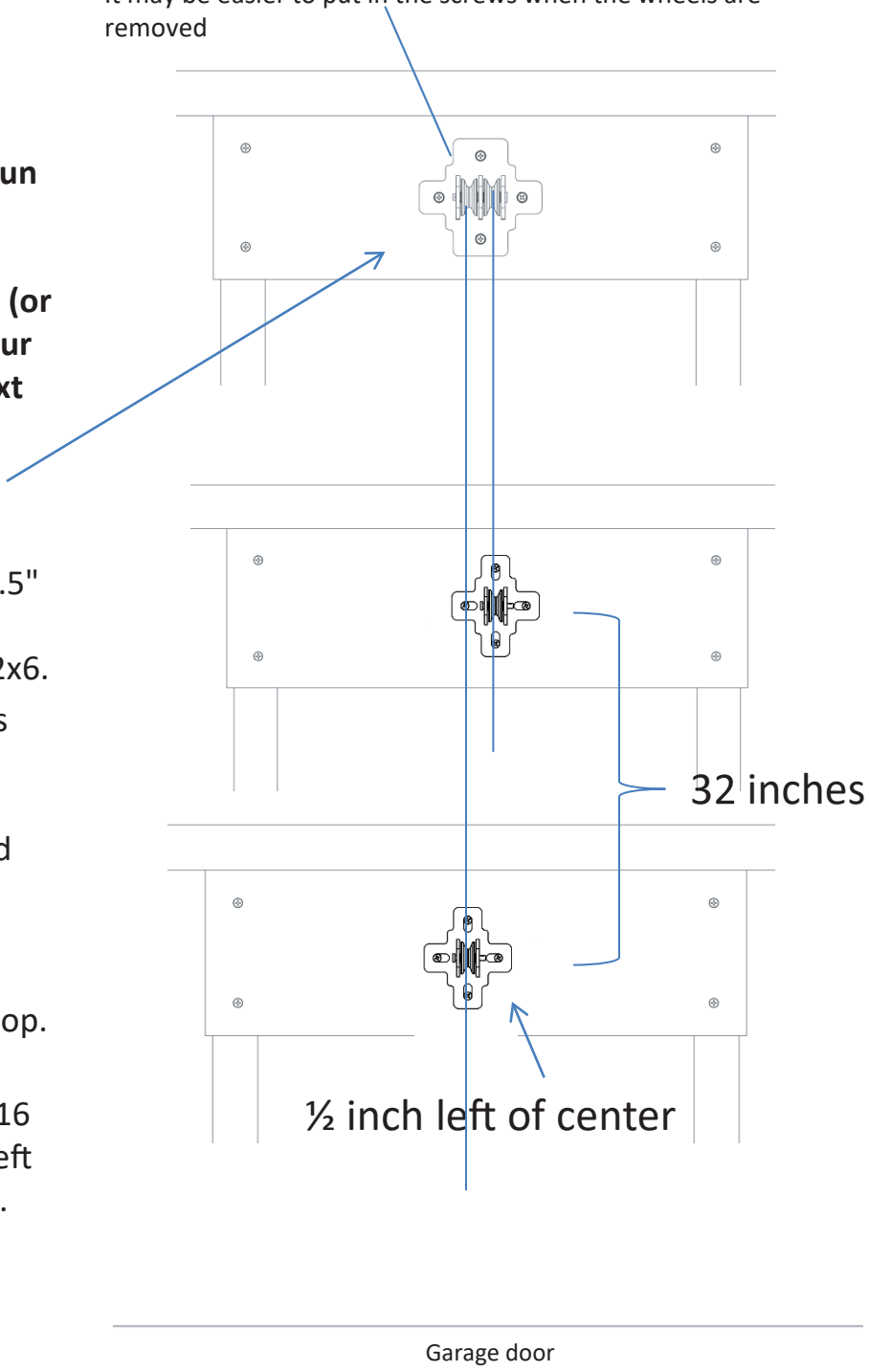


Ceiling Perpendicular Stud Installation

Determine if your studs run perpendicular or parallel with your garage door. If your studs run parallel to (or the same direction) as your garage door go to the next page.

Hint:

It may be easier to put in the screws when the wheels are removed



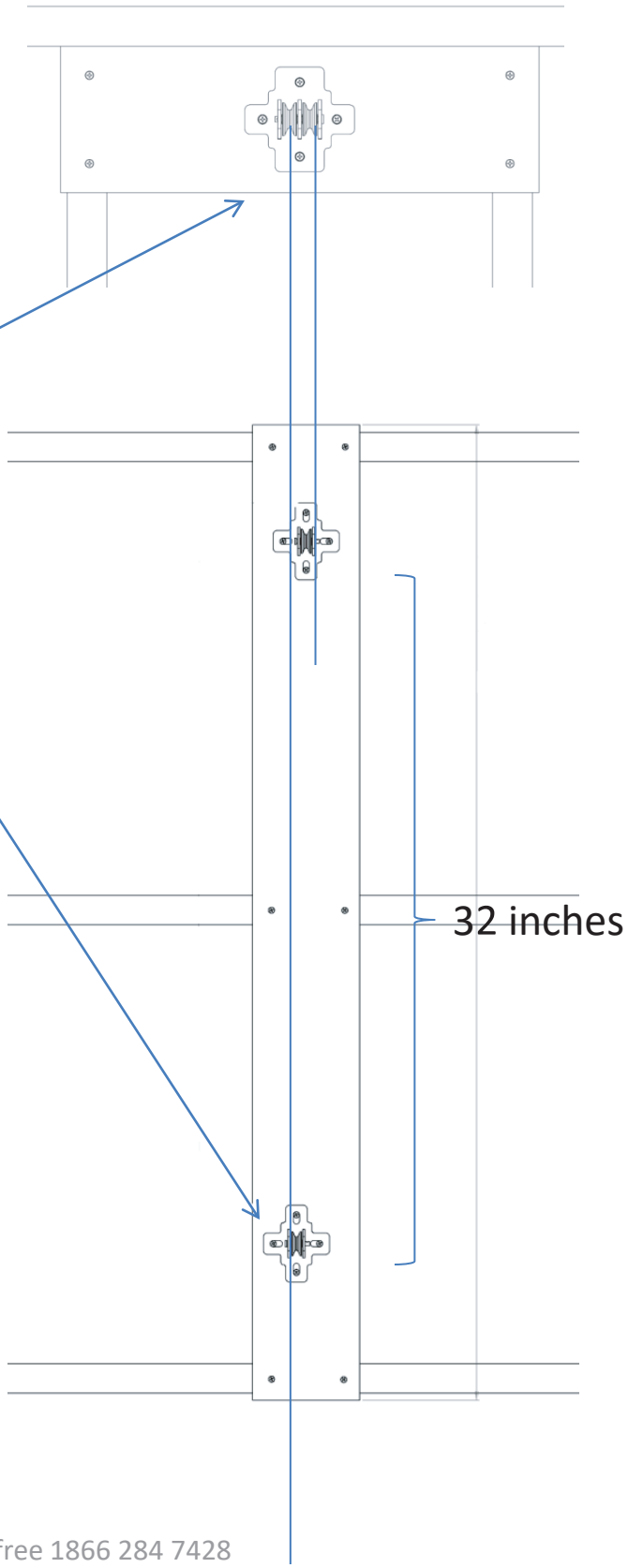
1. Use the remaining 3.5" screws (HAT-050) to place cross bracing 2x6.
2. With the 1.5" screws (HAT-125) provided, mount the double pulley (HAT-118) and one of the single pulleys (HAT-116) centered with the crank unit and hardtop.
3. Mount the second single pulley (HAT-116 & HAT-125) ½ inch left of center on the 2x6. This will allow the second cable to run along the ceiling without interfering with the other cable.

Parallel Ceiling Stud Installation

1. Mount the double pulley (HAT-118) on a 20 inch 2x6. You can mount your double pulley on the celling or at the top of the wall above the crank unit using the 3.5" screws (HAT-050).

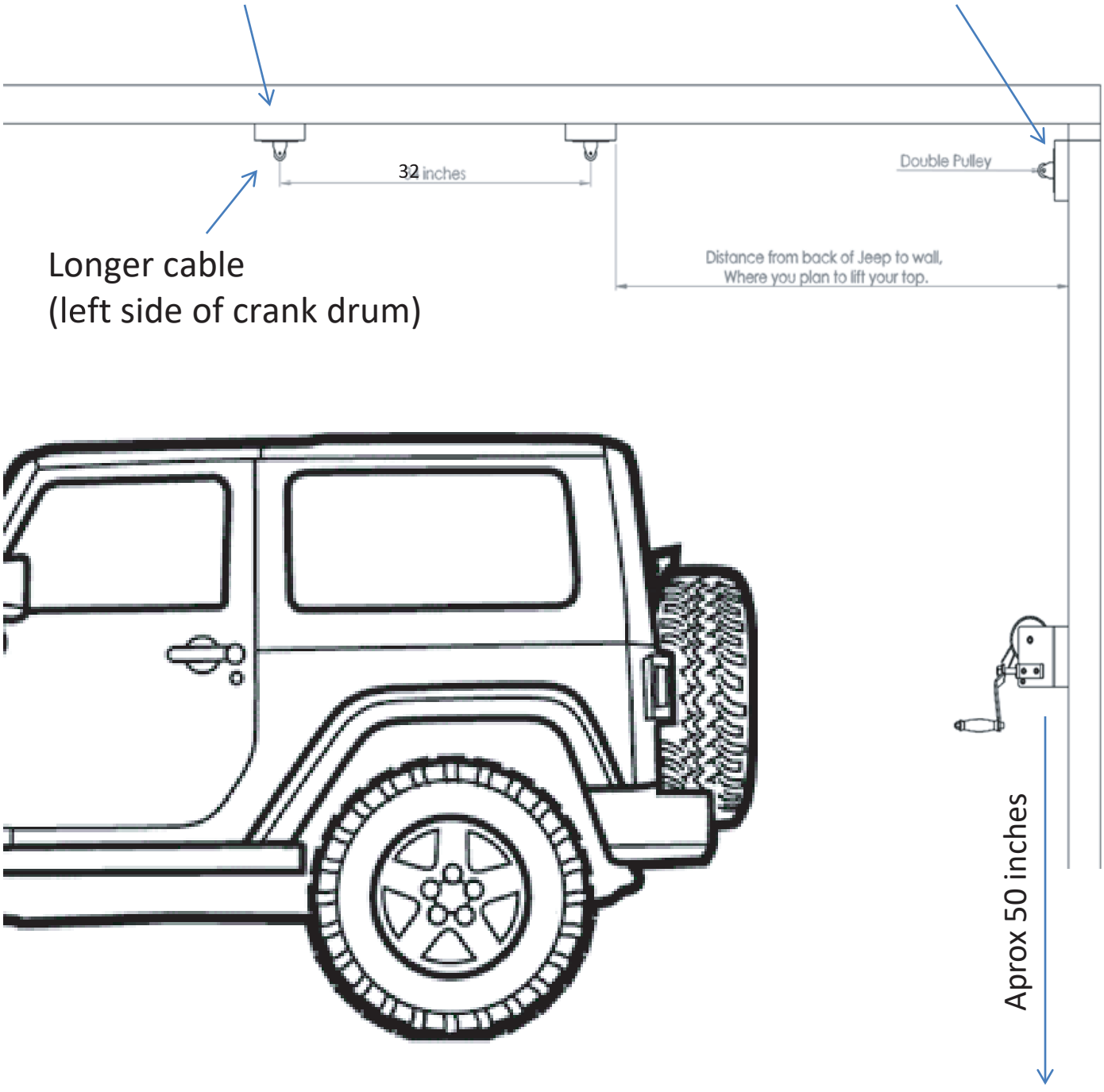
2. Using the 3.5" screws (HAT-050), attach your 2x6 to three studs in line with the double pulley (HAT-118). The distance between the double pulley and the first single pulley can be custom to your garage.

3. With the 1.5" wood screws (HAT-125) attach both single pulleys (HAT-116) on the 2x6 32 inches from each other. Make the first pulley on center with the right side spool and the second pulley ½ inch left of that. This will allow the cables to run next to each other without interference.



This pulley is ½ inch
left of center.

This pulley can be installed
on the wall or ceiling



Longer cable
(left side of crank drum)

Side wall mount option

1. Mount your crank unit on the **side wall** as per the standard instructions.
2. Mount the double pulley in the corner of the wall next to the ceiling directly above the crank unit. (Fig. A)

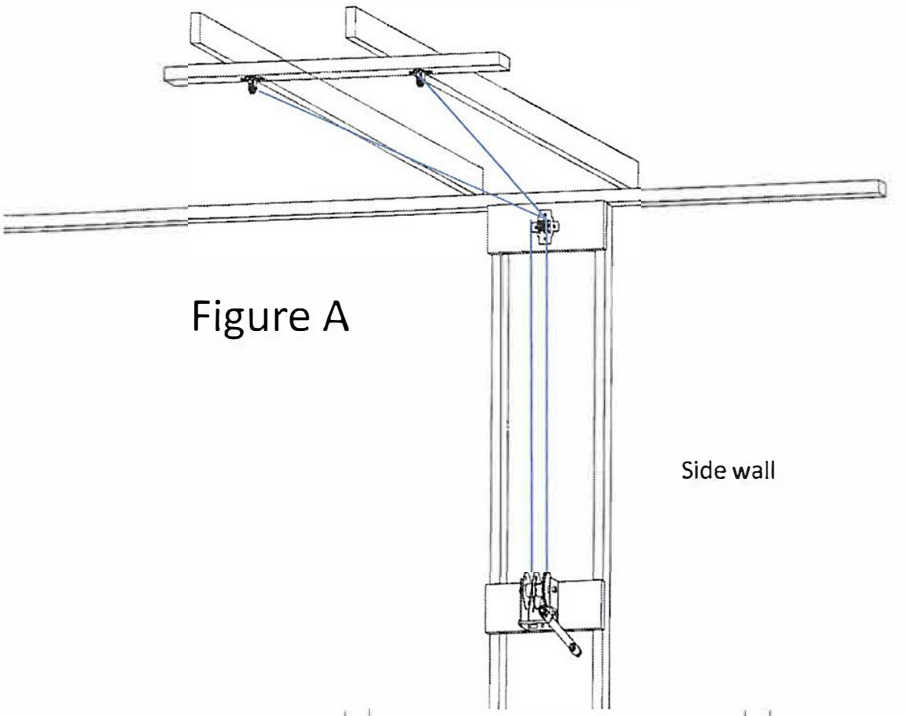
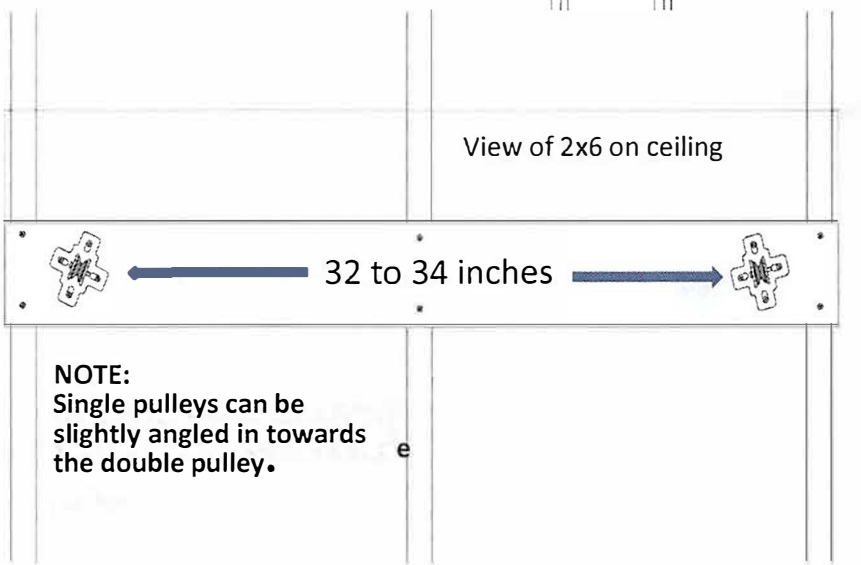


Figure A



1. Mount your single line pulleys in line with each other 32-34 inches apart on your ceiling. The cables will make a V shape from the double pulley to the two singles. (Fig. A)
2. (note the distance from the wall to the jeep is optional, but a minimum of 4 feet is recommended see (Fig. B))
3. Wire your crank unit through the pulleys and connect your lifting device per the standard instructions with the exception of the cable lengths. You will divide your cable evenly between the 2 spools of your crank unit

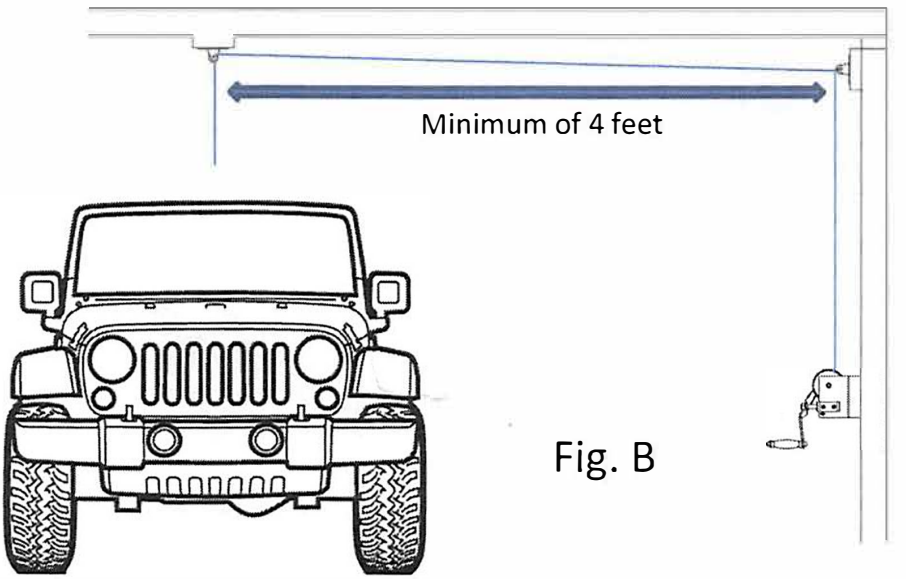


Fig. B

HOIST A TOP®
Frame Assembly

A. Locate the metal T-Frame bundle. Slide two of the support arms (HAT-101) into the T-shaped bar (HAT-100) moving the spring button to the outermost holes as shown in Fig. 3 We will only be assembling the front portion of the T (Fig. 1). The rear Gladiator attachment is installed after the front part of the T frame rests on the top.

B. Slide the Black Foam Holes (HAT-018A) on the arms (HAT-101) to protect your hardtop and freedom top pieces. The black round foam pieces should be spaced directly under your Freedom Top Panels during storage.

C. Slide the White Foam Square Support (HAT-104) on the T-Shaped bar (HAT-100) over the lifting blade. There is a slit that allows you to do this. Pay close attention to the direction of the JT Foam Square (HAT-104) in Fig. 1, and orient it likewise. Small cutout toward driver, and large cutout toward passenger. You will fold your freedom top pieces directly back onto these and wedge them in the corresponding gaps in the foam.

D. Put the J-Shaped hooks (HAT-003) through the holes found on each end of the front support arms (HAT-101). Place one hole of the grommet strap (HAT-110) around the threaded part of the J-Shaped hook (HAT-003). Secure with the nylon nuts (HAC-015) to the point of **only 3 threads past** the nylon part of the nut.

E. Assemble long foam supports (HAT-103) on the rear support arm (HAT-101) as shown in Fig. 1 Use the nylon zip tie's like a needle and thread (Fig. 8) and lace them into place after the foam pieces are connected around the bar, and are in the right position.

F. Insert plastic end caps (HAC-028) to the end of each support arm (HAT-101).

G. Follow the instructions following for attaching and balancing your hardtop.

H. After lowing your frame to your hardtop and you are prepared to lift; Insert the C shaped attachment arm (HAT-139) into the rear of the T-Shaped bar moving the spring button to the first hole as shown in Fig. 4 and carefully inserting the open end of (HAT-139) through the window to meet the support arm (HAT-140) as shown in Fig. 7. Align drilled holes and insert the safety lock clevis pin. The rear section should never touch the glass.

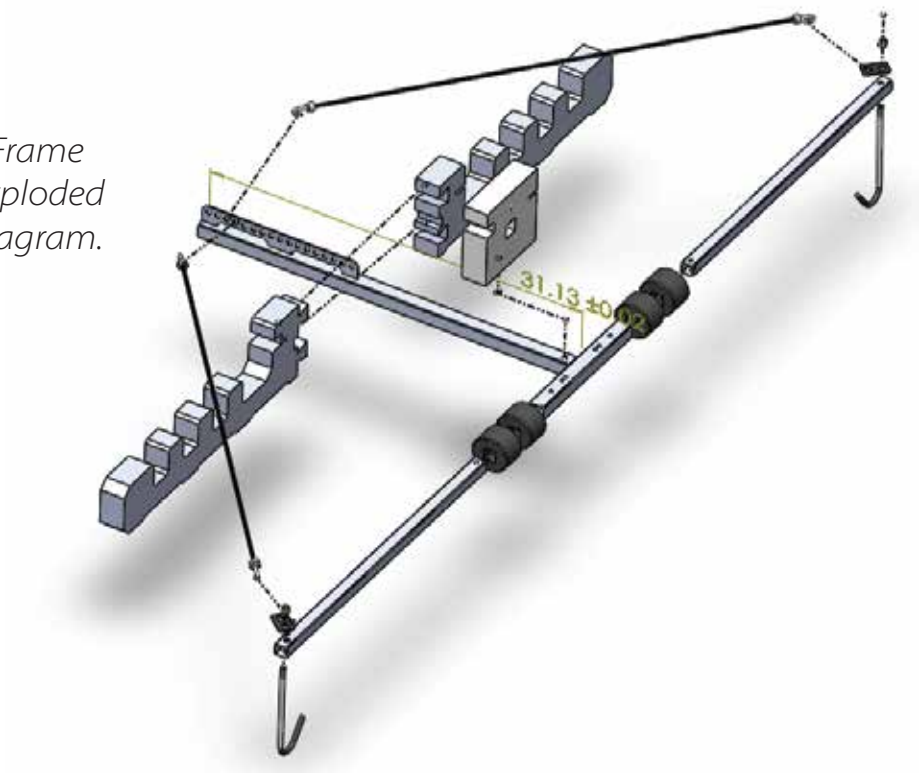


Fig. 1 Front Frame Assembly exploded assembly diagram.

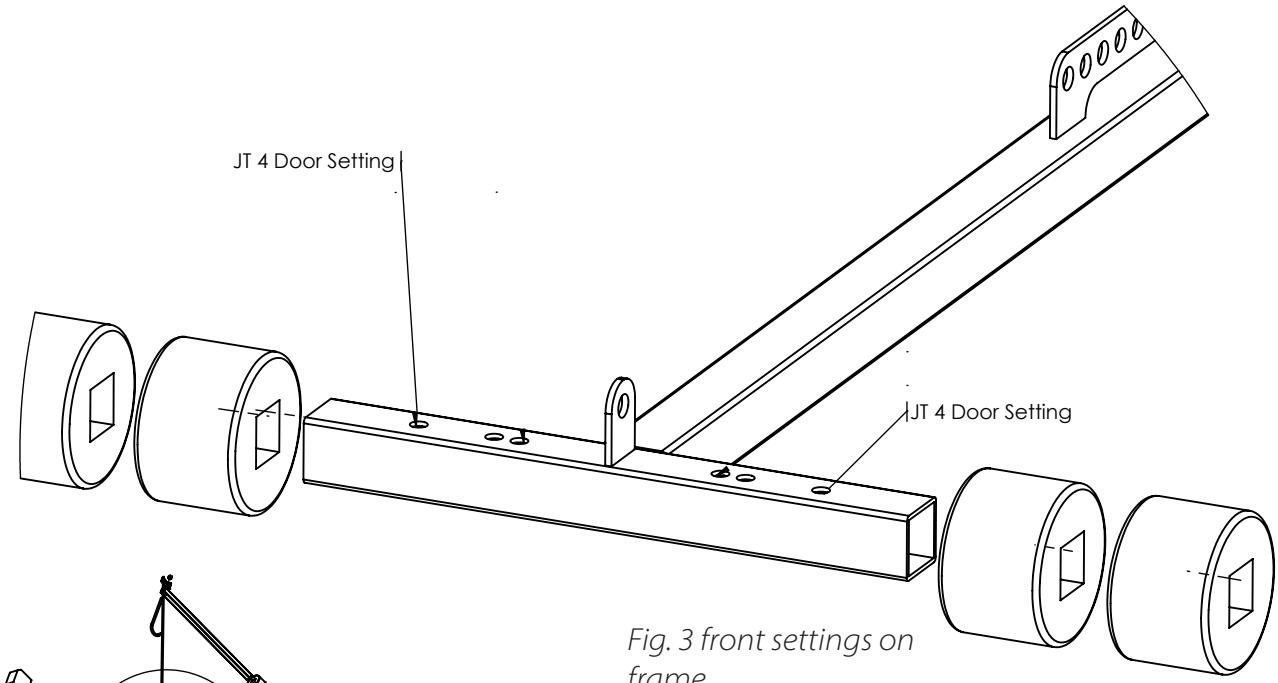


Fig. 3 front settings on frame

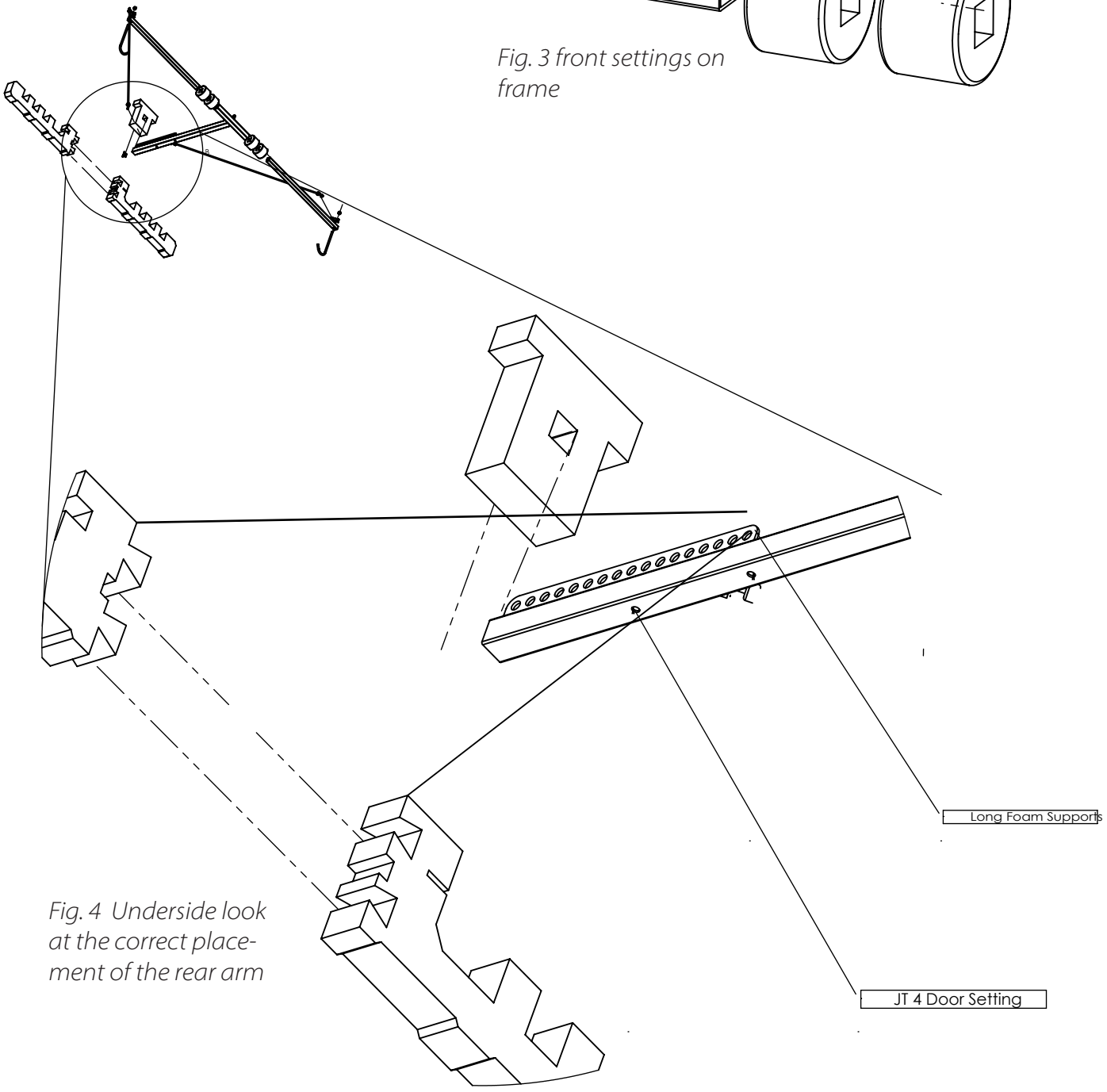


Fig. 4 Underside look at the correct placement of the rear arm

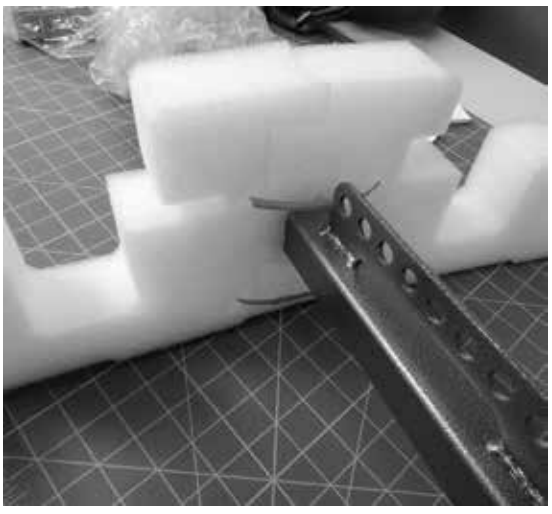
Fig. 6 Showing the frame fully assembled through the rear window.

Fig.2 Front Assembly placed on Jeep before clipping in the rear assembly

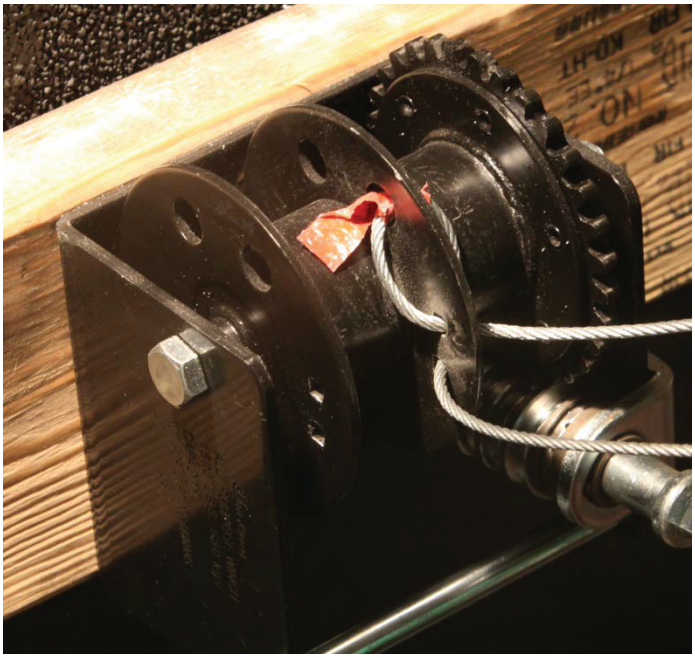
Fig. 7 Depiction of the assembled rear support. Should be assembled in steps after frame is assembled and needs to be fitted with care- through window.

Fig. 5 Placing the support arm through the rear window of the Jeep and attaching to .

Fig. 8 Lacing the wire ties into the foam, and tightening the pieces together



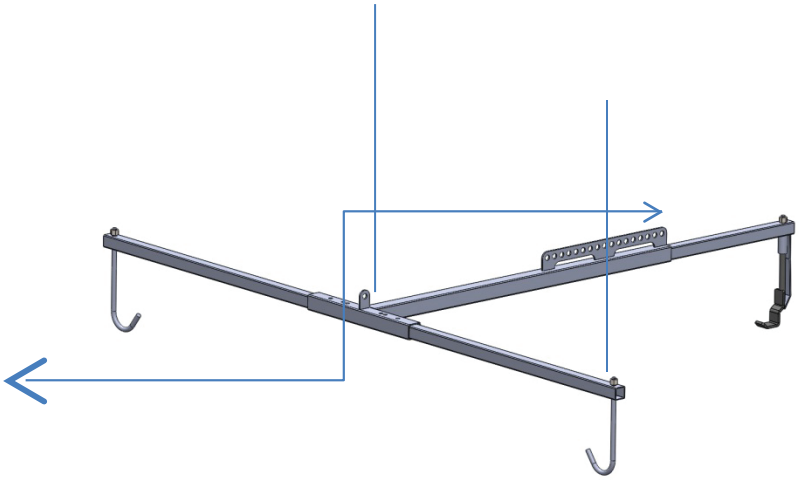
Installing the cable



1. Unclip the wire bundle and stretch out the wire. The cable is 43 feet in total. 23 feet for the left side of the drum and 20 feet for the right side drum.

2. Mark the cable at the 23 foot line with a marker or piece of tape. Center your mark in one of the holes and lace one of each side of the cable through two holes. You should finish with the longer cable on the left side of the spool.

3. Loop both wire ends through the double pulley in the corner of the ceiling. Take care that the cables don't cross and that the long side stays on the left pulley and the shorter side stays on the right.



4. Pull the right side cable (the shorter cable) through the middle single pulley in the ceiling. This line will be for the rear of the lifting frame.

5. Pull the left side cable (the longer cable) through the front pulley (this should be the pulley that was installed ½ inch left of center) This cable will attach to the front of the lifting frame.

6. Attach the cables to the front and rear using the wire thimbles and clamps. Use the farthest back hole for the second lifting point. See the next page for details

Balancing and attaching the frame

With your frame assembled (Fig. 1-8) lay it on the floor directly below the cables with the top of the "T" Frame facing your garage door. Insert one thimble (HDW-031) on the rear most hole on the lifting blade (HAT-100). Insert the other thimble (HDW-031) on the tab on the front of the "T" Frame (HAT-100).

Fig. J

As shown in Fig. K, feed the cable through the hole with the thimble, install cable clamps loosely at first, in order to balance the frame. With the frame level on the floor pull the cable taut and secure the cable clamps in the order shown in figure K. Be careful to not over tighten these as they will strip. If they do become stripped or are suspect do not use them, they can be inexpensively obtained at any hardware store. Inspect these and all hardware before each use.

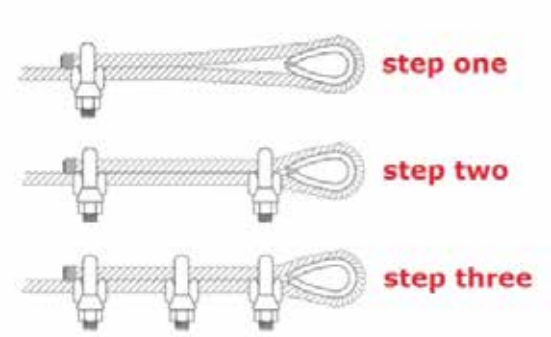


Fig. K

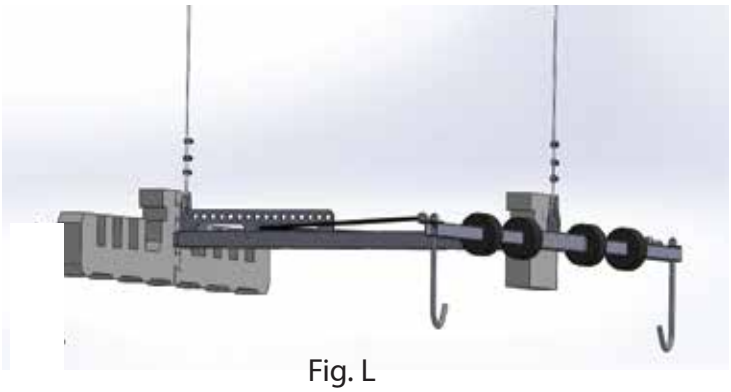


Fig. L

Now that the frame is preliminarily balanced, it also needs to be balanced on your hardtop.
Make sure that all the torque bolts in the top, latches, windshield fluid tube, and wiring harnesses are disconnected before lifting.
Put your Hoist-A-Top frame on the hardtop of your Jeep, and attach the rear hook assembly (HAT-139/140). The two J hooks (HAT-003) in the front should grapple underneath the hard top just before the corner where the window goes. The foam supports are designed to have the interior side of the freedom top pieces facing up on the same side from where they were removed. The bungee cords hook from the grommet straps (HAT-110) to any free hole in the lifting blade, holding the top panels in place. Final leveling of the hard top is achieved by loosening the cable clamps and removing some slack from the dipping side. Do this until the top is parallel to the ceiling. This is a trial and error basis and takes some fiddling, but you only have to do it once. When you are satisfied that the top is level, inspect and tighten all cable clamp bolts.

Glossary of Terms

Cribbing: The act of cross bracing perpendicular with a piece of wood. In our case we are laying a 2x6 or wider flat across ceiling or wall joist; securing with four inch decking screws. This is an example of cribbing between wall joists on 16" centers with a 2x6.

Plumb-Bob: A bob of lead or other heavy material forming the weight of a plumb line. It can be as simple as a sharpie or pencil tied to a string.

Jeep Wrangler "JT": Each Jeep has a two letter designation that describes it's run series.
JT is the Gladiator, beginning in 2020
JL began in 2018. JK runs from 2007-2019.
The TJ ran from 1997-2007. YJ is from 1987-1996.
CJ owners know exactly what I'm talking about already ;)

Lifting Blade: Hockey skate blade shaped metal fin welded in the center of the "T" and drilled with several holes.

Warranty

We want you to be as happy as we are with our products. Give us a call if you're having trouble, we'll be able to help you. We have been lifting tops for 30+ years now and have heard about everything. 9-5 MST is the best time to catch us, but if we miss you leave a message or email us at contect1@langeoriginals.com
We honor a one year warranty from the date of purchase on this product if installed and operated according to these instructions. This warranty is invalid if purchased through an unapproved third party or a unregistered dealer. This warranty covers parts if found defective but does not include: abuse or damage due to neglect or misuse. Liability for any application for the product is limited to the replacement or repair of the product itself. Use at your own risk.
Please call customer service at 1-866-284-7428 for warranty, returns, and help. If your product is out of warranty and you need a part, give us a call we can replace most items at a moderate cost to our customers.

WARNING: This product can expose you to bisphenol, a chemical known to the state of California to cause cancer or reproductive harm. For more information go to: www.p65warnings.ca.gov