## L1400 / L3200 Winch Kit



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## 1. Introduction

| Read the machine Operator's Manual before you |
| :--- |
| install or use this accessory. Carefully read all |
| the safety information and understand all the |
| safety labels that are on the machine. If you do |
| not read and obey the machine information, there |
| is a risk of serious injury or machine damage. |
| The L1400 / L3200 winch kits are designed to work with the  <br> LXT95 / LXT115 log loader trailers.  <br> Model Winch kit <br> LXT95 L1400 kit <br> LXT115 L3200 kit |

Illustrations are provided for reference only. It is possible that some details are not shown.

For support or service, contact your local Wallenstein Equipment dealer or distributor.

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### 1.1 Orientation

When describing controls throughout this manual, the directions for left side, right side, front, and rear are determined when sitting in the tractor driver's seat, facing the direction of forward travel.

## 2. Safety

## A WARNING!

Read the machine Operator's Manual before you install or use this accessory. Carefully read all the safety information and understand all the safety labels that are on the machine. If you do not read and obey the machine information, there is a risk of serious injury or machine damage.

### 2.1 Safety Alert Symbol

This Safety Alert Symbol means:

## ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED!

The safety alert symbol identifies important safety messages on the machine and in the manual.

When you see this symbol, be aware of the possibility of personal injury or death. Obey the instructions in the safety message.


### 2.2 Signal Words

he signal words DANGER, WARNING and CAUTION identify the severity of a hazard to anyone who uses the machine. The applicable signal word for each message was selected using the following guidelines:

## DANGER

Identifies a hazardous situation that, if not avoided, will result in serious injury or death. This signal word is used to tell anyone who uses the machine about the most hazardous situations and machine components that cannot be guarded against.

## WARNING

Identifies a hazardous situation that, if not avoided, could result in serious injury or death. This signal word includes hazards that occur when guards are removed and can be used to tell anyone who uses the machine about unsafe practices.

## CAUTION

Identifies a hazardous situation that, if not avoided, could result in minor or moderate injury. It can also be used to tell anyone who uses the machine about unsafe practices.

IMPORTANT - Identifies a situation that could result in damage to the machine or property, but is not a personal injury hazard.


Provides additional information that is helpful.

## 3. Accessory Components



Figure 1-Accessory components

| Item | Part Number | Description | Quantity |
| :---: | :---: | :---: | :---: |
| 1 | Z71230 | Hex bolt, 5/16" NC x ${ }^{\text {"11 }}$ | 3 |
| 2 | Z73122G8 | SAE washer, $5 / 16$ " Gr. $8^{1}$ | 3 |
| 3 | 2071L504 | Hose clamp, $2 \times 1 / 4{ }^{\prime \prime}$ | 2 |
| 4 | 6083A231 | Winch-motor assembly | 1 |
| 5 | 6083A201 | Winch pulley | 1 |
| 6 | Z92118 | Synthetic winch rope, 5/16" $\times 80$ | 1 |
| 7 | Z92318 | Choker chain, 5/16" $\times 90$ | 1 |
| 8 | 6083L211 | Spacer ${ }^{2}$ | 8 |

[^0]| Item | Part Number | Description | Quantity |
| :---: | :---: | :---: | :---: |
| 9 | Z71517 | Hex bolt, 1/2" NC x 1-3/4" | 8 |
| 10 | Z73151G8 | SAE washer, 1/2" Gr. 8 | 8 |
| 11 | Z72231 | Hex lock nut, 3/8" $\mathrm{NC}^{1}$ | 4 |
| 12 | Z73131G8 | SAE washer, 3/8" Gr. $8^{1}$ | 4 |
| 13 | 6083 L 286 | Step ${ }^{1}$ | 1 |
| 14 | 3012S204 | U-bolt ${ }^{1}$ | 2 |
| 15 | Z52203 | Hydraulic hose assembly ${ }^{1}$ | 1 |
| 16 | Z52222 | Hydraulic hose assembly | 2 |
| 17 | Z51644 | Hydraulic fitting | 5 |
| 18 | Z56216 | Winch-control valve ${ }^{1}$ | 1 |

## 4. Install a Winch Kit

## A WARNING!

Read and follow all the installation and setup instructions. Do not modify this equipment and make sure that the equipment is installed correctly. Incorrect installation or modification of the equipment can cause serious injury or damage the machine.

### 4.1 Install a L1400 Winch Kit

This procedure tells you how to install a L1400 winch kit on a LXT95 log loader trailer.
The accessory component item numbers are in brackets and defined on page 4.

## Step 1

Align the winch-motor assembly (4) with the bolt holes in the boom frame.


## Step 2

On each side of the machine, install the two bolts (9) through the two washers (10), the winch-motor assembly (4), the two spacers (8), and into the boom frame.

Use a calibrated torque wrench to torque the four fasteners to $80 \mathrm{lbf} \cdot \mathrm{ft}(110 \mathrm{~N} \cdot \mathrm{~m})$.


## Step 3

Align the winch pulley (5) with the bolt holes in the boom frame.


## Step 4

On each side of the machine, install the two bolts (9) through the two washers (10), the winch pulley (5), the two spacers (8), and into the boom frame.

Use a calibrated torque wrench to torque the four fasteners to $80 \mathrm{lbf} \cdot \mathrm{ft}(110 \mathrm{~N} \cdot \mathrm{~m})$.


## Step 5

Wind the synthetic winch rope (6) around the winch drum. Make sure that the synthetic winch rope is safely attached to the winch drum.


## Step 6

Put the synthetic winch rope (6) through the winch pulley (5). Make sure that the synthetic winch rope moves freely through the pulley.


## Step 7

Connect the hydraulic hose assemblies (16) and the hydraulic fittings (17) to the hydraulic valve on the front of the operator control panel.

Use a calibrated torque wrench to torque the hydraulic fittings to 20-22 lbf $\cdot \mathrm{ft}(\mathbf{2 7 - 3 0} \mathrm{N} \cdot \mathrm{m})$.


## Step 8

Remove the bolt and washer from the hose clamps that are attached to the left side of the boom.

Set aside the fasteners. They are not necessary for installation.


## Step 9

Connect the hydraulic hose assemblies (16) to the winchmotor assembly (4).

Use a calibrated torque wrench to torque the hydraulic fitting to 20-22 lbf $\cdot \mathrm{ft}(\mathbf{2 7 - 3 0} \mathrm{N} \cdot \mathrm{m})$.


## Step 10

Align the hose clamps (3):

1. Put the hose clamps (included in the winch kit) on each side of the hydraulic hoses (16).
2. Align the bolt holes in the hose clamps with the hose clamps on the left side of the boom (where the fasteners were removed in step 8).


## Step 11

Install the bolt (1) and washer (2) through all of the hose clamps and into the boom.
Make sure that the hose clamps (3) and hydraulic hoses (16) are attached correctly and cannot move.


## Step 12

Apply tension to the synthetic winch rope.
For instructions, see Apply Tension to the Winch Rope on
page 15.

### 4.2 Install a L3200 Winch Kit

This procedure tells you how to install a L3200 winch kit on a LXT115 log loader trailer.
The accessory component item numbers are in brackets and defined on page 4.

## Step 1

Align the step (13) with the left stabilizer, below the hydraulic cylinder.


## Step 2

Attach the step (13) to the left stabilizer. Install the two u-bolts (14), the four nuts (11), and the four washers (12).

Use a calibrated torque wrench to torque the four fasteners to $33 \mathrm{lbf} \cdot \mathrm{ft}(45 \mathrm{~N} \cdot \mathrm{~m})$.


## Step 3

Align the winch motor assembly (4) with the bolt holes in the boom frame.


## Step 4

On each side of the machine, install the two bolts (9) through the two washers (10), the winch motor assembly (4), and into the boom frame.

Use a calibrated torque wrench to torque the four fasteners to $80 \mathrm{lbf} \cdot \mathrm{ft}(110 \mathrm{~N} \cdot \mathrm{~m})$.


## Step 5

Align the winch pulley (5) with the bolt holes in the boom frame.


## Step 6

On each side of the machine, install the two bolts (9) through the two washers (10), the winch pulley (5), and into the boom frame.

Use a calibrated torque wrench to torque the four fasteners to $80 \mathrm{lbf} \cdot \mathrm{ft}(110 \mathrm{~N} \cdot \mathrm{~m})$.


## Step 7

Wind the synthetic winch rope (6) around the winch drum. Make sure that the synthetic winch rope is safely attached to the winch drum.


## Step 8

Put the synthetic winch rope (6) through the winch pulley (5). Make sure that the synthetic winch rope moves freely through the pulley.


## Step 9

Align the winch-control valve (18) with the bolt holes on the operator control panel.


## Step 10

Attach the winch-control valve (18) to the operator control panel using the three bolts (1) and three washers (2).

Use a calibrated torque wrench to three fasteners to $19 \mathrm{lbf} \bullet \mathrm{ft}$ ( $25 \mathrm{~N} \cdot \mathrm{~m}$ ).


## Step 11

Connect the hydraulic hose assemblies (16) to the hydraulic fittings (17), and to the hydraulic valve (18).

Use a calibrated torque wrench to torque the hydraulic fittings to $\mathbf{2 0 - 2 2 ~} \mathrm{lbf} \cdot \mathrm{ft}(27-30 \mathrm{~N} \cdot \mathrm{~m})$.


## Step 12

Connect the hydraulic hose assembly (15) to the winchcontrol valve (18) and the operator control panel:

1. Connect the hydraulic hose assembly to the hydraulic fitting (17), and to the winch-control valve.
2. Connect the hydraulic hose assembly to the fitting on the left side of the operator control panel.
Use a calibrated torque wrench to torque the hydraulic fittings to 20-22 $\mathrm{lbf} \cdot \mathrm{ft}(\mathbf{2 7 - 3 0} \mathrm{N} \cdot \mathrm{m})$.


## Step 13

Remove the bolt and washer from the cable clamp that is attached to the left side of the boom.

Set aside the fasteners. They are not necessary for installation.


## Step 14

Connect the hydraulic hose assemblies (16) to the winchmotor assembly (4).

Use a calibrated torque wrench to torque the hydraulic fitting to 20-22 lbf•ft, (27-30 $\mathrm{N} \cdot \mathrm{m}$ ).


## Step 15

Align the cable clamp (3):

1. Put the cable clamp (included in the winch kit) on each side of the hydraulic hoses (16).
2. Align the bolt holes in the cable clamp with the cable clamp on the left side of the boom (where the fasteners were removed in step 13).


## Step 16

Install the bolt (1) and washer (2) through both of the cable clamps (3).
Make sure that the cable clamps and hydraulic hoses (16) are attached correctly and cannot move.


## Step 17

Apply tension to the synthetic winch rope.
For instructions, see Apply Tension to the Winch Rope on page 15.

## 5. Apply Tension to the Winch Rope

## A WARNING!

Risk of machine roll over. Rope pull angle must not exceed $25^{\circ}$ from the center axis of the machine. Exceeding that angle can subject the machine to a tipping load and cause the machine to roll over.

## A WARNING!

Start or stop the winch slowly and smoothly. Sudden movements can damage the winch rope. A synthetic rope that breaks when it is under tension can move fast with dangerous force and cause serious injury or death. Replace a winch rope that is kinked, too frayed, or that has knots, cuts, or broken strands.

## A WARNING!

Keep all bystanders in the safe zone during winch operation. The logs and winch rope create hazards that can cause serious injury or death.

## A. CAUTION!

Stay away from the winch rope when you operate the winch. The winch rope can cause personal injury from entanglement or burns.

IMPORTANT! Leave a minimum of $3 \mathrm{ft}(1 \mathrm{~m})$ of cable or winch rope on the winch drum. If you pull the cable or winch rope out fully, the end can pull off the anchor.

The synthetic winch rope must have tension applied before the first use to prevent additional stretch during operation.

1. Find a large log that is safe to use as a load for the winch rope.
The log should be large enough to apply tension, but should not exceed the rating of the winch rope.
2. Park the log loader trailer three feet closer to the tree than the length of the winch rope.
3. Disconnect the machine from the tow vehicle. For instructions, see the log loader trailer Operator's Manual.
4. Pull the winch rope to the log.

Leave a minimum of $3 \mathrm{ft}(1 \mathrm{~m})$ of winch rope on the winch drum.
5. Attach the winch rope to the log. Use the choker chain included in the winch kit.
6. Set up the machine. For instructions, see the log loader trailer Operator's Manual.
7. Start the machine.

For instructions, see the log loader trailer Operator's Manual.
8. Move the winch gear lever on the winch-motor assembly to the Slow position.
For more information, see the log loader trailer Operator's Manual.
9. Pull and hold the winch gear lever to wind the winch rope and winch the log.
For more information, see the log loader trailer Operator's Manual.
10. When the $\log$ is at the machine, release the winch gear lever to release the winch rope.
For more information, see the log loader trailer Operator's Manual.
11. Stop the machine. For instructions, see the log loader trailer Operator's Manual.
12. Disconnect the winch rope and the choker chain from the log.

## 6. Torque Specifications

### 6.1 Bolt Torque

IMPORTANT! If you replace hardware, use fasteners of the same grade.

IMPORTANT! The torque specifications in these tables are for non-greased or non-oiled threads. Do not grease or oil fastener threads unless otherwise indicated. When using a thread lock, increase the specified torque $5 \%$.


Bolt grades are identified by the marks on the bolt head.

The bolt torque specification tables provide the correct torque settings for common bolts and capscrews. Tighten all bolts to the torque that is specified in the table, unless otherwise indicated. Check the bolt tightness periodically.

| Imperial Bolt Torque Specifications |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bolt Diameter | Torque |  |  |  |  |  |
|  | SAE Gr. 2 |  | SAE Gr. 5 |  | SAE Gr. 8 |  |
|  | lbf •ft | $\mathrm{N} \cdot \mathrm{m}$ | lbf •ft | $\mathrm{N} \cdot \mathrm{m}$ | lbf •ft | $\mathrm{N} \cdot \mathrm{m}$ |
| 1/4 inch | 6 | 8 | 9 | 12 | 12 | 17 |
| $5 / 16$ inch | 10 | 13 | 19 | 25 | 27 | 36 |
| 3/8 inch | 20 | 27 | 33 | 45 | 45 | 63 |
| 7/16 inch | 30 | 41 | 53 | 72 | 75 | 100 |
| 1/2 inch | 45 | 61 | 80 | 110 | 115 | 155 |
| 9/16 inch | 60 | 95 | 115 | 155 | 165 | 220 |
| 5/8 inch | 95 | 128 | 160 | 215 | 220 | 305 |
| $3 / 4$ inch | 165 | 225 | 290 | 390 | 400 | 540 |
| 7/8 inch | 170 | 230 | 420 | 570 | 650 | 880 |
| $\square$ <br> SAE Gr. <br> SAE Gr. 8 |  |  |  |  |  |  |

## Metric Bolt Torque Specifications

| Bolt Diameter | Torque |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Gr. 8.8 |  | Gr. 10.9 |  |
|  | $\mathrm{lbf} \bullet \mathrm{ft}$ | $\mathrm{N} \cdot \mathrm{m}$ | $\mathrm{lbf} \bullet \mathrm{ft}$ | $\mathrm{N} \cdot \mathrm{m}$ |
| M3 | 0.4 | 0.5 | 1.3 | 1.8 |
| M4 | 2.2 | 3 | 3.3 | 4.5 |
| M6 | 7 | 10 | 11 | 15 |
| M8 | 18 | 25 | 26 | 35 |
| M10 | 37 | 50 | 52 | 70 |
| M12 | 66 | 90 | 92 | 125 |
| M14 | 83 | 112 | 116 | 158 |
| M16 | 166 | 225 | 229 | 310 |
| M20 | 321 | 435 | 450 | 610 |
| M30 | 1,103 | 1,495 | 1,550 | 2,100 |



### 6.2 Hydraulic Fitting Torque

Tighten flare-type tube fittings:

1. Check the flare and flare seat for defects that might cause leaks.
2. Align the tube with the fitting before tightening.
3. Hand-tighten the swivel nut until it is snug.
4. To prevent the tube from twisting, use two wrenches. Place one wrench on the connector body and tighten the swivel nut with the second wrench. Torque the fitting to the correct specification.
If a torque wrench is not available, use the flats from finger tight (FFFT) method.

| Hydraulic Fitting Torque Specifications |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Tube size <br> OD | Hex size <br> across <br> flats | Torque |  | Flats from finger <br> tight |  |
| Inches | Inches | Ibf•ft | $\mathrm{N} \bullet \mathrm{m}$ | Flats | Turns |
| $3 / 16$ | $7 / 16$ | 6 | 8 | 2 | $1 / 6$ |
| $1 / 4$ | $9 / 16$ | $11-12$ | $15-17$ | 2 | $1 / 6$ |
| $5 / 16$ | $5 / 8$ | $14-16$ | $19-22$ | 2 | $1 / 6$ |
| $3 / 8$ | $11 / 16$ | $20-22$ | $27-30$ | $1-1 / 4$ | $1 / 6$ |
| $1 / 2$ | $7 / 8$ | $44-48$ | $59-65$ | 1 | $1 / 6$ |
| $5 / 8$ | 1 | $50-58$ | $68-79$ | 1 | $1 / 6$ |
| $3 / 4$ | $1-1 / 4$ | $79-88$ | $107-119$ | 1 | $1 / 8$ |
| 1 | $1-5 / 8$ | $117-125$ | $158-170$ | 1 | $1 / 8$ |

Specifications are for non-lubricated connections.

## 1. Warranty

## WALIENSTEIN

LIMITED WARRANTY

Wallenstein products are warranted to be free of defects in materials and workmanship under normal use and service, for a period of

Five Years for Consumer Use
Two Years for Commercial/Rental Use
from the date of purchase, when operated and maintained in accordance with the operating and maintenance instructions supplied with the unit. Warranty is limited to the repair of the product and/or replacement of parts.

This warranty is extended only to the original purchaser and is not transferable.
Repairs must be done by an authorized dealer. Products will be returned to the dealer at the customer's expense. Include the original purchase receipt with any claim.

This warranty does not cover the following:

1) Normal maintenance or adjustments
2) Normal replacement of wearable and service parts
3) Consequential damage, indirect damage, or loss of profits
4) Damages resulting from:

- Misuse, negligence, accident, theft or fire
- Use of improper or insufficient fuel, fluids or lubricants
- Use of parts or aftermarket accessories other than genuine Wallenstein parts
- Modifications, alteration, tampering or improper repair performed by parties other than an authorized dealer
- Any device or accessories installed by parties other than an authorized dealer

5) Engines. Engines are covered by the manufacturer of the engine for the warranty period they specify. For the details of your engine warranty, see your engine owner's manual. Information about engine warranty and service is also available in the FAQ section at www.wallensteinequipment.com

WallensteinEquipment.com



[^0]:    1 Only included in the L3200 kit
    2 Only included in the L1400 kit

