

NEW BRONCO Power Installation Manual



#### Lange Originals Limited Warranty

#### What the Warranty Covers

This Warranty covers defects from the manufacturing process that would render the product unusable. It does not cover damage or loss as a result of mishandling by the shipper.

Who is Covered?

This warranty covers the original purchaser of this device with an invoice of purchase or receipt from a valid, current dealer.

How Long Does the Coverage Last?

This warranty remains in force for one year, to the original purchaser, from the date of purchase on the invoice or receipt. This warranty applies only to products purchased from approved dealers of Lange's products.

What We Will Do to Correct the Problem Lange Originals will repair or replace parts, at it's discretion. Warranty does not cover third party labor, or return shipping.

How Do I Get Service?

To obtain warranty repairs, obtain and authorization from Lange Originals for either a return, or replacement part call: **801 262 7322** Monday through Friday, 9:00 to 4:30 Mountain Time.

This Warranty Does Not Cover

Abuse, neglect, carelessness, or accident. Incidental loss of property. Any defect caused by alteration of the site or product.

Warning: This product can expose you to products known to the state of California to cause cancer or reproductive harm. For more information go to: www.p65warnings.ca.gov

#### **Parts List**

This list may include optional items, from other Hoist-a-Top® systems, as well as a list of common parts included in all hoists. Parts are listed by part number, description, and quantity. The part number may be referenced in the instructions designated by parenthesis () for your convenience.

Part Number	Description	Qt
<b>Common Parts</b>		
1	Support Arms	3
2	"Y" Section	1
3	Black Foam Holes	5
4	Plastic End Caps	3
5	"J" Hook	1
6	Nyloc Nut	1
7	Ceiling Pulley	1
10	Wood Screws for pulleys (short)	10
11	Zinc Plated Long screws for lumber	14
12	Support Arm	1
13	Foam Block	1
14	Foam Support Split	2
15	Hanger Plate	2
16	Lock Rings	2
17	T Bolts (not shown)	2
Power Unit Additional Parts		

Fower offic Additional Failts		
1a	110V Winch	
2a	Mounting Bar	
4a	4" Lag Screws	
5a	Wire Clamps	
бс	3/8" Washer	
ба	Wire Ties	
7a	3/8" Eyebolts	
8a	Bungee Cord	





Watch the video to learn how to assemble and use the Hoist-a-Top Bronco.



## Call Us Directly for Help

If you need help or are missing a part DO NOT CALL YOUR DEALER. You will receive faster support though

**the factory 1-866-284-7428.** We offer technical support Monday through Friday 9:00 AM to 4:30 PM Mountain Standard Time. Send us an inquiry via our website hoistatop.com anytime, or contact1@langeoriginals.com. 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. Lange Originals<sup>®</sup> is not responsible for damage or personal injury due to either improper installation, custom installation, installation that doesn't follow the instructions, or neglect.

There is an online video that is extremely helpful for this product. Most questions are answered visually by watching the videos (Scan the QR codes with your phone). You can also browse to langeinstructions.com, or search You Tube for "Lange Power Hoist A Top Install." We also have a section in the video for removing the hard top screws and wiring.

## **Site Preparation**

Determine whether to do a side-wall mount, or a ceiling mount. The determining factor is ceiling height. Garages with 7-9 ft ceiling require a side-wall installation. Garages over 9 ft. tall can use the overhead ceiling mount. If your ceiling is vaulted, or abnormal (anything other than parallel to the floor) consult a contractor/professional.

Next, determine the direction of you ceiling joists. There are five methods used depending on the Joist direction relative to the garage door.

These five possibilities to consider and are listed in sequence by number in the following instructions

- 1. Ceiling Mount with parallel joists.
- 2. Ceiling Mount with perpendicular joists.
- 3. Wall Mount with parallel joists.
- 4. Wall Mount with perpendicular joists.
- 5. Side Wall Mount.

## Locating the Right Spot to Lift Your Bronco Top

Locate your Bronco in your garage in a suitable location to lift your top and still open your rear tailgate. To do this, back Your Bronco in the garage to a suitable parking spot and drop a plumb-bob from the ceiling to the center of your Bronco top See Figure 1 for exact locations. You want the center line of the Power Unit as show in the Figure 1.

A stud finder is helpful if you have sheet rock. If you have a 9 -foot or above ceiling height, use the ceiling mount method. Lower ceilings require the wall mount method. In either case, the marked location for picking up your top will be the same.



Fig. 1 Typical Layout Dimensions



Fig. 2 Typical Cable Pattern Layout 24" Separation

rock, determine the closest rafter and set marks on the ceiling. Install cross bracing appropriate to your garage configuration (see Fig. 2 and 3 ) Install the pulley on a separate 2x6 cross brace. Install one side of the mounting bar fairly loosely with the lag bolt (4a) and washer (6c). (With a

helper) slide power unit onto the open side of the mounting bar.

Using a stud-finder or your preferred method if you have sheet

Thread the other lag bolt(4a) with washer (6c) through the mounting bracket hole, and into the pre-drilled wood cross brace. Alternate tightening bolts until they are snug. Extend the cable to release some slack, thread pulley cable (see Fig. 2 and 3) through the hole in the casing and spool through the offset pulley in the housing. Leave the drop cables hanging down toward the floor.

Fig. 3 Cable and Pulley Layout

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### **Ceiling Mounting and Layout**

Overhead mounting of the power unit: Pick a mounting location, pick a mounting rafter style (see Sections either 1, 2, 3, 4, or 5). Next, determine a suitable lifting point from the ceiling, back your Bronco in the garage to a suitable parking spot and run a <u>plumb-bob</u> from the center of your hardtop to the ceiling and make a

ceiling mark with a pencil. (See Figure 1) Make sure you still have room to open your tailgate.

#### Fig 3a

Install one side of the mounting bar fairly loosely with the lag bolt. (With a helper )slide power unit onto the open side of the mounting bar.



Watch this video to help install the Power Unit.

## Ceiling Mount With Parallel Studs

# **1**. Parallel Ceiling Joist Installation

Install two 2x4s longer than the length of the gap between studs (typically 16 or 24 plus inches). Install the mounting bracket as shown in Fig. 3a spanning the two rafters.

Install a 2x6 in between two ceiling joists, centering it with the drop cable. Install the pulley in the center of this 2x6 board 24 inches from hoist mid-line.

Plug the Power Unit in temporarily and let some slack out of the spool. Thread the pulley cable through the hole in the casing and thread through the pulley. Attaching the cable to the frame is covered in the Balancing portion of the instructions.



Fig. 4 Parallel Joist Layout



# **2**. Perpendicular Joist Ceiling Installation

Center two-2x6s between the area you marked with the plumb bob (center of your hard top measured from the ceiling down.) 2x6 boards are 24 inches apart on centers. See Fig. 5.

With the mounting lag screws (4a) provided, position the mounting bar (3a) to one 2x6 and one of the single pulleys (9) in the center of the forward 2x6. NOTE: Mount the pulley offset so it lines up with the drop cable otherwise the frame will not center properly.



### Fig. 5 Perpendicular

Garage Door Side



## 3. Parallel Wall Mounting Method

## 4. Perpendicular Wall Mount Method

Install two-2x6s longer than the length of the gap between joists, centered on the ceiling mark you drew with your pencil and plumb bob. The pulleys should be installed 24 inches apart centering the pulley wheels . Be sure to have a 1/2 inch offset on the pulleys. Install 2x6s with provided long wood screws.



#### Wall Mounting Methods for Both Parallel and Perpendicular Ceiling installation

(With a helper) slide power unit onto the open side of the mounting bar.

Thread the other lag bolt(4a) with washer (6c) through the mounting bracket hole, and into the pre-drilled wood cross brace. Alternate tightening bolts until they are snug. Extend the cable to release some slack , thread pulley cable (see the Drawings Below) through the hole in the casing and spool through the offset pulley in the housing. Leave the drop cables hanging down toward the floor.

### Perpendicular Stud Wall Mounting





Frame assembly from the rear of the Bronco

## 5. Sidewall Mount

There is no diagram or figures for a side mount because we don't recommend this method. Here are the issues:

1. The Power Unit must be located far enough from wall -to-pulleys so that the spread angle is diminished.

2. The pulleys must be angled slightly to the lines coming from the Power Unit.

3. This setup had the disadvantage of 1 having the cables jump the pulleys, and 2 when rewinding the cable into the Power unit, it can bunch-up on the drum.

### You try this at your own risk.



1. Locate the Y-Frame steel piece. Slide the two rear support arms into the Y-shaped bar moving the spring buttons to the appropriate holes as shown in Fig. 7.

2. Slide the Black Foam doughnuts on the arms to protect the hardtop and freedom top pieces. The black foam pieces should be spaced as shown in Figures 6 and 7.

3. Slide the Foam Square Support onto the Y-Shaped bar in Fig. 6 and 7, orient it as shown. Note the orientation of the notches.

4. Assemble long foam supports as shown in Figures 6 and 7. Note the orientation of the notches.

5. Insert the remaining support arm into the front of the Y Frame about 4.25 inches and lock it with the 3/8" eye bolt and safety nut. Put two black foam pieces in first and then install the L hook on the front of this bar using the 3/8" nyloc nut.

6. Set the frame on the top of the Bronco in the lifting position as shown on the front cover photo.

7. Insert the Lifting Blades into the slots on the Bronco top. Then slide them into the arms attached to the Y section. Pin the arms.

8. Insert and tighten the second eye bolt and install the end caps. Secure the safety nut.

#### Balancing and attaching the frame



Fig. 8

As shown in Figure 8, wrap the cable through the eye-bolt leaving enough for the Safety Stop if you are mounting the Power Unit on the ceiling. Disregard if you use the sidewall mounting method. Level and balance the frame, then tighten the clamps. This is easier if you have enough cable to reach the floor.

Note: the balance of the top is affected by how the cable wraps on each drum.



Unlock the Bronco top by undoing the catches both in the front windshield and on the sides of the center section.

Rotate the five quarter-turn latches holding the front two top pieces to the *off* position. Leave the three latches holding the top center section to the full top locked. This helps keep the center section attached when you lift your top.

Remove the eight screws attaching the rear top to the body of the Bronco roll bar. Unhook the electrical and sprayer tube located on the driver side rear panel.

See the Bronco Operation Manual if necessary.

There are two bolts located on the back edges of the center panel, left and right sides. Use a flat wrench and remove each bolt. They are tough to find. See the Bronco manual.

Note: There are two finger wing bolts in the hardware supplied with this kit. These replace the two bolts supplied by the factory so you can remove and replace them easier without a wrench.

#### Attach the Frame to the Top

Remove one of the rear Lifting Brackets. Align the frame of the Hoist so the attached Lifting Bracket slips in the slot on the Bronco top. See the photo to the right. Replace the one you just removed on the other side and insert the pin to secure.

Remove the two front roof pieces (driver and passenger) and place them in position as shown in Figure 9. Note the orientation so each piece fits into the correct slot on the white foam.

Turn the front center hook on the Hoist-a-Top frame under the top center section.





Fig. 9 Lifting a Top

# With the frame preliminarily balanced, check the balance with the hardtop lifted a few inches. If this is the first time removing your hardtop, head to our video instruction page and click on the video removing your hardtop.

The foam supports are designed to have the underside of the front top pieces facing up, flipped directly on the frame, on the same side from where they were removed. The bungee cords hooks from the rear Y section to front eye bolt. See Figure 7 and 9.

Level the hardtop by loosening the cable clamps and removing some slack from the lower side. Do this until the top is parallel to the ceiling. This is a trial and error job.. When you are satisfied that the top is level, inspect and tighten all cable clamp bolts.







**Reference Photos** 

Lange Originals LLC 3651 South 700 East Salt Lake City, UT 801-262-7322 langeoriginals.com