

Installation Instructions/Hoist-a-Top™

The hoist-a-Top is designed to help you remove your Jeep, Scout or Bronco hardtop quickly and easily by yourself. This kit requires a garage or carport. This Hoist-a-Top mounts on a back wall and on a strong ceiling joist. At least a seven foot ceiling height is required for the hoist to operate correctly. Read the instructions carefully and follow all precautions and safety suggestions.

If you have any problems, question, or missing parts, do not call your supplier, call Lange directly 801-262-7322.

Parts Included		
Drawing #	Description	Qty.
1	Wire Cable Puller	1
2	Hoist Frame T Section	1
3	Frame Arms	2
4	Center Frame Arm with Balance Slide	1
5	Eye Bolt 1/2" with lag screw end	2
6	Screws #4	6
7	End Caps	3
8	Nylon Capture Nuts 3/8"	3
9	Rubber Coated J Hooks	2
10	Rubber Coated L Hook	1
12	Foam Top Protectors	3
11	Eye Bolt 3/8" shorty	1

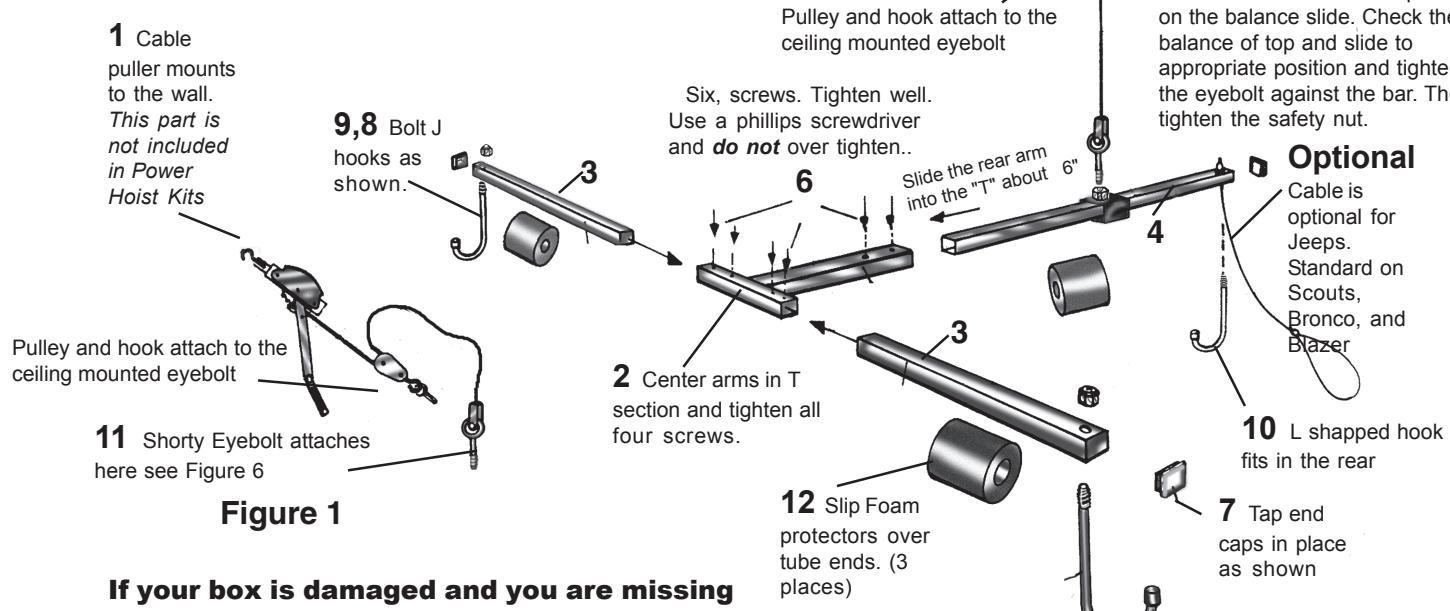


Figure 1

If your box is damaged and you are missing parts or have damaged parts, call your selling dealer immediately for instructions.

**If you are missing parts from a sound box, showing no damage or need technical help, call us directly for prompt attention.
Monday thru Friday 8:30 to 4:30 Mountain Standard Time Call 1-801-262-7322 Do not call your dealer!**

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Eyebolt Installation Figure 6

Find the 3/8" shorty eyebolt in your parts bag and using a pair of pliers, follow these directions below:

1. Locate the "u" bracket, cotter key and pin on the cable attached to the hoist mechanism. With a plier squeeze the cotter key and remove.
2. Pull the pin and separate the cable from the hoist mechanism.
3. Insert the eyebolt as shown. Reinstate the cotter key and bend one arm of the key to prevent separation of components. Check all connections.



Safety !Cautions!--Please Read Carefully

Caution-When lowering the top, ratchet the handle on the wire cable puller slowly to avoid bouncing the top. Bouncing adds tremendous stress and won't do your top any good either.

Caution-never stand under the top when in the stored ceiling position. Keep children and pets from playing under the top. Keep the puller out of their reach or lock with a chain.

Caution-never lower or raise the top with your hand under the edge. Always push or pull from the side.

Caution-make sure all fasteners attaching your top are removed before lifting. Lift the top by hand slightly to check that it will release easily. Trying to lift your top with the Jeep still attached will damage your top or the hoist mechanism. Rubber seals can stick. Break them loose before lifting. Do not lift the top so high that you pull the top against the upper eye bolt. Damage to the ceiling or top will occur. Stop before the hoist frame reaches the pully.

Caution-make sure the back tailgate door is latched before lifting or '92 or earlier jeeps. Watch the rear glass if open on newer jeeps to avoid damaging the glass.

Caution-occasionally check the tightness of all bolts and fasteners. Always check the wire cable puller for loose bolts before each cycle.

Caution-align your Jeep carefully before lifting off the top. This will avoid damage to the vehicle top when the top swings to its lift center. Tape on the floor of your garage will help align the vehicle each time.

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Warranty...Questions...Returns...Parts

Warranty

We give a one year warranty from the date of purchase on this product if installed and operated according to these instructions. This warranty covers parts if found defective and does not include a provision for adjustment if abused or damaged due to neglect or misuse. Liability for any application of this product is limited to the replacement or repair of said product and does not include consequential damages. Please call customer service (801-262-7322) for return instructions and warranty verification. Proof of purchase date required.

Questions

If you have questions or gripes, please call, we listen. We offer technical support Monday through Friday 9:00 AM to 4:00 PM Mountain Standard Time. No question or problem is trivial so we'll try and help any way we can. We use these products ourselves and like them, we hope you will too.

Returns

We accept returns within a 30-day period if you are not satisfied. We ask only that the product be returned in complete, as-new condition in its original package. Items that do not meet this condition may be charged a refurbishing or restocking charge. Contact the factory for a Return Authorization number which must be on the address of the package.

Parts

We stock parts. If you need a replacement, just call for pricing and shipping information.



Lange Originals

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Installation Steps

Please follow in order and read carefully before starting. Parts from the above diagram (Figure 1) are represented in the text in parenthesis: example Hoist Frame T Section (2).

1 Prepare your site, measure and mark according to Figure 2. Use the following diagram and mount the 1/2" Eye Bolt (5) by drilling a 3/8" hole in the ceiling joist as shown in Figure 3.

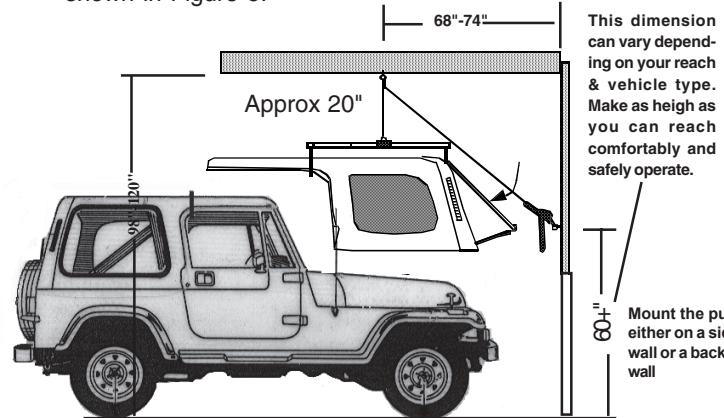


Figure 2, Typical Layout Measurement

Caution: This is a critical step. Make sure the hole you drill into the rafter is the right size. It is important that this hole be 3/8" for the screw eye to hold properly. Too large and the bolt could come out and too small and the joist could be damaged. Make sure you drill the hole directly in the center of the joist.

Make sure there are no knots, splits, or deformities in the rafter. Follow the recommendations in Figure 4 and make sure your ceiling joist can carry the load!

Thread the Eye Bolt (5) as far as it will go into the joist leaving only the circular eye-portion showing. Use a 2" x 6" rafter if available. A 2" x 4" rafter should only be used if necessary or should be reinforced as in Figure 4.

Again, make sure the Eye Bolt (5) goes into the center of a joist and that it doesn't contain knots or other imperfections (cracks or splits). **If uncertain about load or other considerations, contact a professional for advise or help.**

At a wall (side wall or back wall) as shown in Figure 2, about 60" or higher from the floor, drill a 3/8" hole in the stud and mount the second Eye Bolt (5).

2 Assemble the hoist frame as shown in Figure 1. Clip the Cable Puller (1) to the wall Eye Bolt (5) and then clip the pulley and hook to the ceiling Eye Bolt (5) as shown in Figure 5. Connect the shorty eyebolt as shown in Figure 6 to the cable puller and then attach to the slide. Place the Slide in the approximate position as shown in Figure 5 and hand-tighten the eyebolt to the arm. Slip the Foam Top Protectors (12) over the three arms of the hoist frame as shown in Figure 1. Hammer the End Caps (7) into the arms of the hoist frame. Attach the 3/8" Nylon Capture Nuts (8) to the hooks as

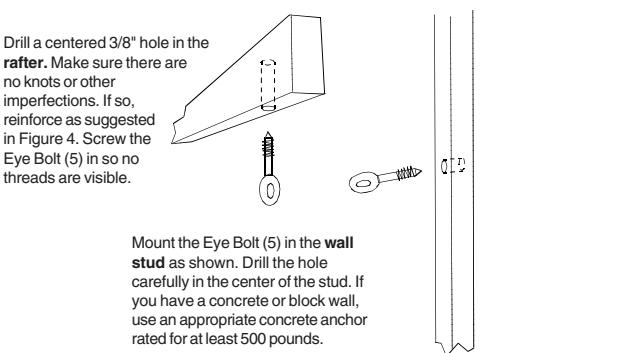
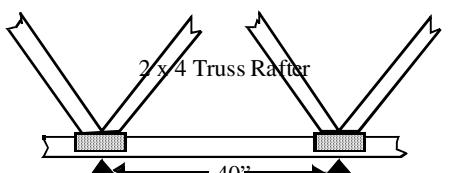
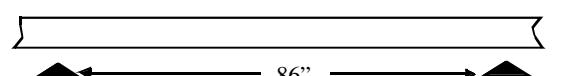


Figure 3, Eye Bolt Mounting In Rafter & Wall



If your span between supports uses a 2 x 4 truss-type rafter and is more than 40", nail or screw more support as shown below. If the rafters in your garage run in the opposite direction, use a 2 x 6 as a support between rafters (24" to 16" between centers). Use a metal joist hanger on each end of this support and extra nails or screws.



If your garage uses 2 x 6 boards as rafters, allow up to 84" between supports. Use good judgement when attaching to any wood rafter. Check for knots or imperfections in the wood that might weaken with lifting and lowering of your top. If any support deflects or bows, add extra support to be safe. If unsure, please contact a professional for help.

Extra 2 x 4s nailed together



Extra 2 x 6 nailed or screwed along rafter



Figure 4, Ceiling Support Requirements

shown in Figure 1. **Tighten until one thread shows above the nut end.** Slip the frame arms into the hoist Frame T Section (2) as shown in Figure 1. **Insert and hand-tighten the #4 Screws (6) in the Frame Arms with a screw driver (3). Do not overtighten**

Check the entire system carefully. Make sure all nuts and bolts and screws are tightened except as noted above.

3 Very important! Warning! Follow these instructions very carefully for safe operation.

Test the whole system with 200 pounds or more of dead load before using on your top. Attach a weight or have a heavy person hang from the hoist frame while you operate the hoist. **Do this a minimum of ten times--very important. Report any problems immediately to Lange 801-262-7322 for technical help.** This tests the mechanism, the screw eyes in the wall and ceiling, and lets you become familiar with the operation of the Cable Pulling Mechanism. Try this several times, work it hard both up and down to test everything, especially the ceiling mounting. For instructions on operating the Cable Puller (1) see the pamphlet inside the puller's shipping box

Lifting Your Top

Helpful Hint: Fill an empty one-gallon milk carton about 3/4 full of water. Slip the handle of the carton through the rear hook on the empty hoist frame. This will balance your hoist so you can raise it to the ceiling leveled (without top).

Lift the hoist to the ceiling and back your vehicle directly under the hoist. (It may pay to mark a line on your garage floor to aid in aligning your vehicle under the hoist). Open both doors. Remove all attaching hardware holding your top and the light plug/washer tube (if any).

Position the frame as shown in Figure 5. If your Jeep is 91 or older and you have purchased the optional cable loop, or if you have a Scout/Bronco/Blazer, attach the cable over the rear door handle and **make sure the door is latched securely--very important.**

For all years of Jeep, a "L" rear hook is provided as standard equipment. **Open the rear window and slip the hook between the glass and the top.** Turn the hook under and position in the center of top.

Position the J Hooks under the edge at the front of the top (see Figure 5). Make sure the hoist is set to *lift*. See instructions in the Cable Puller Box for lifting and lowering settings for the wire cable puller. Lift your top off slowly a few inches. Use one hand to balance the top until it clears the vehicle body. Make sure the top balances so that it remains fairly level when in the stored position (Hanging slightly lower at the back will aid in installation). To change the balance, move the balance slide (either to the front of the jeep to lower the rear or to the rear of the jeep to lower the front). Make sure you replace the top back on the vehicle before moving the slide. When the balance point is found, tighten the eyebolt until it presses hard into the rear support bar, then tighten the safety lock nut to additionally secure the eyebolt. Lift your top slowly a few inches and recheck everything.

!CAUTION!: When lifting, keep fingers and arms away from the underside of your top. Remember that all lift mechanisms can fail without warning! Keep children and pets away from the mechanism and out from under the top when stored on the lift.

Mount the puller either on a side wall or a back wall as high as you can comfortably and safely operate. This gives more clearance for the cable and the rear of the top.

Move the slide to adjust the balance of the top.

Rear L-Hook slips between the glass and the top
After lifting your top, you find that there is not enough room for the rear window to clear the hoist cable, rotate the top 90 degrees and leave the window up or close the top partially and secure with a cord.

Carefully close the rear window 1/2

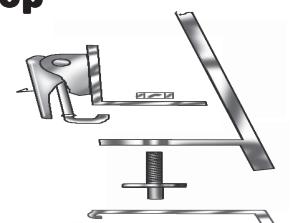
Tape or Cord holds window closed

Rotate the top 90 Degrees

Figure 5, Mounting Connections

Options for Hoist-a-Top

Our Kwick Top Kits make it easier to remove your factory top in seconds. They replace original hardware with hi-tech clamps and quick release fasteners. Models available for CJs, TJs, and YJs. Call for details or to order. \$59.95 plus S&H.



Power Hoist Options for all Hoist-a-Tops are available from the factory. This option allows the top to be lifted easily with an 110V unit and a flick of a switch. Easy to install and operate. Call for details or to order. \$184.95 plus S&H.



Rear cable (not shown) makes it easier for jeeps 91' and earlier. Replaces the rear hook on the Hoist-a-Top for quicker mounting. \$19.50 plus S&H

1-801-262-7322

Call Lange or your dealer to order

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