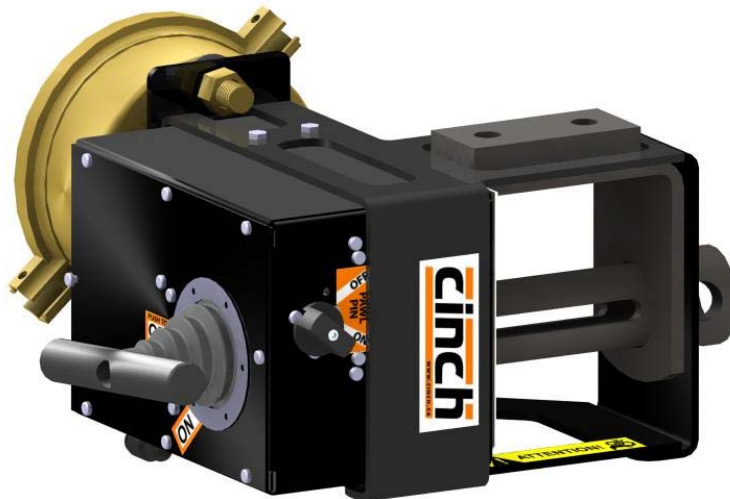


cinchTM
BY TRACTION TECHNOLOGIES
THE ULTIMATE WINCH

Installation &
Maintenance
Manual



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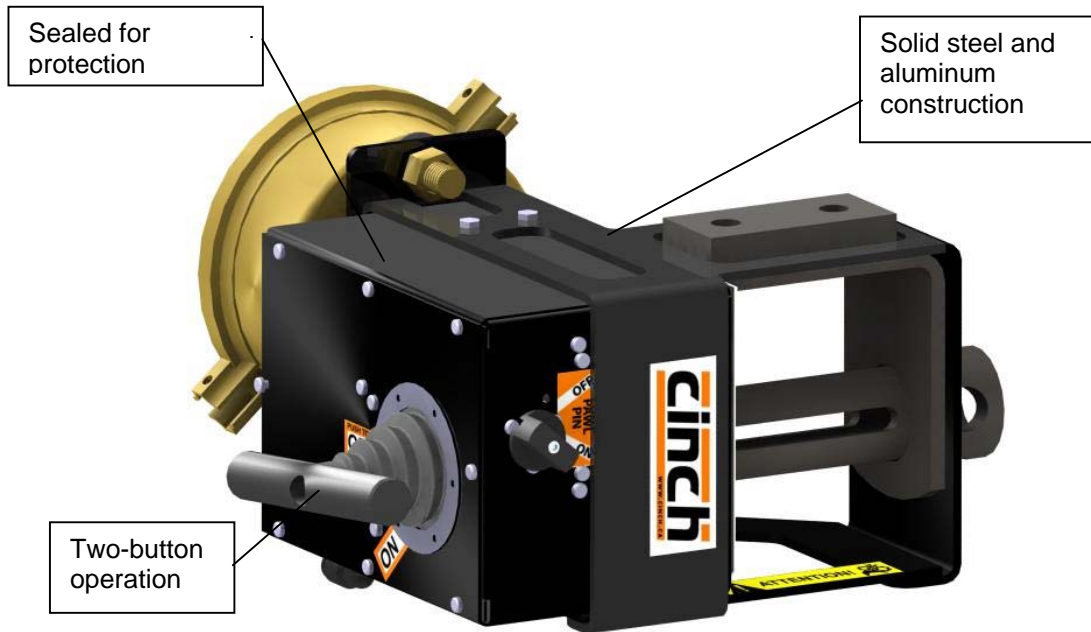
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CHAPTER 1 QUICK TOUR

1.1 Cinch Winch Overview

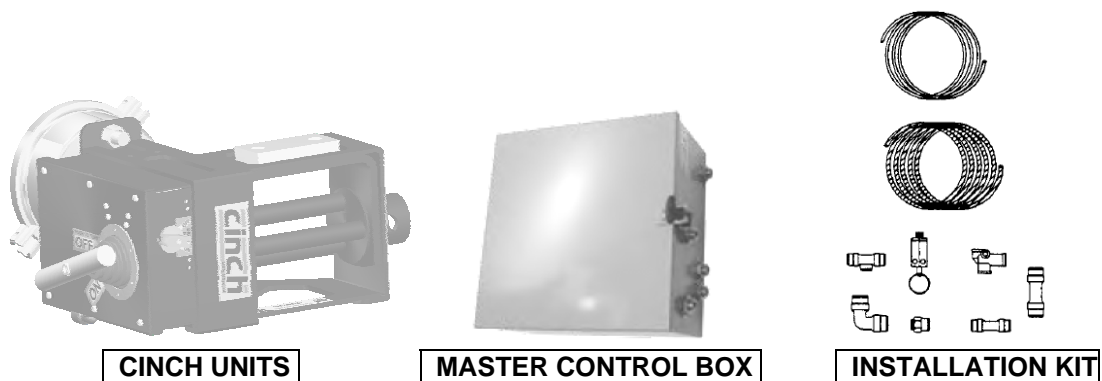
FIGURE 1-1 – Cinch Assembly Uninstalled



- Completely air powered; eliminates pry bar use
- Keeps tie-downs tight during travel by taking up any slack that develops
- System attaches to existing air supply

1.2 System Overview

FIGURE 1-2 – Components

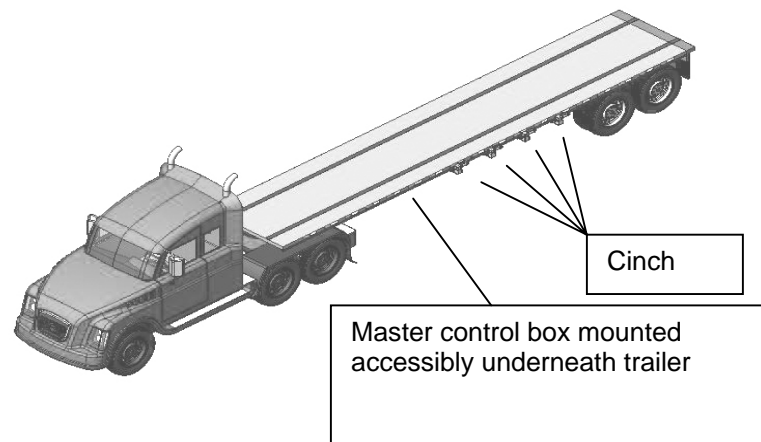


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FIGURE 1-3 – Typical System



- Consult your Operating Manual for further instructions.
- The system is operated completely by air and runs off the same air circuit as the brakes. The Master Control Box has a shut off valve & regulator to control the air pressure to the Cinch system.
- It is imperative that a pressure protection valve is installed between the air supply and the Cinch Control Box, and set to 70 psi (.48 MPa). This valve will ensure that in the event of an air pressure leak in the Cinch system, the valve will close & preserve air pressure for the brake system.

1.3 Information Resources

- A. Ancra Customer Service: Toll free (800) 929-2627
Fax (800) 347-2627
- B. Cinch Installation Manual
- C. Cinch Operating Manual (operating instructions, maintenance and troubleshooting guide)
- D. Cinch Warranty Registration Form

1.4 Warranty –

Ancra International LLC warrants that the Cinch will be free from defects in materials and workmanship under normal use and service for a period of one (1) year from date of purchase. In the event applicable law imposes any implied warranties, the implied warranty period is limited to ninety (90) days from the date of purchase. Some jurisdictions do not allow such limitations on duration of an implied warranty, so the above limitation may not apply to you.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT WILL THE COMPANY BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR LOSS OF VEHICLE, CARGO OR PROFITS.

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2.1 Suggested Installation Sequences

The Cinch has several components that are suggested to be installed sequentially, as described in the following chapters:

Chapter 3: Installing the Cinches

Chapter 4: Installing the Air Supply Line

Chapter 5: Inspecting for Proper Installation and Operation

Before preparing any installation, the installer should read and understand each section thoroughly.

2.2 Checking Inventory

Ensure that you have the proper number of Cinch units for your trailer(s). Ensure that you have one Master Control Box per trailer (including pup trailers).

For best results, and to avoid Warranty issues, Ancra recommends installing only new components and fasteners.

When receiving a shipment from Ancra, immediately report damage and discrepancies to Ancra.

Make sure that all installer-supplied equipment is available.

Table 2-1 – Installer Supplied Equipment

✓	Description
Drawings	Cinch Dimensions, Pneumatic Circuit Example
Installation Guide	Please keep this guide as reference during install
Installation Kit	This includes your order of Cinch units and Master Control Boxes
Bracket Kit	This includes one mounting bracket per cinch unit ordered (and fasteners)

2.3 Inspecting the Vehicle

Before installing a Cinch system, carefully inspect the vehicle and air supply system. Make repairs as required. Ensuring vehicles are roadworthy is the responsibility of the owner and vehicle manufacturer.

2.4 Contacting Ancra Customer Support

Ancra Customer Service is available to answer your questions about Cinch. Call us toll-free at (800) 929-2627 or fax (800) 347-2627.

3.1 Selecting mounting locations

The Cinch requires more space than a standard winch and therefore mounting locations must be selected carefully. Please see Appendix B for critical dimensions. **Be aware of areas where interference from other trailer components may occur when selecting mounting locations (e.g. near the fifth wheel).**

If you are installing a weld-on mounting bracket, ensure that there is adequate surface area on the trailer to weld to and that the area has structural strength to support the forces exerted during cargo securement. Check with your local authorities for guidelines restricting the protrusion of cargo securement equipment from the side of your trailer – this may limit where you can place your Cinch units.

3.2 Attaching mounting brackets

Once each bracket position has been selected, grind the surface clean in preparation for welding. It is recommended that the bracket be welded to the trailer with continuous **1/4" bead** around the entire perimeter of the bracket. The weld bead must have a minimum of **1/8" penetration**. A rust inhibiting paint should be applied to the entire bracket after it has been welded.

3.3 Attaching the Cinch

The Cinch is bolted to the Mounting Plate with 2 x 5/8" Grade 5 bolts. As well, ensure that the external lock washers are inserted; this will prevent the Cinch from becoming loose during transit.

4.1 Locating the main attachment

One main air line is necessary to supply all the installed Cinches. This air line must first run directly from a primary reservoir to the Master Control Box.

Any spare port on the primary reservoir will suffice as the main attachment. If there are no spare ports, a tee-junction must be placed on one of the used ports. The main line is 3/8" tubing – please ensure the proper sized fittings are used.

4.2 Master Control Box

The Master Control Box serves as the main shut off for all the Cinches and contains the pressure protection valve. Tie-down tension is adjusted in the Master Control Box by the regulator. Regulated pressure must not exceed 90 psi (.62 MPa)

The Master Control Box should be in a location easily accessible. It can be riveted or bolted to the trailer through the back of the box.

4.3 Running main air line

The main air line must run from the Master Control Box down the length of the trailer. Where possible, run the air lines where other lines already exist. Where there are no existing air lines, ensure that the air line is kept away from any of the vehicle's moving parts (e.g. axles) and protected from damage.

A tee-junction must be placed in the main air line at every Cinch location. An additional line is required from each tee-junction to its respective Cinch, again ensuring the lines are well protected.

Figure 4-1 shows an installed Cinch. The junction where the main line meets the Cinch line is highlighted. Note – A ball valve may be placed in the line for added protection (if the unit should malfunction, the valve may be shut off and all other Cinch units may be run without having to shut off air to the entire system at the Master Control Box).

FIGURE 4-1 – Cinch Installed



CHAPTER 5 INSPECTING FOR PROPER INSTALLATION AND OPERATION

5.1 Check Master Control Box and air supply

- ✓ Ensure Cinch units are set to OFF
- ✓ Ensure air is supplied to the Master Control Box
- ✓ Open Master Control Box lid. Turn ball valve to ON.
- ✓ Ensure no air leaks at Master Control Box
- ✓ Adjust the regulator and check on the gauge that the air pressure changes
- ✓ To check maximum air pressure, set the gauge to read 90 psi. (.62 MPa).



90 PSI (.62 MPA) IS THE MAXIMUM OPERATING PRESSURE. DO NOT EXCEED!

- ✓ With pressure set to 90 psi (.62 MPa), check the entire line for leaks and fix where necessary
- ✓ Turn off air at the Master Control Box when finished

5.2 Check installed units

- ✓ Check that the mounting bracket and mounting fasteners have been installed properly
- ✓ Ensure air line is connected to each unit from the main line
- ✓ In the Master Control Box, turn air on and set pressure to 30 psi (.21 MPa) (low).
- ✓ Turn each Cinch unit on (**without a strap**) and ensure that the spool starts to rotate.
- ✓ Turn off all Cinch units and Master Control Box when finished

5.3 Check strap tightness

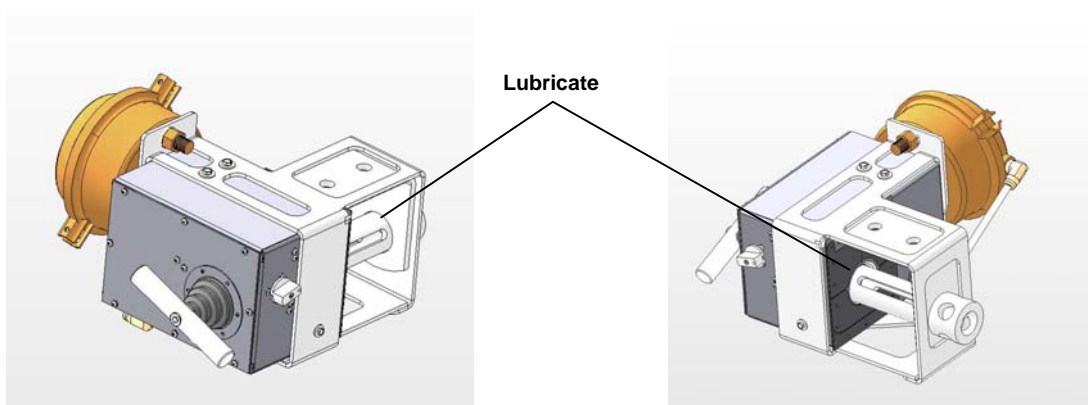
- ✓ In the Master Control Box, turn air on and set pressure to 30 psi (.21 MPa) (low).
- ✓ Insert a tie-down into each Cinch as you normally would and ensure that it is anchored to the opposite side of the trailer
- ✓ Turn each Cinch unit on and allow it to tighten the tie-downs until they have stopped tightening
- ✓ Check the tie-down to ensure adequate tightness. Adjust air pressure as required, increasing the pressure to increase tie-down tension.
- ✓ Turn off all Cinch units and Master Control Box when finished

CHAPTER 6 MAINTENANCE

The key maintenance step required involves lubrication of several areas within the Cinch. A high quality, anti-corrosive, anti-seize lubricant with good flow characteristics and good adhesion should be used (CU800 - a copper based lubricant available as an aerosol spray from Wurth¹ – is recommended).

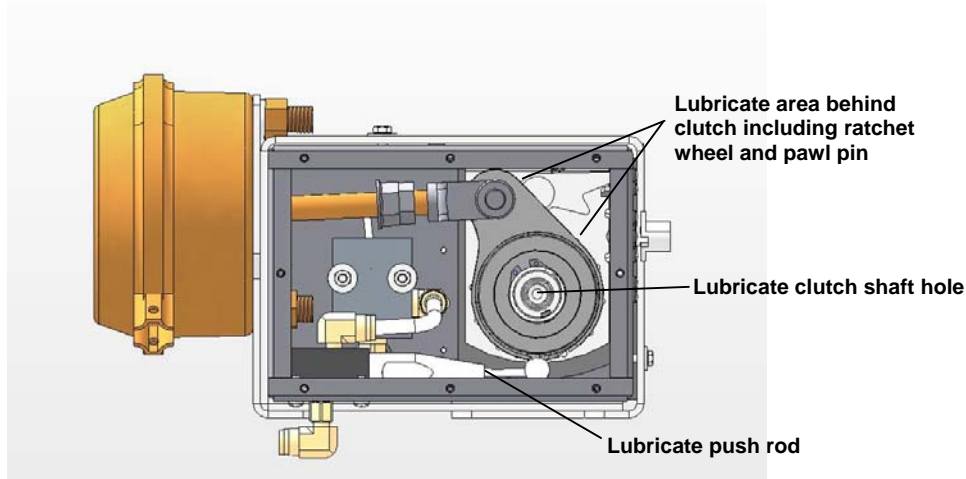
Once per month

- Ensure no air leaks in entire system.
- Lubricate the winch spool where it meets the winch body .



Once per year

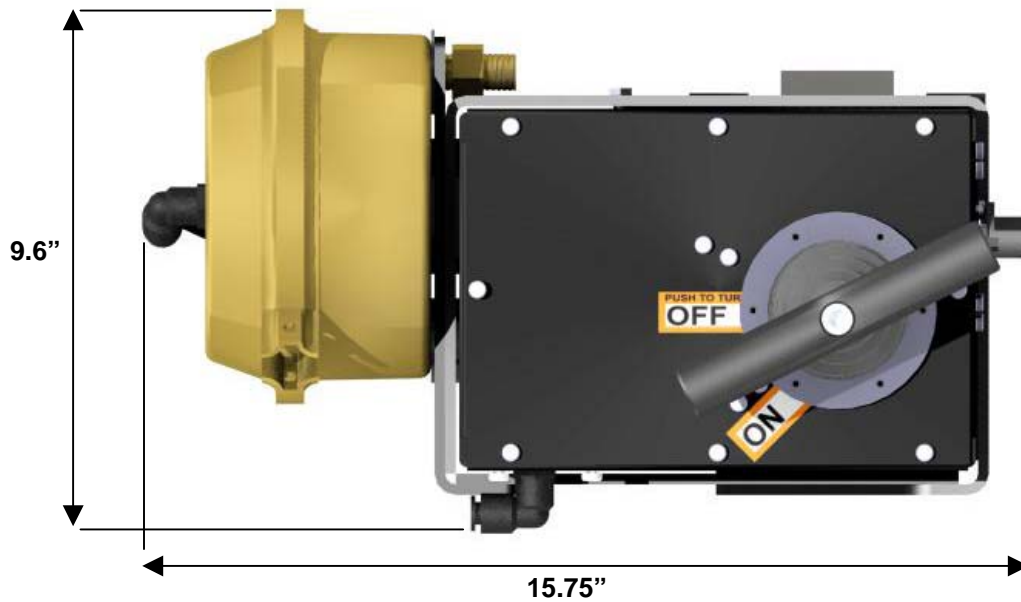
- Remove enclosure lid and lubricate interior components.



¹ Wurth USA – www.wurthusa.com
Wurth Canada – www.wurthcanada.com



Appendix A – Cinch Overall Dimensions



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