

**WOOD PROCESSING EQUIPMENT**

**TIMBERWOLF™ MFG.**  
CORPORATION  
**WOOD PROCESSING EQUIPMENT**

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**M A N U A L**

**Professional  
Grade Conveyor**  
❖ **C30 HD Conveyor**



**TIMBERWOLF**  
**Manufacturing Corporation**

**TW-C30HD**  
**Conveyor**

**Operation & Maintenance**  
**Manual**

Fill out and submit Registration Form to ensure warranty coverage and receive product updates.

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TIMBERWOLF Manufacturing Corporation,  
Rutland, VT 05701

Every effort has been made to ensure the accuracy of this document.

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The information in this document reflects current or planned product features, functions, and characteristics as of the publication date. Because of on-going product improvements and feature additions, information in this document is subject to change without notice.

## About the Manual

Thank you for buying a Timberwolf Manufacturing Corporation conveyor. The conveyor is made with high quality components and will provide years of service under normal working conditions.

Please study this manual before you operate the machine. The manual is divided into the following sections:

- **Overview** – descriptions of Timberwolf conveyors and how they operate.
- **Safety Instructions** – information on safe operating practices.
- **Set Up and Take Down** – instructions for setting up conveyor and taking it down for travel.
- **Operation** – instructions for running the conveyor.
- **Maintenance** – information on periodic and preventive care, lubrication, adjustments for valves and other components.

If you have any questions regarding assembly, use, safety, or maintenance, please call Timberwolf Manufacturing Corp. at 802-775-4227.

### Safety Note

**Please take time to read this manual and learn to how operate and maintain the conveyor safely.**

## Read Entire Manual Before Operating the Conveyor

### Attention Rental Companies

**It is extremely important that any person who operates this equipment has access to and has read the operator's manual. Timberwolf Manufacturing Corporation strongly urges you to keep the manual with the conveyor at all times, and to instruct all persons who will operate this machine to read the manual.**

## Caution!

### Residual Hydraulic Energy

Residual energy must be released from the pressurized hydraulic fluid before any maintenance or repair work is done on the conveyor. Hydraulic fluid can remain highly pressurized even after the pump stops running. Escaping pressurized hydraulic fluid can penetrate skin and cause serious injury.

To release residual hydraulic energy:

1. Shut off conveyor motor (if conveyor is connected to processor hydraulics, shut off processor motor).
  2. Move control valve back and forth, from one limit of travel to the other, at least four times.
  3. Hold valve for three seconds at each limit of travel.
- 

Record your conveyor's ID numbers here:

Model # \_\_\_\_\_

Serial # \_\_\_\_\_

Motor # \_\_\_\_\_

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Protect the investment you've made in a Timberwolf Manufacturing conveyor.

Fill out the Registration Form and send it to us by mail or Fax to ensure your warranty coverage and enable you to receive product updates.

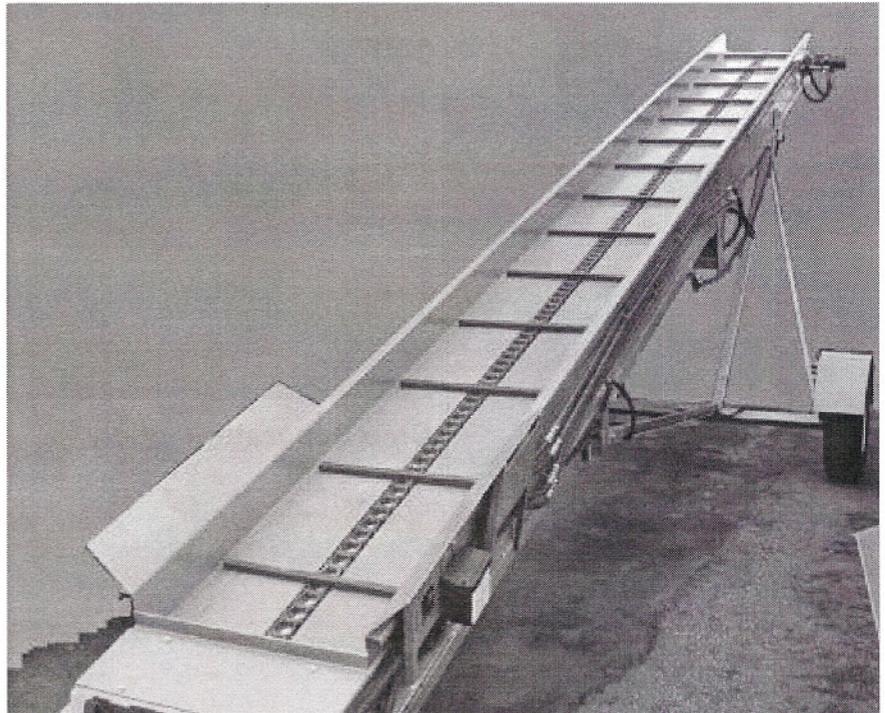
# Timberwolf TW-C30HD Hydraulic Conveyor

## General Information

The Timberwolf Mfg. TW-C30HD Conveyor is an exceptionally rugged and dependable unit, well suited for transporting or loading a variety of materials. In a woodlot or agricultural setting it can be used to move firewood, mulch, and hay. It can be used in a recycling operation to move glass and cans.

The conveyor is 30 feet long and adjusts to a maximum height of 14 feet 5 inches.

The hydraulic motor that drives the conveyor is located at the top for greater efficiency. Conveyor models are available with an on-board gasoline engine and hydraulic pump to power the motor or with fittings for connection to an external hydraulic system. Timberwolf firewood processors, for example, can be specially equipped to power a conveyor.



**Timberwolf Mfg. TW-C30HD Hydraulic Conveyor**

A variety of hopper configurations and control arrangements are available to meet specialized requirements

## General Information (Continued)

The TW-C30HD conveyor employs a drive chain and cleats – rather than a belt – to move material. The chain is recessed below the conveyor trough and rides on a nylon track to reduce friction.

The conveyor can be easily transported on public roads. It comes standard with a 2" ball coupler, and features high speed DOT approved wheels and tires. A pintle hitch coupler is available as an option.

Gasoline powered TW-C30HD conveyors feature a Honda 5.5 HP overhead valve engine. One tank of gasoline can run the conveyor for approximately eight hours.

Two types of height adjustment mechanism are available for the conveyor: a hydraulic jack powered by the pump, or a hand operated cable winch.



**Chip Separator Option**

**Product Specifications**

Power Plant	4 GPM hydraulic pump driven by 5.5 HP Honda engine  External hydraulic power option (compatible with specially equipped Timberwolf Mfg. processor)
Conveyor Length	30 feet
Maximum Height	14 ft 5 in
Retracted Height	9 ft 9 in
Conveyor Trough Width	26 in
Belt	
Type	Cleated Chain (#78 deck chain)
Width	24 in cleats
Speed	Variable
Height Adjustment	Powered hydraulic jack Hand cranked mechanical lift (opt.)
Mobility	DOT approved wheels and tires Light Kit 2" ball coupler standard Pintle hitch coupler (opt.)
Product Options	Processor driven hydraulics Chip Separator

# Hydraulic Safety

 **WARNINGS**

Escaping pressurized fluid from hydraulic system leaks can have enough force to penetrate skin and cause serious injury or death.

Hydraulic fluid can remain highly pressurized while conveyor motor is off.

Never use your hand or any part of your body to check for hydraulic system leaks while the system is pressurized.

Get professional medical help at once if hydraulic oil penetrates anyone's skin.

Always release residual energy from pressurized hydraulic fluid before doing any maintenance or repair work on the conveyor.

## **What You SHOULD Do**

- Inspect hydraulic hoses every day – check for worn, frayed, kinked, and cracked areas.
- Replace any damaged or worn hoses.
- Use sheet of cardboard or log to check for hydraulic leaks while system is running.
- Depressurize system to release residual hydraulic energy before starting any repairs.
  1. Shut off conveyor (or processor) engine.
  2. Move control valve handle back and forth, from one limit of travel to the other, at least four times.
  3. Hold valve for three seconds at each limit of travel.
- Contact Timberwolf Manufacturing Corp. or a qualified hydraulic mechanic to replace worn components.

## **What You SHOULD NOT Do**

- Do not make any adjustments to the pressure relief valve.
- Never remove cap from hydraulic tank while motor is running or while tank is still warm after motor is shut off. Hot pressurized oil can cause serious injury, so wait for hydraulic tank to cool before removing cap.
- Never use any connectors, valves, or fittings that are different from the ones originally installed on the conveyor.

# Set Up and Take Down

## Overview

This part of the manual contains instructions for setting up the conveyor at the work site and taking it down for transport.

Set up procedures include –

- Planning the work area
- Positioning
- Height adjustment
- Leveling the engine/hydraulic tank platform
- Routine maintenance tasks.

Take down procedures include –

- Lowering the conveyor
- Tow vehicle hookup

This part of the manual also includes directions for connecting and disconnecting hydraulic lines to a Timberwolf Mfg. firewood processor. Both the conveyor and the processor require factory-installed special equipment for that application.

## Work Area Layout

- Locate conveyor on firm, level ground.
- Select well-lit spot, outdoors or in well-ventilated area.

### **CAUTION**

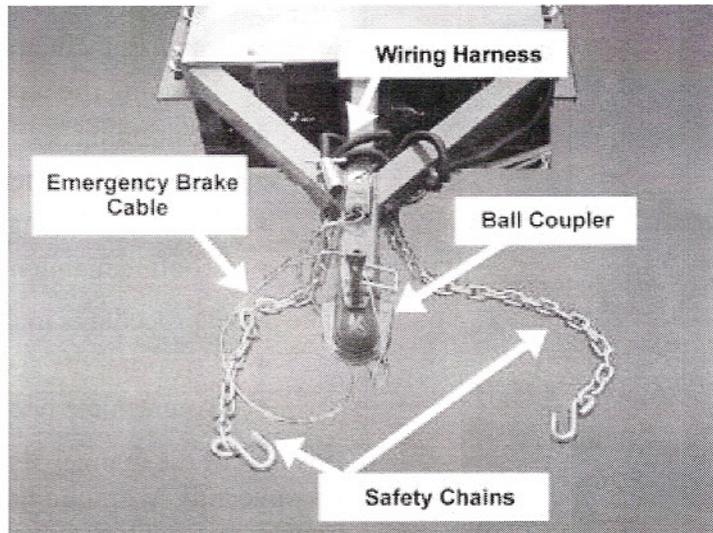
Never run the conveyor without adequate ventilation. Fumes from conveyor and processor engines can cause fatal poisoning.

- Check for hazards around the conveyor. Make sure area is free of slippery surfaces and objects to trip over.
- Make sure there won't be people or animals in the area around the conveyor.
- Plan access for the trucks or trailers to be loaded by the conveyor.
- If conveyor is equipped with optional chip separator, plan for collection and removal of chips and other scraps; separator drops debris 2 – 3 feet back from top of conveyor.

## New Location Set Up

Position conveyor in the selected location, then disconnect tow vehicle:

- Firmly block wheels so conveyor can't roll in either direction.



### Conveyor Towing Hitch

- Disconnect safety chains, emergency brake cable, and wiring harness for conveyor lights and brakes.
- Lift conveyor ball coupler off tow vehicle's trailer hitch.
- Drive tow vehicle clear.

## Processor Hydraulic Power

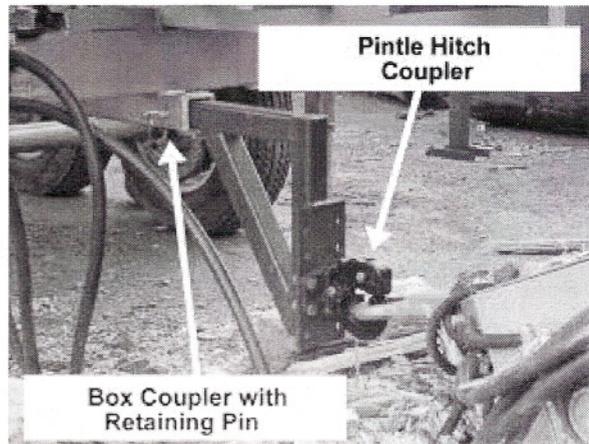
Timberwolf hydraulic conveyors can be equipped to be powered and control by a Timberwolf firewood processor. An externally powered conveyor does not have an engine and pump, hydraulic tank, or control valve lever. The firewood processor assumes the functions of those components.

A processor set up to power a conveyor is equipped with a hitch adapter for connecting the conveyor to the processor, and a control lever and set of hydraulic connectors for the conveyor.

The conveyor/processor hitch adapter secures the machines together for positioning and short, on-site moves. Two hitch adapters are available to match the type of hitch on the conveyor: ball coupler or pintle hitch.

To connect a conveyor to the processor:

1. Position conveyor.
2. Insert conveyor/processor hitch adapter into the coupler sleeve located under the processor's splitter hopper. Lock the adapter in place with the retaining pin.

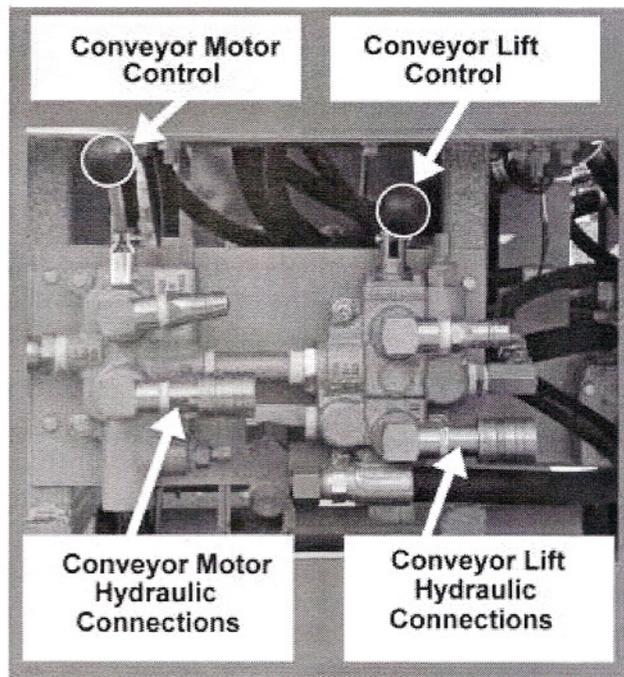


### Conveyor/Processor Hitch Adapter

3. Connect the conveyor's towing hitch to the conveyor/processor hitch adapter.
4. Make hydraulic connections. Connectors accept standard, barrel-style, self-locking hydraulic fittings.

#### **⚠ CAUTION**

Always depressurize the entire processor hydraulic system before connecting or disconnecting any hydraulic fitting. Failure to observe this caution can result in serious injury.



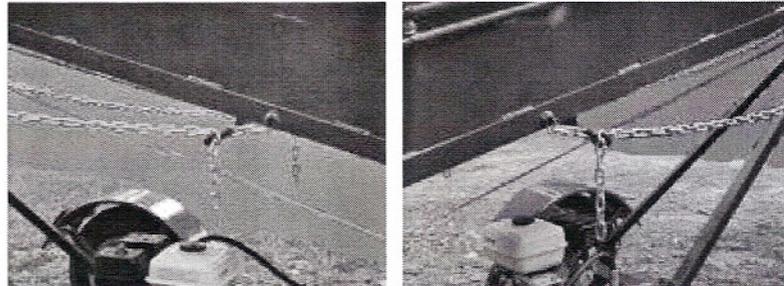
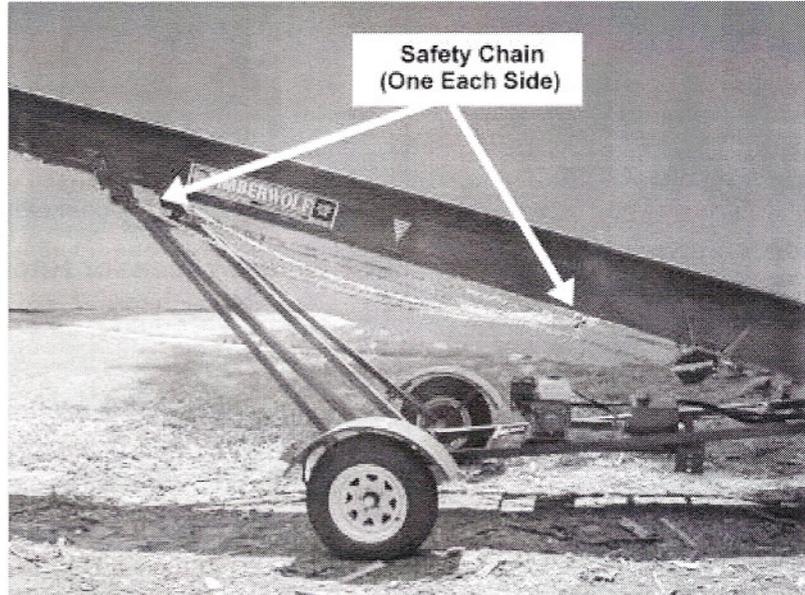
### Conveyor Control Lever & Hydraulic Connections

Consult processor Maintenance and Operation manual.

## Height Adjustment

Timberwolf TW-C30HD conveyors are available with two types of height adjustment system:

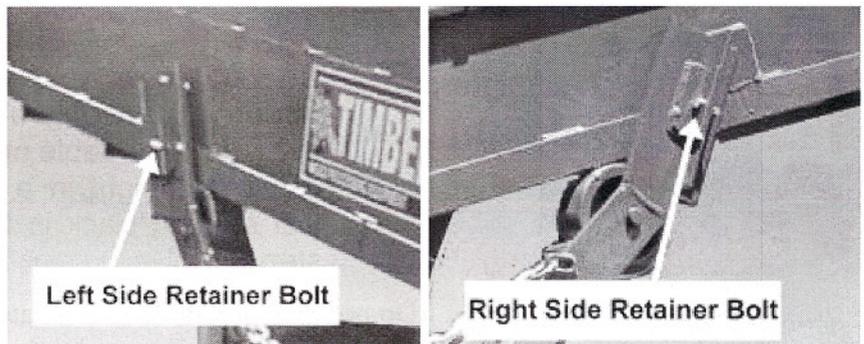
- Powered hydraulic jack
- Winch and cable.



### Safety Chain Securing Hooks

All conveyors have safety chains for securing the support arms to the conveyor frame in order to prevent accidental descent when raised.

There are also retainer bolts, one on each side, that firmly secure the conveyor when it is in its retracted position. The retainer bolts keep the conveyor from bouncing on the support arms during transit, thereby reducing wear and tear and risk of damage. They must be removed before raising the conveyor, and should always be re-installed before it is moved.



### Retainer Bolts

#### CAUTION

Retainer bolts **must** be removed before the conveyor can be raised. Attempting to raise the conveyor with the bolts in place can damage the equipment and cause injury to the operator.

## Hydraulic Height Adjustment

A conveyor can be equipped for height adjustment powered by the hydraulic pump and operated by a control valve lever. The height adjustment lever is located with the conveyor control: on the conveyor for a self-powered unit, or at the processor's operator station for a processor powered unit.

1. Start and warm up the conveyor or processor engine and hydraulic system.
2. Remove retainer bolts when starting from fully retracted position. Store them in a safe place.
3. Use the Conveyor Height control lever to raise the conveyor to the required height. Safety chains go slack as the conveyor rises.
4. Hook safety chains as tightly as possible when conveyor is at the required height.

#### CAUTION

Always secure safety chains when the conveyor is raised. Do not rely on the hydraulic cylinder to maintain the conveyor in its raised position.

5. When making any further adjustments, remember that conveyor can be raised higher with chains in place, but chains must be unhooked before conveyor height can be adjusted downward.

## Winch and Cable Height Adjustment

### **⚠ CAUTION**

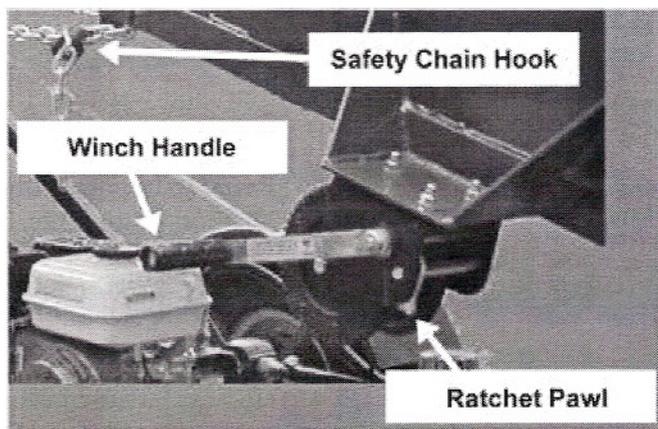
Do not leave safety chains unhooked while raising or lowering a conveyor equipped with the winch and cable mechanism. Instead, adjust conveyor height in a series of steps, allowing just enough slack in the chains for the current step.

Do not release handle unless ratchet pawl is properly engaged. Do not disengage ratchet pawl unless tension is applied to handle. Failure to observe these cautions will cause handle to spin out of control and could cause personal injury.

1. Take firm hold of the winch handle, release tension on the ratchet pawl by moving handle slightly counterclockwise, and disengage the pawl.

### **⚠ CAUTION**

Never let go of the winch handle while raising or lowering the conveyor. Ratchet pawl does not engage automatically.



### Height Adjustment Winch

2. Turn handle counterclockwise to raise the conveyor one or two feet, then engage the ratchet pawl.
3. Adjust both safety chains to remove slack.
4. Repeat steps 1 – 3 until conveyor reaches required height.

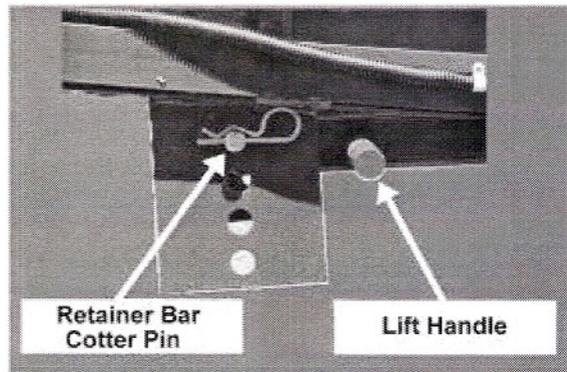
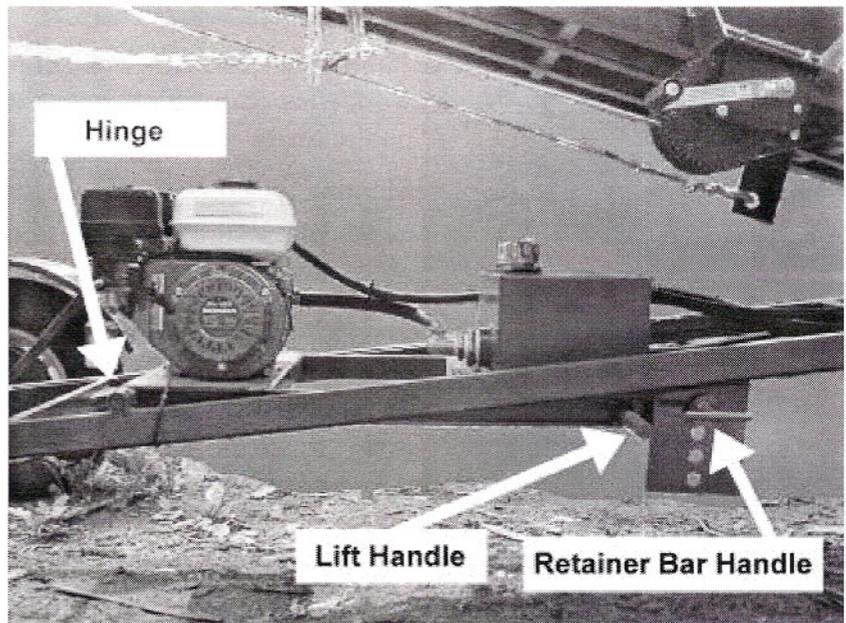
### **⚠ CAUTION**

Always secure safety chains when the conveyor is raised. Do not rely on the cable to maintain the conveyor in its raised position.

## Leveling Engine/Hydraulic Tank Platform

Once the conveyor has been raised to the required height, the platform supporting the engine and hydraulic tank has to be leveled. This operation is best performed by two people.

1. Take out the retainer bare cotter pin.
2. Firmly grasp the lift handle(s) to support the platform's weight and draw out the retainer bar.
3. Line up the platform with the set of holes that will bring it closest to a level position and reinsert the retainer bar.
4. Reinsert the retainer bar cotter pin.



Engine/Hydraulic Tank Platform

**Routine Maintenance**

Routine periodic maintenance is vital to keeping your Timberwolf Mfg. conveyor on the job.

- Pay attention to the maintenance schedule
- Some maintenance tasks should be performed daily or even more often.
- Make maintenance part of the regular workflow, not an afterthought.
- Power plant warm-up time is a good chance to take care of grease fittings and to check set screws and chain tensions.

**Take Down Procedures**

Timberwolf Mfg. firewood conveyors are easily moved between work sites. Conveyors meet the normal size limits for travel on public roads.

Shutting the conveyor down for a move requires special attention:

- Make sure conveyor trough and hopper are clear of scraps and debris
- Close petcocks on
  - Hydraulic tank, supply and return
  - Fuel line
- Raise the engine/hydraulic tank platform to its highest position.

**Lower the Conveyor**

Make sure nothing will block the conveyor as it descends. Then return it to its lowest position.

For a conveyor with hydraulic height adjustment:

1. Disconnect the safety chains.
2. Use the control valve lever to lower the jack slowly.
3. Re-hook the safety chains and re-install the retainer bolts.

A conveyor equipped with cable winch height adjustment should be lowered in a series of steps:

1. Slacken safety chains enough to permit lowering the conveyor one or two feet.
2. Take firm hold of the winch handle, release tension on the ratchet pawl by moving handle slightly counterclockwise, and disengage the pawl.

## Tow Vehicle Hookup

### CAUTION

Never let go of the winch handle while raising or lowering the conveyor. Ratchet pawl does not engage automatically.

3. Turn handle clockwise to lower the conveyor as far as safety chains permit, then engage the ratchet pawl.
4. Adjust safety chains to permit the next downward step.
5. Repeat steps 1 – 4 until conveyor is fully retracted.
6. Re-install the retainer bolts.

Tow vehicle must be big enough and properly equipped to pull the conveyor:

- Towing weight – 1120 lb,
  - Overall length – 33 ft
  - Retracted height – 8 ft
  - Electric brake controller
  - Standard 6-pin wiring harness for lights and brakes
1. Fully compress conveyor's height adjustment jack and place it in the lowest position on the frame.
  2. Back tow vehicle into position.
  3. Lift conveyor's ball coupler and position it securely on tow vehicle's hitch.
  4. Connect light and brake wiring harness, hitch failure emergency brake cable, and safety chains.

### CAUTION

Never use the hitch failure emergency brake unit as a parking brake. Using the break-away brake as a parking brake while hitched to the tow vehicle will overload the electrical system and burn out the wiring.

5. DO NOT tow the conveyor faster than 45 m.p.h.

# Operating Instructions

<h2>Start Up Procedure</h2>	<p>First, walk-around the entire machine:</p> <ul style="list-style-type: none"> <li>• Check –             <ul style="list-style-type: none"> <li>• Fluid levels:                 <ul style="list-style-type: none"> <li>• Fuel – start the day with a full tank of gasoline.                     <ul style="list-style-type: none"> <li>• Engine should run about eight hours on a tank of gas.</li> </ul> </li> <li>• Hydraulic oil – Timberwolf Mfg. recommends Texaco Rando 46 hydraulic oil.</li> </ul> </li> <li>• Hydraulic line condition – keep track of wear; save on downtime by replacing hoses <i>before</i> they fail.</li> <li>• Nuts, bolts, and fittings – make sure all are tight and secure.</li> <li>• Welds – check high-stress joints.</li> </ul> </li> </ul>
<h2>Engine Start Up</h2>	<p>Start the engine:</p> <ul style="list-style-type: none"> <li>• Make sure –             <ul style="list-style-type: none"> <li>• Control valve handle is in Off position</li> <li>• <b>No one</b> is near any moving part</li> </ul> </li> <li>• Start the engine, following the instructions in its operating guide.</li> <li>• Allow engine to warm up at idle:             <ul style="list-style-type: none"> <li>• Always warm up for at least five minutes.</li> <li>• In winter weather (30° F and below) warm up for 30 minutes.</li> </ul> </li> </ul> <p>Don't try to operate the conveyor under a load before the engine is properly warmed up. Take care of other tasks while the engine warms up.</p>
<h2>Hydraulic Start Up</h2>	<p>Timberwolf Mfg. conveyors use an open hydraulic system that starts circulating hydraulic oil when the engine starts running. The conveyor's hydraulic system is ready to go when engine warm-up is complete.</p> <p style="text-align: center;"> <b>CAUTIONS</b></p> <ul style="list-style-type: none"> <li>Never adjust pressure settings on the machine.</li> <li>Never make adjustments while machine is running.</li> <li>Do not take chances.</li> <li>Do not let debris fall into the valve area.</li> <li>Clean the machine of debris daily.</li> <li>Do not operate this machine when you're tired or while taking any form of medication or alcohol.</li> </ul>

## Operation

When engine and hydraulic system are sufficiently warmed up, start the belt by pulling on the control valve. The belt continues running until the valve is pushed back to the Off position.

### NOTE

Be sure there are no objects on the conveyor belt when it starts running

# Maintenance

<p><b>General</b></p>	<p>Good maintenance extends the conveyor’s life and helps to insure efficient operation.</p> <p>For engine maintenance schedules, consult the engine owner’s manual.</p>
<p><b>Periodic Maintenance</b></p>	<p>Establish a routine of performing periodic maintenance as a regular part of daily operation.</p> <p>Daily maintenance needs to include:</p> <ul style="list-style-type: none"> <li>• Grease bearings on top and bottom belt drums.</li> <li>• Check chain tension</li> </ul> <p>Hydraulic filters should be replaced at each 150 hours of operation (roughly monthly).</p>
<p><b>Conveyor Chain Adjustment</b></p>	<p>Conveyor chain tension may require occasional adjustment:</p> <ol style="list-style-type: none"> <li>1. Loosen the four nuts that secure the bottom sprocket axle.</li> <li>2. Increase or decrease chain tension by sliding the sprocket axle.</li> <li>3. Securely re-tighten the nuts while holding the axle in position.</li> </ol> <div data-bbox="577 991 1367 1575" data-label="Image"> </div> <p><b>Chain Adjustment</b></p>

## Limited Warranty

### Product Covered:

This warranty is for Timberwolf and/or Valley Wood Processing branded log splitters, conveyors, wood processors, ride-on equipment and their attachments or accessories.

### Date Warranty Begins:

The warranty begins on the date of sale and is warranted by Timberwolf Mfg. Corp. to the original purchaser only.

### What We Will Do for You:

We or your authorized dealer will, at our option, repair or replace any part found to be defective in material or workmanship, without charge for parts or labor, to the original residential purchaser for a period of time of one year. However, charges for pickup, delivery, and service calls are not covered by this warranty. The engine is warranted separately by the engine manufacturer.

### What Is Not Covered:

This warranty does not apply to parts that have been damaged by accident, alteration, misuse, abuse or improper lubrication. The following items are not covered after the first six months of home use: hoses, batteries, bushings, seals, filters, tires, wheels, paint, chains, appearance items, light bulbs, and similar items which are normally replaced through periodic maintenance.

### Limited Commercial Use Warranty:

If used for commercial, institutional or rental purposes, the warranty on this product is limited in duration to 90 days from date of purchase. This warranty does not apply to parts that have been damaged by accident, alteration, misuse, abuse or improper lubrication. The engine for commercial use is warranted separately by the engine manufacturer.

### Commercial Use Definition:

For the purpose of this warranty “consumer use” means personal residential household use by the original retail consumer. “Commercial use” means all other uses, including use for commercial, income producing or rental purposes. Once a unit has experienced “commercial” use it will be considered as a commercial unit for the purposes of this warranty.

### How To Get Service:

To obtain service, contact our nearest dealer, or Timberwolf Mfg. Corp. at 118 Spruce Street, Rutland, VT 05701, or call us at 802-775-4227. For engines, contact us or our dealers, or consult your Yellow Pages for the name of the service dealer that is authorized by the manufacturer.

### Disclaimer of Consequential Damages:

Timberwolf Mfg. Corp. shall not be liable under any circumstances for any incidental or consequential damages or expenses of any kind, including – but not limited to – the cost of equipment rental, loss of profits, or cost of hiring services to perform tasks normally performed by the equipment.

### Limitation of Implied Warranties:

Any implied warranties, including without limitation any implied warranty of merchantability or fitness for a particular purpose, shall be limited in duration to a period of one year (90 days if product is purchased for commercial or other non-residential use) from the date of sale.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts.

### Your Rights Under State Law:

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.



**TIMBERWOLF MANUFACTURING CORPORATION****Warranty Registration Form**

Timberwolf Manufacturing Corporation requires this warranty registration form to be filled out and returned within 30 days after the machine's purchase. The record of your purchase helps us to efficiently process any warranty claims that may arise.

**Purchaser Name****(Individual or Company):** \_\_\_\_\_**Address:**\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**Purchased From****(Dealer):** \_\_\_\_\_**Address:**\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**Date of Purchase:**

\_\_\_\_\_

**Model Number:**

\_\_\_\_\_

**Serial Number:**

\_\_\_\_\_

**Motor Serial Number:**

\_\_\_\_\_

**Options:**

\_\_\_\_\_

Mail to      TIMBERWOLF Manufacturing Corporation  
                 118 Spruce Street  
                 Rutland, Vermont 05701

**OR**

Fax to      802-773-1275

Detach and Fold this page, Tape Shut, Affix Stamp, and Mail To:

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118 Spruce Street  
Rutland, Vermont 05701